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DCAA CONTRACT AUDIT MANUAL

Vol. 2 of 2
Chapters 9-15
Appendixes A-I
Topical Index

DEPARTMENT OF DEFENSE
DEFENSE CONTRACT AUDIT AGENCY

DCAA Contract Audit Manual

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DCAA CONTRACT AUDIT MANUAL

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CHAPTER 9

9-000 Audit Of Cost Estimates And Price Proposals

9-001 Scope of Chapter

a. This chapter presents guidance for evaluating estimates of cost and profit supporting price proposals submitted by contractors in connection with the award, administration, modification, or repricing of Government contracts. The guidance applies to audit of estimates submitted in connection with negotiation of the following:

(1) prices of firm-fixed-price contracts;
(2) initial and adjusted prices of redeterminable fixed-price contracts;
(3) initial and successive target costs of incentive fixed-price and incentive cost-reimbursement contracts;
(4) estimated costs of cost-plus-fixed-fee contracts;
(5) prices of spare parts;
(6) contract change proposals;
(7) rates for time and material and technical services contracts;
(8) claims for price adjustments due to abnormal events;
(9) economic price adjustments;
(10) price adjustments pursuant to Cost Accounting Standards clauses; and
(11) advance agreements on forward pricing factors such as indirect cost rates, labor hour rates, material handling rates, and other elements of pricing formulas to be used repetitively.

b. Section 1 discusses administrative procedures for field pricing support; that section includes coverage of requests to provide specific cost information and to assist higher-tier contractors audit proposals submitted by subcontractors. Section 2 provides guidance in evaluating the adequacy of cost or pricing data in the proposal. Section 3 discusses general evaluation procedures for estimates. Sections 4 through 7 present specific guidelines for evaluating cost estimates for direct labor, direct material, other direct costs, and indirect costs. Section 8 presents special considerations in pricing the impact of inflation, including the audit of proposed contractual economic price adjustment provisions. Profit evaluation assistance to the contracting officer is discussed in Section 9. Section 10 highlights criteria for audit of estimates derived from cost estimating relationships that involve noncost variables. Section 11 is reserved. Section 12 provides guidance in evaluating forward pricing rate agreements. Section 13 provides guidance for DCAA participation as a member of a should-cost audit team.

9-002 Related Audit Guidance

a. Chapter 5-1200 covers Audits of Estimating System Internal Controls. It presents procedures applicable to comprehensive team surveys of contractor estimating systems by auditors and technical specialists.

b. Audit report preparation is covered in Chapter 10. Since audit reporting requirements affect the fieldwork required, be familiar with Chapter 10 provisions applicable to the proposal at hand before you begin the proposal audit.

c. Appendix E and EZ Quant, which describe graphic and computational analysis and improvement curve analysis techniques as evaluation tools, should be used in conjunction with this chapter.

d. Throughout this chapter, various Cost Accounting Standards are cited. Refer to the complete text of CASB Rules, Regulations and Standards and to Chapter 8 for audit guidance on CAS.

e. The DCAA Intranet and the APPS software provide an audit program to examine price proposals which is to be tailored to the specific circumstances and an audit program

for the examination of proposals under $10 million, under activity code 21000. When appropriate, the DCAA Intranet and the APPS application software should be used to expedite:

(1) rate applications;

(2) audit summarization; and

(3) preparation of summary working papers, audit report exhibits, and rate schedules.

f. Chapter 4-403 covers the format and contents of working papers. Standardization in design, content, and arrangement facilitates audit, supervision, and report preparation.

g. As part of planning the audit of a price proposal, brief the request for proposals in accordance with 3-203. During each audit of cost estimates or price proposals, observe any operations security (OPSEC) measures required by current DoD contracts or requests for proposals, in accordance with 3-205.

h. While auditing the price proposal, if anticompetitive procurement practices are suspected, refer to 4-705 for audit guidance.

9-003 The Total Audit Environment

a. The guidance in this chapter should be applied to the audit of individual proposals with due regard for the audit environment, considering previous audit experience with the contractor and the materiality of the various elements of the proposal. A detailed evaluation of each element of every proposal submitted for audit is normally unnecessary.

b. Make full use of all relevant knowledge about the contractor which has been documented in prior audits. This would include:

(1) The strengths or weaknesses of the contractor's estimating system, which may also be the subject of a separate examination (see 5-1200).

(2) The general credibility of the contractor's proposals, as determined in the course of previous proposal evaluations and postaward audits. (When a contractor's accounting practices or representations of historical and projected costs repeatedly contain significant deficiencies, errors, or unreasonable estimates which suggest either negligence or an apparent intent to deceive the Government, such cases are reportable under 4-700.)

(3) The reliability of the contractor's cost accounting system.

(4) Current trends in the contractor's labor, indirect cost, or other costs, as reflected in the results of recent proposal evaluations or audits of incurred costs.

(5) Current changes in and/or modernization of the contractor's manufacturing practices as noted during tours of the manufacturing floor, perambulations, and in the results of estimating surveys, recent proposal evaluations, or audits of incurred costs. (Changing the flow of how products are made can affect the flow of costs (see 14-800).)

(6) Cost avoidance recommendations made as a result of operations audits (see 14-500).

9-100 Section 1 --- Administrative Procedures for Field Pricing Support

9-101 Introduction

a. This section presents the general procedures for processing requests for advisory audit reports and other contract audit information related to contractor and subcontractor price proposals. Basic guidance on audit fieldwork and preparation of audit reports is not repeated in this section (see subsequent sections of this chapter and 10-300).

b. The term "PCO" is also applied to a plant representative/ACO who has been delegated procurement authority to execute the particular contract action.

9-102 The Field Pricing Support Concept

9-102.1 The Approach

a. FAR 15.4 and DFARS 215.4 describe the responsibilities and functions for the audit, analysis, and negotiation of price proposals, and related matters concerning negotiated procurements. Much of this guidance applies to all types of negotiated pricing actions, including contract price redetermination after costs have been incurred under the contract. However, certain requirements may apply only to the initial pricing of contracts, contract additions, or contract modifications (sometimes called forward or pre-award pricing actions).

b. Field pricing support consists of all audit and other specialist effort necessary for the contracting officer to determine the reasonableness of the proposed cost or price. FAR 15.404-2 assigns the contracting officer responsibility for determining the extent of field pricing support required, and for establishing the specific areas in which audit input is needed. This usually results in a request to DCAA to provide field pricing assistance. DCAA provides the following forward pricing services:

Type of Service	Scope of Service	Contractor's Supporting Documentation	Type of Report Statement	Reporting	CAM Cite
Specific Cost Information [Code 25000]	Provide existing data in FAO files, or additional services that can be provided in 4 hours or less	Cost or pricing data; information other than cost or pricing data	None	Telephone with written confirmation memorandum	9-107
Application of Agreed-Upon Procedures [Code 28000]	Performance of specific procedures agreed-upon in advance with the customer	Cost or pricing data; information other than cost or pricing data	Disclaimer	Report	9-108
Cost Realism Analysis [Code 28000]	Evaluation to ascertain potential cost understatement	Information other than cost or pricing data	Disclaimer	Report	9-108 9-311.4

Type of Service	Scope of Service	Contractor's Supporting Documentation	Type of Report Statement	Reporting	CAM Cite
Audit of Part of a Proposal [Code 27000]	Examination of one or more cost elements or parts of a cost element, e.g., rates or the bases, but not the entire proposal	Cost or pricing data on the part(s) to be examined; information other than cost or pricing data on the part(s) to be examined (cost information only)	Opinion only on the part(s) of the proposal examined	Report	9-108 9-209
Complete Proposal Audit [Code 21000]	Examination of an entire proposal	Cost or pricing data; information other than cost or pricing data (cost information only)	Opinion on proposal as a whole	Report	Chap. 9
Audit of Forward Pricing Rates [Code 23000]	Examination of a contractor's direct and indirect rates (generally in support of forward pricing rate agreements or informal rate recommendations, however, a request to examine an individual price proposal can trigger a Code 23000 audit if the results are expected to form the basis for subsequent audit rate recommendations related to other price proposals)	Cost or pricing data; information other than cost or pricing data (cost information only)	Opinion on the rates examined	Report	9-700 9-1200

A clear understanding of the requestor's needs is essential for establishing the scope for audits of proposals for either prime contracts or subcontracts as discussed in 9-103.3 and 9-104.2. When significant contractor deficiencies or system problems exist, the auditor should explain them to the contracting officer and discuss the potential for additional audit coverage. When a request is received for an examination of the entire proposal and there is little risk involved, discuss with the requestor if their needs could be met by other services such as examining part of the proposal (9-108) or providing specific cost information (9-107). See 4-103 for guidance on preparing acknowledgment and notification letters. There are special requirements for reporting on an examination of a part of a contractor's proposal as stated in 9-108, 9-206, 9-207, and 10-300.

c. FAR 15.404-2(a)(3) encourages contracting officers to team with appropriate field experts throughout the acquisition process, including negotiations. Early communication among team members assists in determining the extent of assistance required, the specific

areas for which assistance is needed, a realistic audit schedule, and the information necessary to perform the field pricing assistance audit. The Defense Contract Management Agency (DCMA) advocates use of Integrated Product Teams (IPTs) whenever possible. DCAA auditors may not be a team member of an IPT. However, DCAA will provide audit services, as necessary, to assist the contracting officer in determining a fair and reasonable price (See 1-800). DCMA no longer prepares traditional field pricing reports which integrate both technical and pricing aspects. FAR 15.404-2(b)(1)(ii) does not require that field pricing assistance reconcile technical and audit recommendations. When the PCO determines that audit support is required, then the PCO will send the audit request directly to the cognizant audit office. The PCO sends requests for field pricing support services broader than audit services to the plant representative/ACO, with a copy to the cognizant contract audit office; the contract auditor shall treat the advance copy of the PCO request as a signal to begin the audit work. DCMA policy is that requests for DCAA audit will be forwarded to the cognizant FAO and the requestor be apprised of such action and advised that future requests may be sent directly to DCAA. If after receiving an advance request there is concern about whether an audit will be necessary, immediately discuss the matter with the ACO. Any uncertainty about whether an audit will be needed should be resolved in favor of starting the audit. If the ACO states that an audit will not be requested, contact the PCO to determine whether ACO actions will be sufficient. If the PCO states that an audit is necessary, it should be performed as a direct request in accordance with FAR 15.404-2(c) and the ACO should be so advised (see 9-103.1d.(7)).

d. The field pricing support process is conducted as a cooperative team effort in order to ensure timely and effective response to the PCO's request. The efforts of all field pricing support team members are complementary, therefore, cooperation and communication are essential in order to establish a proper understanding of each member’s role.

e. The procedural steps involving contract audit are discussed in later paragraphs of this section. The roles and relationships described in 9-305 also apply in the field pricing support situation.

9-102.2 Applicability of Procurement Procedures

a. FAR/DFARS procedures are cited in this section for convenience and only briefly outlined. Slight variations may occur among DoD components, and procedures applicable to non-DoD agencies may differ. Auditors auditing major or numerous proposals for a particular DoD or non-DoD contracting activity should be familiar with the applicable agency FAR supplement and any special proposal requirements of the procurement office. This information is needed to ensure good support to the PCO, to anticipate procurement needs for contract audit services, and to estimate and monitor workload trends. It is especially important in this regard to know the procurement office's dollar thresholds and related criteria for requesting field audit of proposals (9-102.3).

b. FAR 15.404-2(c)(2), 10 U.S.C 2313(d) and 41 U.S.C. 254d provide that contracting officers are required to contact the cognizant audit office to determine whether an audit of the proposed indirect costs was conducted during the preceding 12 months. Contracting officers are not to request a preaward audit of indirect costs if this would entail duplicative audits. Requests may be made in circumstances where the information available is considered inadequate for determining reasonableness of the proposed indirect costs. (See 1-303)

c. Prime contractors are required to register in the Central Contractor Registration database prior to award of a contract or agreement which contains the clause at FAR 52.204-7 or DFARS 252.204-7004. When the contractor is required by the solicitation to register in the CCR database (www.ccr.gov), the contracting officer should verify that the contractor has complied with that requirement prior to contract award.

9-102.3 Applicability of Dollar Thresholds

DFARS Procedures, Guidance, Information (PGI) 215.404-2(a) recommends that contracting officers consider requesting field pricing support for:

- Fixed-price proposals exceeding the cost or pricing data threshold;
- Cost-type proposals exceeding the cost or pricing data threshold from offerors with significant estimating system deficiencies; or
- Cost-type proposals exceeding $10 million from offerors without significant estimating deficiencies.

Generally, field pricing support should not be requested for proposals below the thresholds. However, DFARS PGI 215.404-2(a)(ii) permits contracting officers to request an audit of a proposal below the thresholds when a reasonable price can not be determined because of (1) a lack of knowledge of the contractor, or (2) sensitive conditions. When requested to audit a proposal that is below the threshold, the auditor should understand the circumstances driving the request (See 9-103.1d(3)). The auditor should consider if a different level of service could provide adequate field pricing support and should make an appropriate recommendation given the circumstances. The working papers should include documentation on the circumstances and discussions with the requestor.

9-103 DCAA Field Pricing Support at the Prime Contract Level

9-103.1 Coordination of the Request-Field Pricing Support

a. In responding to requests for audit services, FAO managers, supervisors, and auditors should keep in mind that the PCO and ACO are Our aim is to provide timely and responsive audits, audit reports and financial advisory services that meet the user's needs. This goal can be achieved by establishing open and effective channels of communication that allow for the sharing of information and ideas as the audit progresses. FAR 15.404-2(a)(3) encourages PCOs to team with appropriate field experts and to communicate early in the acquisition process.

b. In particular, requests for field pricing support need to be handled in an expeditious manner. Proposals should be evaluated for adequacy as soon as possible after receipt so that corrective action can be taken immediately (see 9-200). The auditor should seek assistance from the ACO/PCO, if needed, early in this process. The Agency has also developed criteria that can be used to evaluate the adequacy of contract price proposals. The auditor may discuss the checklist with contracting officers and suggest that they use it in the screening process. The form is available on the DCAA Intranet and the APPS (file name ADEQUACY).

c. Locally established working arrangements may expedite handling of relatively routine requests. However, effective field pricing support to the PCO may, in some cases, require individualized cooperative arrangements between the plant representative/ACO and the auditor. Also, some matters may need reconsideration during the course of major field pricing support cases.

d. Additional key matters the auditor may need to coordinate:

(1) Obtaining a copy of the contractor's proposal and applicable portions of the RFP, if not received with the PCO request and not provided directly by the contractor.

(2) Establishing the due date for the audit report, considering existing audit workload, required audit scope, or any other relevant factors. The contract auditor should coordinate due date adjustments with the PCO and the plant representative/ACO. Any audit conflicts involving more than one PCO should be worked out jointly between the auditor and the plant representative/ACO (see 9-103.7).

(3) Obtaining a clear understanding of the requestor's needs and identifying areas of the contractor's proposal for special consideration. Verbal discussions with the PCO and/or ACO should be held before beginning the audit if the auditor does not have a clear under-

standing of the requestor's needs. Otherwise, communicate information regarding the nature, timing, and extent of planned testing and reporting, including the level of assurance expected to be provided, in the acknowledgment of request letter.

(4) The auditor should coordinate with the requestor, upon completion of the risk assessment, to resolve any inconsistencies between the requested audit effort and the scope of audit determined by the auditor's assessed level of risk (see 9-103.3a). If the request is for an audit of something that is of lesser significance and lower risk that should be handled as a request for specific cost information (see 9-107.1), the auditor should discuss this with the contracting officer and make an appropriate recommendation. Likewise, the auditor should discuss with, and make an appropriate recommendation to the contracting officer if the request is for less than a full audit where the risk assessment reveals that a full audit should be conducted. However, the final decision regarding the need for a complete examination, an application of agreed-upon procedures, or a request for specific cost information rests with the contracting officer. If there is disagreement with the contracting officer after the auditor clearly explains that the requested level of audit services is not appropriate based on the risk, Financial Liaison Advisor (FLA) assistance should be requested. The FLAs can provide valuable assistance working with procurement officials to ensure requests for services are accurate, clear, and appropriate for the risk involved. (FLAs are identified in the FLA Locator on the DCAA Intranet site.) If a command does not have an assigned FLA, the auditor should contact the appropriate Senior FLA. If the contracting officer continues to disagree with the FAO's recommendation to modify the request for audit services, the FAO should consider elevating the issue to regional management for further coordination with the command's management. The modifications that the FAO believes should be made due to its risk assessment should be addressed in the acknowledgement letter or response to specific cost information along with the actions taken to elevate the issue within the command. In the interim, the auditor should commence with the audit services requested by the contracting officer. If the disagreement is not resolved during the audit, the Subject of Audit paragraph in the audit report should confirm the auditor's advice regarding the potential impact of known issues and the reasons given by the contracting officer for not modifying the requested audit services. The working paper file should include documentation on the discussions and decisions.

(5) Arranging for all technical input needed for the audit, including field technical reports the PCO requests to be incorporated into the audit report. Technical input can often be obtained through informal consultation; however, written confirmation of the requested information should follow. Similarly, informal audit input may be needed to support other field pricing support efforts before the audit report is prepared (see 9-306 and D-204).

(6) Arranging for any needed supplementary analysis of subcontract or intracompany proposals by the prime contractor and/or Government field personnel. Time constraints require that this area be given early, expedited attention (see 9-104 and 9-105). If the prime contract proposal contains foreign subcontract costs requiring audit by foreign auditors under a reciprocal audit agreement, the auditor should recommend that the contracting officer seek a separate audit of those subcontract costs under the terms of the reciprocal agreement (see 4-1007).

(7) Obtaining the PCO's estimate of most likely level of procurement requirements under a proposed basic ordering agreement or time-and-materials-type contract. The reasonableness of proposed costs should be evaluated considering the anticipated level of effort.

(8) When requests are received directly from the PCO, auditors should not delay these audits awaiting a request through the ACO. When these requests are received, necessary coordination will be made directly with the requestor.

(9) When the contracting officer identifies that the price proposal is for an FMS procurement, the auditor should coordinate with the contracting officer the release of contractor proprietary data to the FMS user and the level of detail to be included in the report. The auditor should also determine at the start of the evaluation whether the contractor will have any reservations or restrictions on release of the report to the FMS user (see 9-110). Similarly, if the price proposal evaluation is for Direct Commercial Contract (DCC) users

(foreign countries), requested by the DCMA International and Federal Business Division, DoD Central Control Point (DoDCCP), the auditor should coordinate with the DoDCCP and FLA the release of contractor proprietary data to the DCC user and the level of details to be included in the report.

9-103.2 Acknowledging the Request

At an early stage in planning the audit, send a memorandum to the PCO and/or plant representative/ACO confirming coordination of the audit (see 4-103).

9-103.3 Audit Scope - Field Pricing Support

a. When an examination of the contractor's price proposal is requested, the auditor is responsible for determining the scope and depth of examination required to render an informed opinion as to the adequacy of the cost or pricing data or information other than cost or pricing data for negotiation of a price, including the use of technical specialists when necessary. To determine the scope of audit, the auditor should first read the audit request and get a clear understanding of exactly what is requested and whether the proposal is based on cost or pricing data or information other than cost or pricing data. The auditor should then complete a risk assessment (see 4-403f) based on this understanding. After completing the risk assessment, the auditor should coordinate with the requestor to resolve any inconsistencies between the requested audit effort and the scope of audit determined by the auditor’s assessed level of risk (see 9-103.1d(3)). Prior to performing the detailed audit steps, the auditor should submit the risk assessment and audit program to the supervisor for review and approval (see 3-103.2b.). Requests for audit of part(s) of a price proposal are discussed in 9-108.

b. As early as possible, determine whether technical review requested by the ACO will be sufficient to allow the auditor to express an opinion regarding the quantitative and qualitative aspects of the contractor's proposal. The auditor is responsible for ensuring that adequate evidential matter is examined to render an opinion on the proposed costs. This includes making decisions about what technical assistance is needed, effectively communicating with the technical specialist(s), assessing the impact of technical specialist findings upon the audit opinion, and reporting on the uses of technical specialists or the impact of their nonavailability (see Appendix D and 9-306).

c. When ACO/PCO-imposed time constraints make it impossible to perform an entire proposal examination, coordinate with the ACO/PCO to determine if other services can be performed in the prescribed time frame to assist in the negotiation of the award (e.g., providing specific cost information or examining part of a proposal---see 9-107 and 9-108). If no services can be provided in the prescribed time frame, confirm the results of the conversation in writing with the ACO/PCO.

d. If there is a lack of adequate technical input necessary for the expression of an unqualified opinion regarding the quantitative and qualitative aspects of the proposal, the audit report should be qualified accordingly (10-304).

9-103.4 Sampling Procedures to be Used

a. Requests to evaluate an inordinate number of items and/or dollar amounts should be discouraged. Criteria used by some procuring offices for auditing line items may be more extensive than DCAA's established statistical sampling guidance and government auditing standards requirements. Although the auditor establishes the scope of audit following established and accepted statistical sampling procedures (see 4-600 and Appendix B), the requestor's sampling procedures may be considered, as appropriate.

b. Coordinate the selected line-item sample with the PCO. Additional line items of particular concern to the PCO that were not selected in the initial sample selection should be looked at separately on a case-by-case basis. Coordinating the stratification process and

ensuring that random techniques are properly applied will make the sample results more useful to the auditor and the requestor.

c. Value Evaluation. A value evaluation involves a subjective assessment of item prices (as compared to an illustrated parts breakdown, picture, drawing, or sketch of the item), including a short written description of labor, material, and engineering characteristics of the item. The purpose of a value evaluation is to determine if the price offered appears to be a fair value. For example, a value evaluation could determine that $1.50 is a fair price for a switch, toggle, multi-terminal while $11.50 may not be a fair price; or that $10.00 is not a fair price for a particular bolt while $0.25 may be a fair price. Generally, a value evaluation is performed as a procurement function. Therefore, the auditor should ensure that a listing of all items that failed the value evaluation has been provided as part of the audit request. These items, along with an explanation as to what caused their failure, should be considered as audit leads. If the auditor plans to evaluate a failed value item separately, the requestor should be advised so as to avoid duplication.

9-103.5 Request to Report by Line Item

a. Audit requests which require auditors to spend an inordinate amount of time reporting their findings by line item do not usually result in an economical use of audit resources, particularly when the contractor's accounting system does not identify total cost by individual line item.

b. Although some contractors propose engineering and other direct support effort by using estimating or pricing factors for individual line items, their accounting systems usually do not account for direct support cost by individual line item. Furthermore, the use of such techniques cannot be supported by historical cost experience.

c. When there is no direct relationship between factors and individual line item costs, the total amount of direct support effort should be evaluated by Government technical personnel to ascertain the reasonableness of the effort proposed. The auditor will recommend labor and indirect cost rates applied to this total effort and results will be reflected in the audit report. The auditor will also comment on any estimating/pricing techniques used to distribute the direct effort to line items and their impact on the proposed cost.

d. Contractors may not record their costs on a line-item basis and it may not always be practical to track audit findings to a line item. When impediments to identification exist, request contracting officer assistance before any additional audit resources are spent to develop audit findings and write a report by line item. In these cases, the contracting officer should solicit the contractor's assistance to aid in the identification of costs by line item. Such assistance is needed in order for the auditor to report questioned costs by line item.

9-103.6 Requests to Report on Comparative Historical Cost Information

a. The requirement to have comparative historical cost information should be placed on the contractor and included as part of the cost proposal.

b. If a request to develop this type information is received, request that the contractor prepare the information, notify the requestor of the action taken, perform whatever audit steps are necessary to verify the accuracy of the information, and include the information with the audit report. In the event the information is not received in time for inclusion in the audit report, include appropriate comments necessary to explain the circumstances. This, of course, does not preclude the inclusion of readily available recent historical cost information in audit reports to support the audit findings.

9-103.7 Scheduling Audit Report Issuance

a. Issuance of a report on an audit of a price proposal should not be delayed beyond the agreed-to due date pending the receipt of an assist audit report (9-104) or technical

report (Appendix D). Neither should the report be delayed because of the contractor's oral statement about revising the proposal. However, other developments during the course of the audit may impact the audit report schedule, such as:

(1) Serious problems with the contractor such as lack of cooperation, insufficient supporting data, or denial of access to records, which may have a major adverse impact on price negotiations (see also 9-205).

(2) Expansion of audit requirements by the PCO.

(3) Major unanticipated problems with the proposal, such as unusual or complex data or significant controversial items of cost.

(4) New, competing priorities in other PCO requests.

b. Promptly discuss these other developments with the PCO or plant representative/ACO. His or her early attention may correct the problem and eliminate the need for the auditor to request a due date change or for an audit report qualification. FAR 15.404-2(d) requires that the contracting officer be notified in writing, following immediate oral notification, of circumstances shown in (1) above. The notification should include a description of the deficient or denied data or records (copies of the deficient data should be provided, if requested by the contracting officer), the need for the evidence, and the unsupported costs resulting from the denial (1-504.3). In addition, the audit report should identify any cost or pricing data submitted that are not accurate, complete, and current and a schedule of any cost representations that are unsupported. (See also 10-304.)

c. Supplemental reports may be required upon receipt of assist audit reports (9-104), technical reports (9-103.8), or receipt of additional cost or pricing data. In addition, FAR 15.404-2(c)(3) requires the contracting officer to provide to the auditor updated information that affects the audit. FAR 15.404-2(c)(1)(ii) requires the auditor to immediately notify the contracting officer about any information disclosed after submission of an audit report that may significantly affect the findings. This information may include data related to costs unsupported in the original audit report. The contracting officer will require the offeror to concurrently submit this data to the audit office. Upon receipt of the data and a request to evaluate it, the auditor should initiate a timely audit of the data and issue a supplemental report if the status of negotiations is such that a supplemental report will serve a useful purpose.

d. If an extension of the audit report due date is considered necessary, follow the procedures in 9-103.1, 9-103.2, and 10-300, including coordination, written confirmation, and, if applicable, report qualification.

e. Peak workload periods and other unforeseen strains on FAO audit resources do not relieve FAO management from the responsibility for judicious and timely management of proposal audits. Therefore, every effort should be made to issue proposal audit reports by the original due dates.

9-103.8 Technical Evaluations Impact on Audit Report Schedule

a. If the auditor requests a technical analysis, she/he normally will incorporate the financial effect of the analysis in the audit report. In view of the number of technical specialties that could be involved, there may be several technical reports to consider (see 9-103.1 and Appendix D). If the auditor requests a technical analysis, (s)he should not expect any other party to consolidate reports on proposal analyses made by the several technical specialists on the field pricing support team.

b. In the absence of adequate requested technical analysis, the report will be qualified (see 10-304). However, if the auditor can obtain sufficient evidence to support an opinion on the proposal, including requirements, then a request should not be made and the report should not be qualified. This holds even if the auditor knows that an evaluation is being done, and the results are not received. A qualification should not be used in this case even though the technical report may question elements which the auditor did not question.

c. Technical report results which are not received in time for inclusion in the initial audit report will be incorporated in a supplemental report, if the status of negotiation is such that a supplemental report will serve a useful purpose. All technical report results received by the auditor will be included in the audit report.

d. Any continued delays in receipt of field technical reports required to satisfy the PCO's request for field pricing support should be treated as a matter of special management concern because of the impact on contract audit workload. If the matter cannot be resolved at the local level, it should be elevated to the regional office.

9-104 Field Pricing of Subcontract Proposals Included in Prime Contract Price Proposals

9-104.1 Basic Responsibilities for Subcontract Proposals

a. FAR 15.404-3(b) requires contractors to conduct appropriate subcontract price or cost analysis and include those analyses with their proposal support. FAR 15.408, Table 15-2 requires that the contractor provide data showing the basis for establishing the source and reasonableness of price. For competitive acquisitions, the contractor should also include the degree of competition. This data should be provided for all acquisitions exceeding the pertinent threshold set forth in FAR 15.403-4(a)(1). For noncompetitive acquisitions that meet the requirements of FAR 15.403-4(a)(1), the cost or pricing data supporting the prospective source's proposal as required by FAR 15.404-3(c)(1) should also be submitted.

b. Primary responsibility for evaluation of subcontractor proposals rests with prime contractors and upper-tier subcontractors. FAR 15.404-3(b) require contractors and higher-tier subcontractors to conduct appropriate cost or price analyses to establish the reasonableness of proposed subcontract prices. FAR 15.408, Table 15-2 requires contractors and higher-tier subcontractors to conduct price analysis of all subcontractor proposals and a cost analysis of each subcontract proposal when cost or pricing data are required by FAR 15.403-4(a)(1) regarding noncompetitive methods and to provide the results of such evaluations prior to negotiations. FAR 15.404-3 and DFARS PGI 215.404-3 permit the contracting officer to request audit or field pricing support to analyze and evaluate the proposal of a subcontractor at any tier (notwithstanding availability of data or analyses performed by the prime contractor), if the contracting officer believes that this support is necessary to ensure reasonableness of the total proposed price. DFARS PGI 215.404-2(c)(i) further provides that, if, in the opinion of the contracting officer or auditor, the review of a prime contractor's proposal requires further review of subcontractor’s cost estimates at the subcontractors’ plants (after due consideration of reviews performed by the prime contractor), the contracting officer should inform the ACO having cognizance of the prime contractor that a review is required.

c. During coordination of the PCO request for audit of a prime contract proposal (9-103.1), the needed coverage of any significant proposed subcontract costs will be a major consideration. The auditor at the prime contract level plays a major role in ensuring that proposed subcontract costs are adequately evaluated. Depending upon the contractor's basis for the proposed subcontract costs, an evaluation may be made only at the prime contractor plant or an audit at the subcontractor plant may be required (see 9-103 and 9-104.2). If the prime contract proposal contains foreign subcontract costs requiring audit by foreign auditors under a reciprocal audit agreement, coordination with the PCO is especially important (see 4-1007).

d. In some cases, audits of subcontracts may be performed when requested by the contracting officer prior to completion of the prime contractor’s proposal and the prime contractor’s analysis of the subcontract proposal provided all of the following three guidelines are met:

(1) The subcontract proposal has been approved by the appropriate subcontractor management.

(2) The prime contractor has submitted the subcontract proposal to the Government with an assertion from the prime contractor's management that it intends to contract with this subcontractor, and

(3) The contracting officer, prime contract auditor, or next higher-tier subcontract auditor requests an audit of the subcontractor proposal and informs the subcontract auditor that the contracting officer has determined subcontract audit support is required based on DFARS PGI 215.404-3(a)(i). The PGI provides that such assistance may be appropriate when, for example:

(a) There is a business relationship between the contractor and the subcontractor not conducive to independence and objectivity;

(b) The contractor is a sole source supplier and the subcontract costs represent a substantial part of the contract cost;

(c) The contractor has been denied access to the subcontractor's records;

(d) The contracting officer determines that, because of factors such as the size of the proposed subcontract price, audit or field pricing assistance for a subcontract at any tier is critical to a fully detailed analysis of the prime contractor's proposal;

(e) The contractor or higher-tier subcontractor has been cited for having significant estimating system deficiencies in the area of subcontract pricing, especially the failure to perform adequate cost analyses of proposed subcontract costs or to perform subcontract analyses prior to negotiation of the prime contract with the Government; or

(f) A lower-tier subcontractor has been cited as having significant estimating system deficiencies.

e. When auditors determine that a division affiliated with the prime contractor is proposing to perform subcontract effort or interdivisional transfer effort and there are unaffiliated companies in competition to perform as a subcontractor, notify the contracting officer. Because of the potential for bias, the contracting officer should ask offerors to submit a plan explaining how they will ensure that the competition will be conducted fairly and result in the best value for DoD. The Government is not expected to act as a surrogate source selection official or to approve the selection of a particular source. Also, see 9-104.2b.(3) regarding the potential need for an assist audit.

f. The prime contract auditor is responsible for providing the subcontract auditor with Government price negotiation memorandums applicable to negotiations with the prime contractor concerning subcontract prices.

9-104.2 Deciding Whether a Government Field Audit of a Subcontractor's Proposal Should be Obtained

a. Generally the prospective prime contractor should support proposed subcontract prices, including performance of price or cost analysis of subcontractor cost or pricing data, when required by FAR 15.408, Table 15-2 regarding noncompetitive methods. DFARS PGI 215.404-3(a)(v) provides that when the contracting officer's selection is based on a decision other than lowest price, deficient contractor analyses may be returned for correction. The Government may decide, however, that adequate evaluation of a prime contract proposal requires field pricing support at the location of one or more prospective subcontractors at any tier.

b. The prime contract auditor will specifically evaluate each pricing submission and available supporting data to determine the need for subcontractor assist audits. As part of this evaluation, ascertain the adequacy of the prime contractor's completed price or cost

analysis of subcontract proposals. For those analyses that are not completed, determine the contractor's completion schedule and consider the adequacy of its procedures for conducting price/cost analysis. An estimating system flash report should be issued if the contractor fails to perform the required price/cost analysis of its subcontractors, (see 5-610.1 and 5-1209.3). At major contractors, a limited scope internal control review should then be issued based on the supporting evidence. There may be no need to request an assist audit when the contractor's procedures are adequate and the cost analyses are scheduled for completion prior to negotiation. This independent evaluation of the risks associated with subcontracts and the resulting determinations on the assist audits to be performed will be clearly documented in the working papers. FAO's should not rely on arbitrary dollar The following items will generally indicate a need for an assist audit:

(1) The contractor's price or cost analysis is inadequate or is not expected to be completed prior to negotiations.

(2) The prime contractor's policies and procedures for awarding subcontracts are inadequate.

(3) There is a business relationship between the prospective prime contractor and subcontractor not conducive to independence and objectivity, as in the case of a parent-subsidiary or when prime and subcontracting roles of the companies are frequently reversed.

(4) The proposed subcontract costs represent a substantial part of the total contract costs.

(5) The prospective prime contractor was denied access to the proposed subcontractor's records.

c. Upon determining and documenting the need for an assist audit, establish whether the assist audit has already been appropriately requested by either the ACO or PCO. If a needed assist audit has not been requested, immediately bring this matter to the attention of the ACO and PCO and convey the reason the assist audit should be obtained.

d. The auditor should take special care to point out to the ACO and PCO any prime contractor price/cost analysis that will not be available before the conclusion of audit field work, but is scheduled for completion prior to negotiations (see 9-104.2b.). Also comment on the adequacy of the contractor's procedures for conducting price/cost analysis (see 9-406.1). This information will allow the ACO and/or PCO to decide whether to wait for the contractor's price/cost analysis or to request an assist audit if the prime contract auditor has not already requested an assist audit. Regardless of whether or not an assist audit has been requested, if the contractor has not completed its analysis, or the completed analysis is inadequate, the costs should be classified as unsupported (see 10-304.8).

e. When the prime contract auditor determines that the ACO or PCO has requested or will request an assist audit, he or she should at once alert the subcontract auditor and confirm that the audit can be completed timely. The prime auditor will immediately confirm the notification. If the subcontract auditor has not already begun the audit, it should be started upon such notification.

f. If, after notification and discussion with the ACO and PCO, the assist audit is still determined necessary and it is not going to be requested by either the ACO or PCO, the prime contract auditor will prepare and address an assist request to the prime contractor ACO. The prime contract auditor will also immediately notify the subcontract auditor of the impending audit request and send a copy of the request directly to the assist auditor. It should include all of the information required by DCAA's management information system to set up an assist audit assignment including a due date which, if possible, will allow the assist audit results to be incorporated into the prime auditor's report. The request for assist audit should be accompanied by copies of:

- the subcontractor's proposal, along with all related cost, pricing, and pertinent technical data;

- if available, the results and supporting data from the prime contractor's evaluation of the subcontractor's proposal; and
- the audit request received by the prime DCAA office (used to identify reimbursable work).

g. The auditor cognizant of the subcontractor should obtain a clear understanding of the requestor's needs and identify areas of the subcontractor's proposal for special consideration (in addition to any specified by the PCO/ACO). To the extent necessary, discussions with the PCO, ACO, and/or auditor cognizant of the contractor should be held before beginning the audit. If the request is for an audit of an immaterial cost item(s) or one which could be handled as a request for specific cost information (see 9-107.1), the auditor cognizant of the subcontractor should discuss this with and make an appropriate recommendation to the contracting officer. However, the final decision regarding the need for a complete audit, an application of agreed-upon procedures, or specific cost information rests with the contracting officer. The working paper file should include documentation on the discussions and decisions.

h. A Government audit of proposed subcontract costs does not relieve the prime contractor of its responsibilities. FAR 15.404-3(b) and FAR 15.408, Table 15-2 require prime contractors and higher-tier subcontractors to conduct price or cost analysis of each subcontract proposal and include the results of these analyses and the subcontractor’s cost or pricing data in the prime contractor’s price proposal. The DCAA auditor should include an appendix in the audit report identifying subcontracts requiring contractor price or cost analyses which have not yet been provided to the auditor (see 10-308).

i. Auditors should not perform audits of subcontract proposals where the prime contract is a firm-fixed-price contract and has been already negotiated. An audit of a subcontract proposal must serve a valid Government interest. Generally, this would mean a potential for a Government prime contract price adjustment if the proposal is found to be misstated. An audit is appropriate only when a firm-fixed-price type contract has a special contract clause providing for recovery of later subcontract price reductions.

9-104.3 Coordination of Major Program Subcontract Assistance

A DoD contracting activity is required to notify applicable contract administration activities when a planned major acquisition will require extensive, special, or expedited field pricing assistance of subcontractors' proposals (DFARS PGI 215.404-2(c)(ii)). DCAA support of these programs will be facilitated by prompt and thorough coordination among the FLA, regional offices, FAOs, and Headquarters element involved in the acquisition program.

9-104.4 Processing Requests for Audit of Subcontractor Price Proposals

a. Under DoD field pricing support procedures, audit requests of subcontractor proposals, at any tier, will be processed through plant representative/ACO channels. This applies whether the request has been initiated by the PCO, by the field pricing support team, or by the cognizant auditor at the prime contractor location. In each case, a copy of the request is to be sent directly to the contract auditor responsible for audit of the prospective subcontractor. The request will be accompanied by copies of (1) the subcontractor's proposal to the prime or higher-tier contractor, including a proposal cover sheet if FAR 15.408, Table 15-2 is used, and related cost or pricing data, and (2) the review package accomplished by the prime contractor and/or by the higher-tier subcontractor involved, including any cost and/or price analysis if available (FAR 15.404-3).

b. Upon receipt of either a copy of the PCO request, a written request through ACO channels, or a copy of the prime contract auditor's request, the auditor at the subcontractor location will set up the assist audit assignment and begin the audit, if not already started as a result of following the guidance for advance telephone notification of im-

pending requests in 9-104.2. The request will be acknowledged following the guidance in 4-103. Required technical assistance for such audits will be arranged through ACO channels as currently provided for in 9-103.1d and 4-103.

9-104.5 Special Requirements for Timeliness and Coordination of Subcontractor Audits

a. Time available for proposal audit becomes successively shorter as field pricing support is required at major subcontractors and lower subcontract tiers. To support the PCO on the prime contract pricing action, field audit offices must take special prompt action on requests and reports concerning subcontract proposals.

b. The prime contract auditor is responsible for taking all reasonable steps to ensure that the results of the assist audit are incorporated in the final audit report. This includes following up periodically on the status of all assist audits being performed and documenting this follow-up effort in the audit working papers. Thus, the prime contract auditor must be fully aware of the results of any cost evaluations performed at prospective subcontract locations. Coordinate closely with the plant representative/ACO to ensure complete interchange of communications to and from other plant representatives/ACOs and contract auditors concerning the proposed subcontract costs. If incorporation of assist audit results is not possible, the prime contract auditor should confirm that the assist audit report will be available in time to meet the needs of the ACO/PCO (see 9-104.2e. & f.).

c. To help ensure timely incorporation of assist audit results into the prime auditor's report, auditors should notify each other of any impending delays in report issuance.

9-104.6 Differences of Opinion Between DCAA Offices

Should a difference of opinion arise between offices when performing subcontractor audits, the procedures stated in 6-807 for resolving the difference will be followed.

9-105 Intracompany Proposals Included in Prime Contract Price Proposals

a. Basic FAR provisions on responsibilities for subcontract proposals (9-104.1 and 9-104.2) also apply to proposals of other company segments included in a prime contract proposal. However, the factor of common control, or possible lack of arms-length dealing (9-104.2b.) make any significant intracompany proposal an area for special consideration in auditing the prime contract proposal (see 9-103.1).

b. If adequate audit of a prime contract proposal requires field pricing support at another segment location, procedures in 9-104 will be followed as applicable to the intracompany situation. This includes processing of requests through plant representative/ACO channels, as well as the special audit coordination requirements stated in 9-104.5.

c. Upon receiving the copy of a request from the higher-tier plant representative/ACO, the contract auditor at the other segment location will follow procedures in 9-103, 9-104, and 10-300, as applicable to the intracompany situation.

9-106 Special Considerations --- Release of Data to Higher-Tier Contractors

a. DFARS PGI 215.404-3(a)(iii) governs the methods by which the plant representative/ACO will release field pricing results to the higher-tier contractor. Where the lower-tier contractor consents, the Government will furnish "a summary of the analysis performed in determining any unacceptable costs, by element, included in the subcontract proposal." Absent the lower-tier contractor's consent, the Government will furnish "a range of unacceptable costs for each element."

b. Based on the above, a subcontractor's objection to unrestricted release of the audit report may place an extra reporting burden on the higher-tier plant representative/ACO. Therefore, the contract auditor will determine at the start of the evaluation whether the

subcontractor will have any restrictions or reservations on release of the report to the higher-tier contractor. If so, promptly notify the requesting plant representative/ACO to determine whether the proposal evaluation should be continued. The plant representative/ACO, working with the higher-tier contractor, may be able to remove the subcontractor's restrictions or reservations.

c. If the evaluation is completed at the request of the plant representative/ACO despite the subcontractor's objections to unrestricted release of the results, audit report marking and contents will be modified per 10-212.3. In no event may the subcontractor withhold its decision on release of the audit report pending review of the audit results or report contents.

d. Where subcontract proposal audits are made on a recurring basis for the same higher-tier contractor, try to expedite the process by developing a working arrangement for unrestricted audit report release. The arrangement should be documented by the subcontractor's representative, with a copy to the plant representative/ACO and the auditor.

9-107 Written and Telephone Requests for Specific Cost Information on Price Proposals

9-107.1 Processing Requests for Specific Cost Information

a. In connection with a pricing action, a PCO may request specific information concerning a contractor's costs without requesting an audit or evaluation of the contractor proposal. Data to be provided should already be determined. Examples of such information include recent costs for specific production items or lots; established pricing formulas such as for spare parts or other logistics items; established prices for standard components; and current rates for labor, indirect costs, per diem, etc. However, auditors may also respond to any request (telephone or written) from a customer as a telephone request for specific cost information when effort can be accomplished in 4 hours or less. When a PCO requests a complete audit and the auditor determines that there is sufficient information available in the FAO files to meet the PCO’s request, the auditor should explain the available options to the PCO and make an appropriate recommendation. (See 9-103.1d.). The PCO has the final decision in determining if a full audit is needed to determine cost reasonableness.

b. The PCO may request specific cost information by telephone, mail, fax, or electronically directly from the field auditor. Such requests should receive timely attention. Written requests are sometimes desirable for clarity, but will not be required. See 15-300, and particularly, 15-305.3b., for obtaining the assistance of a DCAA financial liaison advisor (FLA) in requesting specific cost information.

c. The auditor should ask the requestor for the value, type of contract contemplated and the performance period, in order to provide advice on the usefulness of the data being provided. If the information that the requestor seeks is considered to be of limited or no use in assessing the reasonableness of the proposed costs, the auditor should explain any concerns to the requestor. However, even if the auditor recommends limitations on the use of the information, it must still be furnished.

d. Take care to ensure that contractor data is released only to known authorized Government procurement or contract administration personnel. Within 24 hours, by telephone or in person, provide requested information contained in the files or otherwise readily obtainable.

9-107.2 Written Confirmation of Specific Cost Information

a. FAOs (other than FLAs) will issue a confirming written response to each PCO request for specific cost information within one week. However, specific cost information submitted to the plant representative/ACO at his or her request need not be confirmed in writing unless the requestor so desires. See 9-107.3 as to information requested by a higher-tier contractor.

b. The response should be in the form of a memorandum/letter, with "Submission of Specific Cost Information" as the first line of the subject block. Do not use the terms "report," "audit," “examination,” "review," or “evaluation” in the subject. State that the purpose is to furnish the cost information requested, and include applicable cautionary statements per 9-107.1c. Whenever applicable, state that the information is based on the contractor's yearly sales volume of $XXXXX and may require adjustment if the proposed procurement will affect the contractor's level of operation. Also, when indirect rate information is furnished, state the period to which the rate(s) apply and the cost elements the contractor classifies as the allocation base. Include the following statement:

> Providing this information does not constitute an audit or attestation engagement under generally accepted government auditing standards.

Provide a copy of the memorandum to the FLA if any. See Figure 9-1-1 for a sample response format.

9-107.3 Special Considerations --- Subcontractor Cost Information

a. Specific cost information on prospective or current subcontractors will be provided to Government procurement or contract administration personnel at any tier per the preceding paragraphs. Special care must be taken, however, to ensure that subcontractor information is not released by DCAA to an upper-tier contractor without express permission of the subcontractor. In addition, avoid providing assistance to contractors that would not serve a governmental purpose (see 9-106).

b. The necessity for controlling subcontractor information will usually preclude releasing it to higher-tier contractors by telephone or in person unless the subcontractor's authorized representative is present. Where there are continuing requirements for DCAA confirmation of specific cost information of a subcontractor to a particular higher-tier contractor, a local working arrangement may be made to expedite the process. The arrangement should be documented by the subcontractor's representative, with a copy to the plant representative/ACO and the auditor.

c. If the higher-tier contractor prefers to submit requests for subcontractor specific cost information in writing, this should be accommodated. Coordination between the plant representative/ACO and contract auditor at the requestor's plant will establish how such requests are to be processed.

d. The required written response (9-107.2) on subcontractor specific cost information provided to a higher-tier contractor will be addressed to the plant representative/ACO at the higher tier. Distribute a copy to the contract auditor at the higher tier, and distribute a copy to the subcontractor's plant representative/ACO if he or she so desires.

9-108 Audit of Part(s) of a Proposal and Applications of Agreed-Upon Procedures – Price Proposals

a. Auditors will be responsive to a contracting officer’s request for an application of agreed-upon procedures or an audit of part(s) of a proposal provided it clearly establishes the agreed-upon procedures to be applied or parts of the proposal to be examined.

(1) Audits of part(s) of a proposal are examinations conducted to express an opinion on one or more parts of a pricing proposal, but not on the entire proposal. A part of a proposal may be an entire cost element, for example, labor costs which encompass both the labor rates and the labor hours, or only part of a cost element, for example, specified labor rates or material loading factors. Audits of part(s) of a proposal may be conducted on proposals based on cost or pricing data and on proposals based on information other than cost or pricing data, if that information is cost data (see 9-206b., 9-207c.). Auditors may not examine and express opinions on proposals based on information other than cost or pricing data if that information is price or sales data (see 9-207a.). The auditor establishes the scope of audit for the part of the proposal under examination. This applies to contemplated awards made on the basis of negotiation as well as source selection awards made in accordance with FAR Subpart 15.3. In establishing the need for examinations of this type, the dollar thresholds by contract type in DFARS PGI 215.404-2(a) apply to the total amount of the contractor's proposal regardless of the dollar value of the elements specified for examination (also see 9-208).

(2) Applications of agreed-upon procedures are performances of procedures agreed upon with the contracting officer at the start of the engagement (see 14-1000). Auditors may perform applications of agreed-upon procedures on proposals based on cost or pricing data or on information other than cost or pricing data. All proposals supported by pricing and sales data will be evaluated by performing applications of agreed-upon procedures; no examinations may be performed (also see 9-207).

b. When a full proposal has been prepared, the total price proposal package should accompany these requests even though only certain parts of the proposal will be examined or only specified agreed-upon procedures will be performed. If the PCO/ACO initially requests an examination of the complete proposal but later modifies this to a request for an examination of parts of the proposal or the accomplishment of agreed-upon procedures the reporting guidance in 10-300 or 10-1000, respectively, is applicable. Once the field work has begun, auditors should consider the guidance on disclaimer of opinions in 2-104 before agreeing to convert an examination to an application of agreed-upon procedures. An examination cannot be converted to an application of agreed-upon procedures merely to avoid disclosing a scope limitation encountered during the examination (e.g., when the examination cannot be completed within the PCO's request time frame.

c. A clear understanding of the requestor's needs is essential (see 9-103.1d.(3)). Discussions with the ACO and/or PCO, should be held in accordance with 4-103 before beginning the audit. When significant contractor deficiencies or system problems exist, explain them and discuss the potential for additional audit coverage. Also convey information about prior contract performance and related cost history which the contracting officer may want to consider in finalizing the audit request. However, the final decision regarding the type of audit to be performed rests with the contracting officer responsible for negotiating the contract. See 9-103.1d.(3), for guidance when the auditor risk assessment does not coincide with the contracting officer's requested level of services. FLA assistance should be requested. Once the type of audit is established, the auditor should perform the required steps and report the findings. The report will confirm the auditor's advice to the contracting officer regarding the potential impact of known contractor deficiencies or systems problems on areas not audited and the reasons given by the contracting officer for not expanding the audit request.

d. It is important to recognize that the examination of part of a proposal and application of agreed-upon procedures differs from the processing of requests for specific cost information (9-107), wherein the auditor provides information from the audit files without doing an audit of any specific proposal. Paragraph 9-107 prohibits the use of the terms "report," "audit," or "examination" when processing requests for specific cost information.

9-109 Evaluation of Data Rights Price Proposals

a. DFARS 252.227-7013, "Definitions," states “Developed exclusively at private expense” means development was accomplished entirely with costs charged to indirect cost pools, costs not allocated to a government contract, or any combination thereof.” The Government is entitled to only limited rights in technical data developed exclusively at private expense (DFARS 227.7103-5(c)). DFARS 227.7103-5(d) states that specific license rates may be negotiated when the parties agree to modify the standard license rights granted to the Government or when the Government wants to obtain rights in data in which it does not have rights.

b. In determining a fair and reasonable price, the contracting officer may request assistance from the DCAA auditor. However, the contractor proposals are not generally supported by cost or pricing data; therefore, the auditor's involvement in auditing such proposals is limited. The auditor can verify to the books and records the amount claimed by the contractor as the cost of developing the proposed technical data (previously charged to indirect costs, or direct contract costs). The auditor can also evaluate information regarding sales of the technical data to other parties, if any. If such sales have occurred, the Government should not pay any more than the price paid by the contractor's most favored customer. However, the auditor cannot determine if the costs incurred under a claimed project or account relate only to the proposed data; nor can the auditor determine if there were other costs related to the data that were incurred under additional projects or accounts. The auditor also cannot be reasonably certain as to whether or not there is a specific contract or contracts that required development of some or all of the proposed data (such a determination would give the Government increased data rights and possibly preclude the need to make the purchase).

c. As indicated above, the auditor will be unable to render an informed opinion regarding the reasonableness of the contractor's proposed price for data rights. DCAA effort will normally be limited to the application of agreed-upon procedures related to a cost or price verification. The report will include a statement regarding the adequacy and compliance of the contractor's disclosed accounting practices. Unless providing this information is part of the agreed-upon procedures, these items should be included in the “Other Matters to be Reported” appendix (see 10-1011). However, to be fully responsive to the contracting officer, the auditor should contact the requestor upon receipt of a data rights audit request to discuss the specific agreed-upon procedures to be performed. Guidance for the application of agreed-upon procedures is contained in 9-108 and 14-1000. The appropriate report format, including the disclaimer of opinion, is included in 10-1000.

9-110 Release of Contractor Proprietary Data to FMS/DCC Customers

a. The U. S. Government contracting officer is responsible for determining the data to be released to FMS customers and for providing that data to the FMS customer. Auditors shall not provide contractor proprietary information to an FMS customer unless the contracting officer directs such release in writing (e-mail messages will suffice) and the contractor does not object to the release. If the price proposal evaluation is for Direct Commercial Contract (DCC) customers (foreign countries), requested by the DCMA International and Federal Business Division, DoD Central Control Point (DoDCCP), the auditor should coordinate with the DoDCCP and FLA regarding the release of contractor proprietary data to the DCC customer.

b. When the contracting officer or DoDCCP identifies that the price proposal is for an FMS/DCC customer, the auditor should determine at the start of the audit whether the contractor objects to the release of the report to the FMS/DCC customer. Auditors should request at the start of the audit that the contractor provide a written statement either confirming the contractor’s agreement or the contractor’s objection to the release of proprietary data and advise the contracting officer or DoDCCP accordingly. The contractor may

not withhold its decision as to the release of its proprietary data pending review of the audit results or report contents. If the contractor objects to the release to the FMS/DCC customer, the third paragraph of the report restrictions discussed in 10-307.3 should state the contractor's objection.

c. There may be instances where the FMS/DCC customer requests additional information concerning FMS/DCC prices. The contracting officer or DoDCCP, after consultation with the contractor, may decide that certain proprietary data may be released to the FMS/DCC customer. In this instance, the contracting officer may request that the FAO tailor the presentation of the data in the audit report to satisfy the FMS/DCC customer requests. It is the contracting officer's decision as to the level of contractor proprietary data to be provided in the report. The tailoring of the presentation of any proprietary data in the audit report in no way affects the scope of audit or results of audit, including the questioned cost. It merely affects the presentation of the data in the audit report.

Figure 9-1-1
Sample Format for Confirmation of Specific Cost Information on Price Proposals

October 15, 20XX

MEMORANDUM FOR PROCURING CONTRACTING OFFICER,
DEFENSE FUEL SUPPLY CENTER

ATTENTION: PPK/John Smith

SUBJECT: Submission of Specific Cost Information Related to RFP No. DLA31-XX-R-0001 - The ABC Company, Alexandria, Virginia

As you requested by telephone on ____, we gathered the following ABC Company data contained in our files or otherwise readily available:

Description	Amount	How Applied	Source *
Engineer	$29.00	Rate per Hour	Unaudited actual Weekly Labor Run 16 dated 3/3/20XX.
Design Engineer	$30.50	"	"
Senior Engineer	$35.00	"	"
Technician	$26.50	"	"
Material Overhead	18.3%	% of Mat'l Costs	Unaudited CFY 20XX budget dated 12/28/20XX
Labor Overhead	187.3%	% of Labor Costs	"
G&A	12.2%	% of Mat'l/Labor	"

[* *Clearly identify the source of the information, including whether the rates are "audited" or "unaudited."*]

The above information is only applicable to contractor fiscal year (CFY) 20XX and is based on the contractor's annual sales volume of $ _____. These rates and factors may require adjustment if a pricing action significantly affects the contractor's level of operation.

Providing this information does not constitute an audit or attestation engagement under generally accepted government auditing standards.

ABC Company information given above may be proprietary. The restrictions of 18 U.S.C. 1905 should be considered before releasing it to the public. Also, this information should not be used for other purposes without first consulting us regarding its applicability.

Any questions on this matter should be directed to _____ at telephone number _____.

Mary C. Simms
Branch Manager

FOR OFFICIAL USE ONLY

9-200 Section 2 --- Evaluating the Adequacy of Cost or Pricing Data or Information Other Than Cost or Pricing Data in Price Proposals

9-201 Introduction

a. This section provides criteria for determining whether the contractor/offeror has submitted adequate cost or pricing data or information other than cost or pricing data in support of its price proposal. It also provides guidance for deciding what type of audit opinion should be used depending on the nature of the audit request, whether cost or pricing data or information other than cost or pricing data was submitted by the contractor, and whether the information submitted is considered adequate, inadequate in part, or wholly inadequate.

b. The objective in requiring cost or pricing data or information other than cost or pricing data is to enable the Government to perform cost or price analysis and ultimately enable the Government and the contractor to negotiate fair and reasonable contract prices.

9-202 Definitions

a. FAR 2.101 makes a clear distinction between cost or pricing data and information other than cost or pricing data. Cost or pricing data consist of all facts existing up to the time of agreement on price which prudent buyers and sellers would reasonably expect to have a significant effect on price negotiations. Cost or pricing data is data requiring certification in accordance with FAR 15.406-2. In addition to historical accounting data, cost or pricing data include such factors as vendor quotations, nonrecurring costs, make-or-buy decisions, and other management decisions (e.g., from minutes of board of directors meetings) which could reasonably be expected to have a significant bearing on costs under the proposed pricing action. Cost or pricing data consist of facts which can be verified and should be distinguished from judgments (opinions based on facts) made by the contractor in estimating future costs. (Also see 14-104.) Except as provided in FAR 15.403-1/DFARS 215.403-1, the (sub)contractor must submit a certificate of current cost or pricing data (in the format specified in FAR 15.406-2 certifying that to the best of its knowledge and belief, the cost or pricing data were accurate, complete, and current as of the date of final agreement on price of the (sub)contract or another date agreed upon between the parties that is as close as practicable to the date of agreement on price.

b. Information other than cost or pricing data means any type of information that is not required to be certified in accordance with FAR 15.406-2, that is necessary to determine price reasonableness or cost realism. For example, such information may include pricing information, sales information, or cost information, and includes cost or pricing data for which certification is determined inapplicable after submission.

9-203 Cost or Pricing Requirements

FAR 15.403/DFARS 215.403 contain the basic requirements related to cost or pricing data, including the procedural requirements to be used when submitting cost or pricing data to the contracting officer or the contracting officer's representative. Subject to the exceptions listed in FAR 15.403-1/DFARS 215.403-1, the contractor is required to submit cost or pricing data whenever a pricing action will be over certain stated dollar thresholds (see 14-103.2). The SF 1411, Contract Pricing Proposal, was eliminated as a result of the FAR 15 Rewrite. The contracting officer may now require submission of cost or pricing data in the format indicated in FAR 15.408, Table 15-2—Instructions for Submitting Cost/Price Proposals When Cost or Pricing Data are Required; specify an alternate format; or permit submission in the contractor’s own format. The mere availability of books, records, and other documents for verification purposes does not constitute submission of cost or pricing data. FAR 15.408, Table 15-2, Note 1, states that if

the offeror submits updated information, it must show how this information relates to the proposal.

9-204 Determining Adequacy of Cost or Pricing Data

a. Evaluate the proposal to determine the adequacy of the cost or pricing data for audit purposes, and advise the contracting officer whether the offeror has, in the auditor's opinion, met its obligation to submit adequate cost or pricing data (See 9-205). FAR 15.408, Table 15-2, Note 1, states that the requirement for submission of cost or pricing data is met when all accurate cost or pricing data reasonably available to the offeror have been submitted, either actually or by specific identification in writing. However, neither this FAR provision nor the basic public laws describe in detail what constitutes submission or identification and how much data is enough data. The requirement for submission of cost or pricing data continues up to the time of agreement on price.

b. Use professional judgment when deciding whether all reasonably available data has been submitted or identified to the auditor at the time of the proposal audit. If so, the cost or pricing data can be considered adequate.

c. When the cost or pricing data are considered adequate and the proposal is prepared in accordance with FAR/DFARS, then the proposal will usually be considered "acceptable" as a basis for negotiation of a price. If there are inadequacies in the cost or pricing data, the auditor must decide whether the proposal, after proper adjustment by the contractor, can be used as a basis for negotiation of a price, or whether the impact is such that the contracting officer should be advised that the proposal should not be used as a basis for negotiation until specified corrective action(s) is completed.

9-205 Deficient or Denial of Access to Cost or Pricing Data

a. Support from the ACO and PCO is critical in successfully dealing with deficient or denial of access to cost or pricing data situations. These situations are often sensitive/complex and require extensive coordination between DCAA, the ACO/PCO, and the contractor. It is essential that the ACO and PCO have the maximum amount of lead time to resolve the conditions.

b. When such situations are encountered, the auditor should give immediate oral notification to both the ACO and the PCO (see 1-504.4 and 9-310) followed by written confirmation to the ACO with a copy to the PCO. Written confirmation should normally take place within 7 days of receipt of the contractor's proposal. When the auditor is to obtain a copy of the proposal from the contractor, no more than 3 days should be permitted for the contractor to furnish a copy. Notify the ACO and PCO if the contractor does not furnish the proposal within that time. The written confirmation shall include:

(1) a description of the deficient or denied data or records, with copies of deficient data if requested by the contracting officer;

(2) an explanation of the documentation or contractor action needed to correct the deficient cost or pricing data;

(3) an explanation of why the documentation/denied data or records are needed;

(4) the amount of proposed cost considered unsupported due to deficient cost or pricing data or to be questioned due to denial of access to records; and

(5) the actions taken by the auditor to obtain adequate cost or pricing data. (Further guidance on access to records problems is in 1-504.)

c. There is no set formula for determining when cost or pricing data are so deficient as to justify notifying the contracting officer. Depending on the specific circumstances, the auditor must decide whether one item alone or a combination of items justifies a notification. Examples of cost or pricing data deficiencies that would usually be reported to the contracting officer follow:

(1) Significant amounts of unsupported costs.

(2) Significant differences between the proposal and supporting data resulting from the proposal being out of date or available historical data for the same or similar items not being used.

(3) Significant differences between the detailed amounts and the summary totals (e.g., the bill of material total does not reconcile with the proposal summary).

(4) Materials are a significant portion of the proposal, but the contractor provides no bill of materials or other consolidated listing of the individual material items and quantities being proposed.

(5) Failure to list parts, components, assemblies or services that will be performed by subcontractors when significant amounts are involved.

(6) Significant differences resulting from unit prices proposed being based on quantities substantially different from the quantities required.

(7) Subcontract assist audit reports indicate significant problems with access to records, unsupported costs, and indirect expense rate projections.

(8) No explanation or basis for the pricing method used to propose significant interorganizational costs.

(9) No time-phased breakdown of labor hours, rates or basis of proposal for significant labor costs.

(10) No indication of basis for indirect cost rates when significant costs are involved.

(11) The contractor does not have budgets beyond the current year to support indirect expense rates proposed for future years.

d. If the cost or pricing data are so deficient that an examination cannot be performed, the auditor should consider recommending that the contracting officer return the proposal to the contractor. This approach is intended to permit the efficient use of audit resources. However, if the contracting officer decides not to return the proposal and indicates a need for all available information, a properly qualified report will be issued by explaining the situation in the "Scope of Audit" portion of the report. Because the deficiencies are significant, the report will advise the contracting officer that the proposal should not be used as a basis for negotiation until specified corrective actions are completed. The working papers file will document the contracting officer's reason for wanting a completed audit of an inadequate proposal. When a contracting officer continues to request audits of the inadequate proposals the FAO management should consider elevating our concerns within

9-206 Information Other Than Cost or Pricing Data Requirements

a. FAR 15.402 contains a hierarchical preference for contracting officers to use in obtaining information to determine price reasonableness. Here, and throughout FAR Part 15, contracting officers are to avoid unnecessarily obtaining cost or pricing data and shall not require submission of cost or pricing data if an exception at FAR 15.403-1 applies. These exceptions include:

(1) adequate price competition,

(2) prices set by law or regulation,

(3) acquisition of commercial item,

(4) a waiver of cost or pricing data, and

(5) modifications to commercial contracts or subcontracts.

In addition, cost or pricing data shall not be obtained for acquisitions below the simplified acquisition threshold. (14-907 provides additional information on these exceptions.) The contracting officer always has to determine that he/she is getting a fair and reasonable price. In establishing reasonable prices, the contracting officer shall not obtain more information than is necessary. Nevertheless, the contracting officer is responsible for obtaining information that is adequate for evaluating price reasonableness. The FAR 15.402 hierarchical preference requires the contracting officer to rely first on information available within the Government and then on information obtained from sources other than the offeror. If the contracting officer cannot obtain adequate information from sources other

than the offeror, the contracting officer must require submission of information other than cost or pricing data that is adequate to determine a fair and reasonable price. At a minimum, the contracting officer must require appropriate information on the prices at which the same or similar items have previously been sold, unless there is an exception at FAR 15.403-1(b) for adequate competition or prices set by law or regulation.

b. Information other than cost or pricing data encompasses a broad range of data. FAR 2.101 defines it as "any type of information that is not required to be certified in accordance with FAR 15.406-2 and is necessary to determine price reasonableness or cost realism." Examples include: price information, sales information, and cost information. The level and type of information other than cost or pricing data obtained varies depending upon whether a cost or price analysis is being performed. (See FAR 15.404-1(b) and (c)) Contracting officers are required to conduct a price analysis even when cost or pricing data is not required. A cost analysis may be conducted to evaluate information other than cost or pricing data to determine cost reasonableness or cost realism.

c. The auditor's participation, and the amount of support provided, will be at the discretion of the contracting officer. The types of contractor information requested by the contracting officer can be in any form unless the contracting officer considers a specific format essential and describes it in the solicitation. The FAR Rewrite eliminated the optional SF 1448, Proposal Cover Sheet, Cost or Pricing Data Not Required, which previously was available for submission of this type of information. FAR 15.403-5(a)(4) instructs the contracting officer to specify in the solicitation the necessary preaward audit access. Solicitation clauses at FAR 52.215-20 and -21 provide preaward audit access as well.

9-207 Audits of Proposals Based on Information Other Than Cost or Pricing Data

a. Auditors may not perform examinations and render opinions on the acceptability of proposals as the basis for negotiation of a fair and reasonable price that are supported only by sales or pricing information because suitable criteria to judge the price and sales information is not available. The attestation standards require that the auditor conduct the audit only "if he or she has reason to believe that the subject matter is capable of evaluation against criteria that are suitable and available to users." The criteria must be objective, measurable, complete, and relevant to the subject matter. In the past, the FAR contained such criteria. However, changes made to the FAR as a result of the Federal Acquisition Streamlining Act of 1994 and the Clinger-Cohen Act of 1996, deleted the Standard Form 1412 and the specific criteria against which price and sales information could be judged. The price and sales information can assist the contracting officer in determining if the price is fair and reasonable. To assist contracting officers in such cases, auditors should perform applications of agreed-upon procedures.

b. In performing agreed-upon procedures on proposals supported by price and sales data, the auditor should be responsive to the contracting officer's request for assistance in evaluating the information submitted. Since the effort will vary from procurement to procurement, the auditor must communicate with the requestor to ensure an understanding of the agreed-upon procedures prior to starting the engagement (see 4-103). Once the auditor has completed the performance of the agreed-upon procedures, a report using the format in 10-1000, Reports on Application of Agreed-Upon Procedures, will be used. (Also see 14-907.8)

c. Auditors may perform examinations (in full or in part) on proposals supported by any amount or quality of cost data. The amount or quality of the cost data is not relevant in determining whether an examination can or cannot be performed. However, it could impact the type of opinion provided. Generally, the criteria in FAR Part 15, while not specifically applicable to cost information other than cost or pricing data, provides a guideline to us in reaching an opinion as to the acceptability of the cost information, and therefore, the requirements of the attestation standards are met. (See 9-208) The attestation standards

provide for different types of opinions to address when cost data is sufficient or when it is not sufficient, i.e., unqualified, qualified, adverse, and disclaimer (see 9-211).

d. In establishing assignments to audit proposals based on cost information, it is important for the auditor to understand the level of cost information that the contracting officer required for submission. A disclaimer of opinion in an examination would not serve a useful purpose. Therefore, if the contracting officer has not required a level of cost information that would be sufficient for the auditor to perform an examination and render an opinion, then an application of agreed-upon procedures may be a more appropriate service choice for the contracting officer. The contracting officer may have additional information not provided by the contractor, such as market data, which will be used in making the determination of a fair and reasonable price.

e. As required by 9-103.1d., the auditor should discuss/coordinate with the contracting officer to obtain a clear understanding of his/her needs and the level of cost information that was required by the solicitation. The auditor should then:

- assess the audit risk for the proposal, and
- discuss with the contracting officer the appropriate level of service to be provided considering the auditor's assessed risk level, the contracting officer's needs, and the nature and type of cost information requested by the contracting officer in support of the proposal.

Based on these discussions, the contracting officer will make the final decision on the services to be required, i.e., an examination, an application of agreed-upon procedures, or a request for specific cost information, e.g., a rate check. For unresolved differences regarding the level of services to be performed, FLAs are available to provide assistance (see 9-103.1d.). Auditors must document the working papers for these discussions and describe the basis of the decision underlying the assignment. Once the auditor has completed his/her examination or application of agreed-upon procedures of the cost information, a report using the format in 10-300, Audit Reports on Price Proposals, or 10-1000, Reports on Application of Agreed-Upon Procedures, respectively will be used.

9-208 Determining Adequacy of Information Other than Cost or Pricing Data

a. Review the proposal to determine the adequacy of the information other than cost or pricing data for examination purposes. Inadequacies in the information other than cost or pricing data can occur when (1) the offeror does not submit the information required by the contracting officer (requirements described in the solicitation) or (2) the contracting officer has not required the offeror to submit a level of information other than cost or pricing data sufficient for the auditor to perform an examination and render an opinion as to the adequacy of the proposal or part(s) of the proposal in negotiating a fair and reasonable price.

b. Inadequacies when the offeror does not comply with the contracting officer's requirements. Advise the contracting officer if the offeror has not, in the auditor's opinion, met its obligation to submit the level of information other than cost or pricing data required by the contracting officer. Typically, the contracting officer makes this specification in the solicitation. Generally, criteria in FAR Subpart 15.4, while not specifically applicable, provide a guideline to the auditor in reaching an opinion as to the adequacy of the cost information. There are no public laws or regulations that describe in detail how much data is enough data. Use professional judgment in determining whether the offeror has complied with the contracting officer's requirements.

c. Inadequacies when the contracting officer has not required the offeror to submit sufficient information upon which to render an opinion on the proposal or part(s) of the proposal submitted. Auditor determinations of adequacy must relate to the services requested by the customer, i.e., examination of the proposal in total or examination of part of the proposal. If the contracting officer only requests an examination of part of a proposal, then the auditor is only examining the cost information to support that part of the proposal and rendering an opinion on that part of the proposal. If there are inadequacies in the in-

formation other than cost or pricing data, the auditor should recommend that the contracting officer obtain enough information to protect the Government's interest. The contracting officer will make his/her decision to request additional information based on information in his/her possession, such as market data or prior prices paid to other contractors. As discussed in 9-207e., the auditor should clarify with the contracting officer that an examination is needed before the start of fieldwork, given the level of information that the contracting officer has required. Once fieldwork has begun, if no additional information is forthcoming, then the auditor must decide whether the proposal or part of the proposal being examined can be used as a basis for negotiation of a fair and reasonable price, or whether the impact of inadequate data is such that the contracting officer should be advised that the proposal or part of the proposal being examined should not be used as a basis for negotiation without additional supporting cost information other than cost or pricing data, i.e., issue an adverse or qualified opinion.

9-209 Audit of Parts of a Proposal

A price proposal audit request may call for an examination limited to those steps necessary to establish the adequacy of cost or pricing data or cost information other than cost or pricing data related to specified cost element(s) or parts of cost elements (9-102.1b., 9-108). When this type of examination is conducted, the audit report will clearly describe, as part of the purpose and scope section, what parts of the proposal were examined and comment on any known significant estimating system, internal control or accounting system deficiencies. The opinion and report exhibits will address only the part(s) of the proposal examined. An opinion will be disclaimed for the proposal taken as a whole. The auditor is not performing procedures to gather sufficient, competent evidence on the proposal as a whole, therefore, the opinion is disclaimed for those parts of the proposal not examined. As described below, the report opinion may be unqualified or qualified (9-211.1 and 9-211.2) when the cost or pricing data/cost information other than cost or pricing data are adequate and the examination discloses no significant noncompliances with FAR and/or CAS; or adverse (9-211.3) when the examination discloses significant inadequate cost or pricing data/cost information other than cost or pricing data and/or significant noncompliances with FAR and/or CAS.

9-210 Reporting Results of Evaluations of Pricing Proposals with Cost or Pricing Data or Information Other than Cost or Pricing Data

Once the auditor has completed his/her evaluation of the cost or pricing data or information other than cost or pricing data related to a proposal (or to the parts of a proposal requested), a report using the format included in 10-300 will be issued. This report will include a summary and necessary supporting details for a clear understanding of the results. Any noted inadequacies in the cost or pricing data or information other than cost or pricing data usually result in questioned, unsupported or unresolved costs, as discussed in 10-304. To the extent that fraud, other unlawful activity, or improper practices are found, (see Fig. 4-7-3 for examples of potential indicators), the procedures of 4-702.4 should be followed.

9-211 Types of Audit Opinions in Price Proposal Audit Reports

a. In addition to reporting the results of the examination of the cost or pricing data/cost information other than cost or pricing data, the reporting standard on opinions (10-210.5) requires that the report shall contain either an expression of the auditor's opinion regarding the cost representations or an assertion that an opinion cannot be expressed, i.e., a disclaimer. The opinion is composed of three parts. An opinion is given on the adequacy of the cost or pricing data/cost information other than cost or pricing data submitted in support of the proposed cost examined. In addition, the opinion will address the compliance

of the cost or pricing data/information other than cost or pricing data with CAS or FAR Part 31, as applicable. The concluding part of the opinion will address whether the proposal or part(s) of the proposal examined should be considered acceptable as a basis for negotiation of a fair and reasonable price. (See 10-304.6) The standard allows for three types of opinions: unqualified, qualified and adverse. The following subsections discuss each type of opinion.

b. When the auditor examines the entire proposal, the opinion will be on the cost representations taken as a whole. Examples of the standard opinion paragraphs used in price proposal reports on examinations of cost or pricing data/cost information other than cost or pricing data are included at 10-304.

c. When the auditor examines only part(s) of a proposal, the opinion will be on the cost representations related to the part(s) of the proposal examined and a disclaimer of opinion will be issued for the proposal as a whole. The disclaimer on the proposal taken as whole is rendered because the auditor does not gather evidence to support an opinion on the proposal as a whole (see 10-305.4b.). Evidence is only gathered on the part(s) of the proposal examined. The opinion on part(s) of a proposal is prepared using the standard opinion paragraph in 10-304, tailored for the part(s) of the proposal examined. An example of an opinion paragraph on a part of a proposal is included in 10-305.4.

d. An application of agreed-upon procedures is a performance of procedures agreed upon with the contracting officer, not performance of procedures that the auditor believes are necessary to support the basis of an unqualified opinion. It is performed in accordance with generally accepted government auditing standards. Therefore, the report should disclaim an opinion (10-1000).

9-211.1 Unqualified Opinion

This type of opinion results when the submitted cost or pricing data/cost information other than cost or pricing data are considered by the auditor to be adequate, acceptable and in compliance with applicable FAR/DFARS and CAS provisions. In this type of opinion, the auditor considers the examined cost or pricing data/cost information other than cost or pricing data adequate and compliant and the proposal or the part(s) of a proposal examined to be acceptable as a basis for negotiation of a fair and reasonable price.

9-211.2 Qualified Opinion

An unqualified opinion cannot be issued when there are inadequacies with the cost or pricing data/cost information other than cost or pricing data, noncompliances with FAR/DFARS or CAS, or other problems not related to contractor actions or inactions (9-212). When the entire proposal is being examined, a qualified opinion states that the effects of the matter to which the qualification relates have a significant but limited impact on the proposal taken as a whole; therefore, the cost or pricing data/cost information other than cost or pricing data submitted or identified are an acceptable basis for negotiation of a fair and reasonable price. When only part(s) of a proposal is being examined, a qualified opinion states that the effects of the matter to which the qualification relates have a significant but limited impact on the part(s) of the proposal examined, therefore, the cost or pricing data/cost information other than cost or pricing data is an acceptable basis for negotiation of a fair and reasonable price for the part of the proposal examined. In determining whether a qualified opinion is appropriate in the circumstances, the auditor must consider the impact of questioned/unsupported costs on the negotiation of a fair and reasonable price and the extent of the corrective action the contractor should be required to undertake. See also 10-210.4 for factors to consider in deciding whether to qualify or disclaim the audit report opinion.

9-211.3 Adverse Opinion

a. An adverse opinion shall be rendered when there is denial of access to records/data having a significant effect on the examination, or when significant inadequacies or significant noncompliances requiring corrective action by the contractor prior to negotiation are noted. When the entire proposal is being examined, an adverse opinion presents the auditor's judgment that when taken as a whole:

(1) the submitted cost or pricing data/cost information other than cost or pricing data are not adequate, or

(2) the proposal was not prepared in accordance with applicable acquisition regulations and Cost Accounting Standards, and

(3) the proposal is, therefore, not acceptable as a basis for negotiation of a fair and reasonable price.

When only part(s) of a proposal is being examined, the adverse opinion is only related to the examined part(s) of the proposal. When an adverse opinion is expressed, if there are scope limitations, they should be discussed in the Scope of Audit section. Scope limitations should not be referred to as qualifications. The “except for” language should not be used in an adverse opinion. The opinion paragraph should include a direct reference to another paragraph/section that explains the item(s) causing the adverse opinion. This other paragraph/section in the report must explain specifically, fully, and clearly the reason or reasons for the adverse opinion as well as the specific corrective action necessary to resolve the situation.

b. An adverse opinion is generally the consequence of a contractor’s action or inaction. Situations where an adverse opinion may be justified include, but are not limited to the following:

(1) Significant amounts of questioned or unsupported costs which render the cost or pricing data/cost information other than cost or pricing data inadequate as a basis for negotiation.

(2) Significant deficiencies in the cost information submitted.

(3) Accounting system deficiencies or estimating system deficiencies which have a significant impact on the proposal and preclude an effective examination.

(4) Noncompliances with CAS or FAR/DFARS which have a significant impact on the proposed costs and which require corrective action by the contractor prior to negotiation.

(5) Denial of access to records, budgetary data, or performance data which are considered necessary to evaluate the proposal.

(6) Significant amounts are classified as unresolved costs because the subcontractor has either:

(a) denied access to records, budgetary data, or performance data which are considered necessary to evaluate the subcontract proposal or

(b) not maintained its books and records in a condition which would allow for the examination within reasonable time constraints.

(7) Nonreceipt of technical evaluation reports when the results of such reviews are considered necessary and are so significant that they may have a material impact on the proposed costs, if the contractor has denied access to the technical specialists (see D-301 and D-302).

c. An adverse opinion based on the contractor's action or inaction will normally result in a specific statement that the cost or pricing data or information other than cost or pricing data are not considered acceptable as a basis for negotiations.

9-211.4 Disclaimer of Opinion

a. A disclaimer of opinion states that the auditor does not express an opinion on the cost or pricing data or information audited. It is appropriate when the auditor has not performed an audit sufficient in scope to enable him or her to form an overall opinion on the

submission or information being audited. See 10-210.4 for factors to consider in deciding whether to qualify or disclaim the audit report opinion. A disclaimer of opinion may be used when:

(1) Procurement imposed time constraints allow only a portion of the cost or pricing data/cost information other than cost or pricing data to be examined, but do not allow sufficient time for obtaining competent evidential matter on which to base an opinion on the proposal as a whole or in requests to audit part(s) of a proposal for the specific elements to be examined, and the procurement office will not or cannot grant an extension of the due date.

(2) There are significant amounts of unresolved costs due to the nonreceipt of assist reports covering the proposed subcontract costs, if nonreceipt of the assist audit is not due to the (sub)contractor's action or inaction.

(3) There is nonreceipt of technical evaluation reports when the results of such reviews are considered necessary and are so significant that they may have a material impact on the proposed costs, and the nonreceipt is not due to a contractor's action or inaction (see D-301 and D-302).

(4) The prime contractor's proposal is evaluated through application of agreed-upon procedures, including cost realism analyses (see 10-1000). However, if one or more lower-tier proposals are evaluated using agreed-upon procedures, but the higher-tier proposal is examined, the higher tier report will be qualified with respect to those assist evaluations.

(5) The contracting officer requests that only part(s) of a proposal is to be examined. The opinion will be rendered on only that part of the proposal examined. An opinion will be disclaimed for the proposal taken as a whole. The auditor is not performing procedures to gather sufficient competent evidence on the proposal as a whole, therefore, the opinion is disclaimed for those parts of the proposal not examined. (See 10-305.4b.)

b. When disclaiming an opinion, the auditor should state that the scope of audit was not sufficient to warrant the expression of an opinion. See report language for disclaimer of opinions on examinations in 10-200 and on agreed-upon procedures in 10-1009.

9-212 Reporting the Audit Opinion in Price Proposal Audit Reports

a. The cost or pricing data/cost information other than cost or pricing data provided with the proposal (or for the limited elements/areas audited) may be completely acceptable (unqualified opinion), generally acceptable except for or subject to some specific deficiency that is significant but has a limited impact on the proposal taken as a whole (qualified opinion), or unacceptable (adverse opinion). As with 9-205c above there is no set formula on when each type of opinion must be used. It depends on the auditor's judgment as to the significance of the problems noted. In other words, the auditor must consider the magnitude of the deficiencies found relating to the submitted cost or pricing data/cost information other than cost or pricing data. If no deficiencies (i.e., inadequacies or noncompliances) are found, then normally an unqualified opinion would be appropriate. Deficiencies that are significant but have a limited impact on the proposal taken as a whole normally result in a qualified opinion. An adverse opinion would usually be warranted when the deficiencies have a significant impact on the proposal taken as a whole, and as a result, render the proposal unacceptable as the basis for negotiation of a fair and reasonable price.

b. Whichever of the three audit opinions is given (9-211), it should be reported as part of the summary portion (i.e., the "Results of Audit" section of 10-304) of the report. Necessary comments explaining the inadequacies in the cost or pricing data/cost information other than cost or pricing data and how they influence the audit opinion are usually part of the "Scope of Audit" portion of the report. (This usually means these two sections closely complement and cross-reference each other.)

9-300 Section 3 --- General Evaluation Procedures for Cost Estimates

9-301 Introduction

a. This section presents general guidance on evaluation of contractors' estimates including preliminary survey procedures and overall audit policies. Guidance related to specific cost areas is included in the remaining sections of this chapter (e.g., material cost is in Section 4 and labor cost is in Section 5).

b. This section is also intended to provide a general framework for the discussion on performing contractor estimating system surveys included in 5-1200.

9-302 Adequacy of Cost Accounting System for Preparation of Price Proposals

a. When the contract price is to be negotiated based on cost or pricing data, the contractor is required to certify that the data in support of the proposal are accurate, complete, and current (see 9-202b and FAR 15.403-4). The contractor's cost accounting system usually is a major data source used in preparing the proposal. In evaluating cost accounting system adequacy, the results of prior audits of materials, labor, indirect costs, budgeting function, etc., should assist in determining whether valid, reliable, and current costs are readily available (see 5-1207.3). When applicable, the contractor is also required to file a CAS Board Disclosure Statement certifying that the practices are complete and accurate as of the day of submission. The contractor is also certifying that the practices used in estimating costs in the proposal are consistent with the cost accounting practices disclosed in the statement. In evaluating the cost accounting system, determine that the actual estimating practices comply with CAS and the disclosure statement (see Chapter 8).

b. To provide data required for cost estimating purposes, the contractor's cost accounting system must contain sufficient refinements to provide, where applicable, cost segregation for

(1) preproduction work and special tooling;

(2) prototypes, static test models, or mock-ups;

(3) production by individual production centers, departments, or operations---as well as by components, lots, batches, runs or time periods;

(4) engineering by major task;

(5) each contract item to be separately priced;

(6) scrap, rework, spoilage, excess material, and obsolete items resulting from engineering changes;

(7) packaging and crating when substantial; and

(8) other nonrecurring or other direct cost items requiring separate treatment. (See also 5-1207.3 and 5-1209.)

c. Accounting data used in developing estimated costs must be valid and reliable. For example, in an accounting system which provides for lot costing, inadequate controls over job lot cutoffs may result in inaccurate lot cost data. This type of error could produce inequitable results when lot cost trends are used in developing or evaluating costs for follow-on procurement. For this reason, an audit of internal controls is important.

9-303 Contractor Estimating Methods and Procedures-Cost Estimates

a. A contractor's estimating method is influenced by the type of accounting system maintained and the statistical data available. Data supporting individual cost estimates may include:

(1) directly applicable experience for an entire product, such as a follow-on procurement for a product already in production;

(2) directly applicable experience for certain tasks comprising a new procurement similar to those accomplished under previous contracts; and

(3) general or indirectly applicable experience represented by various ratios and percentage factors applicable to a common base.

When experience ratios or percentage factors are used by contractors to derive related estimates for a current estimate, determine whether adjustments were made to reflect differences in complexity, production rate, contract performance period, and other factors which influence the validity of the current estimate.

b. Contractors may employ uniform procedures to prepare prospective price proposals or may justifiably use a variety of methods and procedures. Special problems may require a deviation from established procedures. It may be desirable in certain instances, from both the cost and time standpoints, to use overall or broad estimating procedures, rather than more precise, detailed methods; or it may be necessary to rely on the judgment of qualified personnel in design, production, and other fields. Variations in estimating procedures employed may be attributable to such factors as:

(1) the relative dollar amount of each estimate,

(2) the contractor's competitive position,

(3) the degree of firmness of specifications related to a new item, and

(4) the available cost data applicable to the same or related products/services previously furnished.

c. Regardless of whether the contractor has based an estimate directly on past incurred costs, ensure that cost estimates for future work are based on correction of any past or current inefficient or uneconomical contractor practices. For example, if the proposed engineering or manufacturing productivity is less than that reasonably achievable by the contractor in performing the proposed contract, the cost difference between the proposed productivity and the more likely achievable productivity should be questioned in the audit. Also question the impact of any cost avoidance recommendations using the criteria in 9-308. (See also 5-1209.)

d. There are various methods of preparing cost estimates. The most frequently used are the detailed, comparison, and roundtable methods or a combination of the three.

(1) The detailed method requires the accumulation of detailed information to arrive at estimated costs and typically uses cost data derived from the accounting system, adjunct statistical records, and other sources. The information often includes specifications; drawings; bills of material; statements of production quantities and rates; machine and workstation workloads; manufacturing processes, including the analysis of labor efficiency, setup and rework, and material scrap, waste, and spoilage; data determining plant layout requirements; analysis of tooling and capital equipment, labor, raw material and purchased parts; special tools and dies; and composition of the indirect cost pools.

(2) The comparison method is used when specifications for the item being estimated are similar to other items already produced or currently in production and for which actual cost experience is available. Under this method, requirements for the new item are compared with those for a past or current item, the differences are isolated, and cost elements applicable to the differences are deleted from or added to experienced costs. Adjustments are also made for possible upward or downward cost trends.

(3) The roundtable method is used to estimate the cost of a new item when there is no cost experience or detailed information regarding specifications, drawings, or bills of material. Under this method, representatives of the engineering, manufacturing, purchasing, and accounting departments (among others) develop the cost estimates by exchanging views and making judgments based on knowledge and experience. This method has the advantage of speed of application and is relatively inexpensive, but may not produce readily supportable or reliable cost estimates. When this method is used, technical assistance may be required to evaluate the resultant cost estimates.

9-304 Price Proposals Format and Support

a. Contractor price proposals required by FAR 15.403 /DFARS 215.403-1 to be submitted with cost or pricing data must also be submitted with the first page of the proposal

including the details specified by FAR 15.408, Table 15-2, if Table 15-2 is being used. Departments which contribute data to the proposal may include, among others, accounting, cost control, budgeting, estimating, planning, purchasing, production control, engineering, drafting, publications, and sales. In addition to the cost information contained in the accounting system, adjunct statistical records and data may be maintained and used in preparing cost estimates. The data may include bills of material, vendor quotations and catalogs, blueprints, value analysis reports, labor efficiency reports, sales budgets, and indirect cost budgets. Contractors may also prepare time series charts, scatter charts, learning curves, and other forms of graphic analysis in developing cost estimates.

b. To expedite the audit process, the Agency has developed criteria which can be used to evaluate the adequacy of the basic supporting data and information submitted with the proposal. This form is available on the DCAA Intranet and the APPS (file name ADEQUACY).

c. When coordinating with the responsible Government procurement and technical representatives, solicit the contractor's cooperation in reaching an informal agreement on types of data and information to be submitted with a proposal or to be made available at the beginning of the audit.

d. If not already provided electronically, request the contractor to submit its proposal and supporting data in electronic media (e.g., CD-ROM, on-line access). The data should be in an acceptable format for processing on DCAA computers.

9-305 Coordination with Contracting Officers

a. The organizational relationship of auditors with contracting officers and their representatives is discussed in 1-400. A close working relationship is essential for complete and meaningful evaluations of contractors' cost estimates.

b. Contracting officers, through proper coordination and utilization of members of the procurement team (including engineers, lawyers, price analysts, and contract auditors), must ensure that contractors' price proposals have been prepared on a sound basis and are evaluated in sufficient depth to support an informed opinion regarding reasonableness. The contracting officer is responsible for requiring the timely submission of needed data. Each member of the team is responsible for making recommendations in his or her respective area.

c. The auditor will perform financial evaluations and analyses requiring access to the contractor's records. These analyses will cover both the adequacy of statements of current costs and the adequacy and reasonableness of projections to the extent information relevant to such projections can be obtained from the contractor's records. These evaluations, for example, might cover material prices and quantities; labor hours and rates; and the elements of the various indirect cost pools and their distribution. As used in this paragraph, "records" include, among other things, historical cost records, cost ledgers, purchase orders, subcontractor and vendor quotations, budgets, forecasts, learning curve computations, and similar cost and forecasting data.

d. Administrative procedures to coordinate:

(1) a PCO request for audit or technical review of a prime contractor price proposal or

(2) an ACO, PCO, or auditor request for audit or technical review of a lower-tier contractor price proposal are described in 9-103, 9-104, 9-108, and Appendix D.

e. The manner in which information furnished by the auditor is used in negotiation is the responsibility of the contracting officer. Where the contracting officer fails to accept an audit recommendation and the auditor believes that this action has a significant or continuing impact on the reasonableness of the price or on administration of the contract, and in addition, feels that there is an opportunity for useful corrective action, the auditor should report the situation to his or her supervisor (see 4-803 and 15-600).

f. The type of contract to be awarded and the contract provisions are the responsibility of the contracting officer. When an evaluation of the contractor's operation indicates that the contemplated contract type would not be in the Government's best interest because of

the contractor's type of business, accounting system, production of similar items for commercial purposes, or other reasons, recommend that the contracting officer consider a different type of contract. Also advise the contracting officer when proposed contract provisions appear inappropriate or undesirable (see 3-200).

9-306 Use of Specialist Assistance in Price Proposal Technical Evaluations

a. An important aspect of a proposal evaluation is determining the reasonableness of material and labor estimates. Audit tests of these estimates may require the assistance of technical specialists.

b. Specialist assistance is usually obtained when the contractor's support for the cost being audited is not based on accounting or financial data and the auditor cannot efficiently or effectively determine the reasonableness of the costs through alternative means. However, the decision to use specialists should be reached only after considering the type of risk factors described in 9-402.2 and 9-501. These risk factors and others may indicate that specialist assistance is not necessary.

c. Detailed procedural guidance is presented in Appendix D to assist in:

(1) deciding whether technical specialist assistance is needed,

(2) identifying what type of assistance is needed,

(3) requesting the assistance,

(4) achieving good communications with technical specialists, and

(5) reporting on the use of technical specialists or the impact of their nonavailability.

d. Statement on Auditing Standards (SAS) No. 73, "Using the Work of a Specialist," requires auditors to exercise professional judgment when the work of a specialist is required, including a determination of the type of technical expertise needed, and provides guidance on using the specialist's findings. It notes that while the appropriateness and reasonableness of methods or assumptions used and their application are the responsibility of the specialist, the auditor should obtain an understanding of these matters to determine whether the findings are suitable for corroborating the cost representations.

9-307 Incorporating Technical Evaluations into the Audit Report

The contracting officer has the overall responsibility for determining how the information and opinions furnished are applied to the contractor's estimate. However, the auditor also has a responsibility for examining the report on any requested technical evaluation to ensure a reasonable understanding of the work performed, the accounting data relied on, and the impact of the results on proposed costs. Documentation requirements are in 4-1000. The work of a specialist should be incorporated into the report (see 10-304.10a.(1) & (2)). However, if the findings are obviously unrealistic, or procedures used appear inadequate, attempt to reconcile differences with the specialist or, if necessary, the responsible supervisory official. Obtain the assistance of the ACO in facilitating a resolution. Discussion of procedures and technical aspects of the evaluation is usually sufficient to eliminate concerns. If the auditor is unable to resolve differences, the technical evaluation should not be relied on in the audit opinion or the development of questioned costs. The audit report should enclose the technical report and explain why it was not used (see Appendix D).

9-308 Incorporating Cost Avoidance Recommendations into Audits of Price Proposals

a. In evaluating the reasonableness of proposed cost elements (including direct labor and material quantities and prices, other direct costs, and indirect costs), consider what it should cost to supply the proposed items assuming the offeror operates with reasonable economy and efficiency. Auditors use contract audit procedures where applicable

to assist the procuring contracting officer in meeting his or her obligation (FAR 15.404-1(c)(2)(ii)) to ensure that the effects of any inefficient or uneconomical contractor practices are not projected into future contract prices. Useful tutorial material on this concept is contained in the Air Force Institute of Technology (AFIT) and the Federal Acquisition Institute (FAI) Contract Pricing Resource Guides, specifically volume III. The internet address is
http://www.acq.osd.mil/dpap/cpf/contract_pricing_reference_guides.html.

b. Operations audits performed as discussed in 14-500 provide one key source of information about inefficient or uneconomical contractor practices which should be considered in each proposal audit. The audit program for each price proposal evaluation will provide for assessing each cost avoidance recommendation from operations audits at the contractor, to determine if there is a significant impact on the proposal. As circumstances develop (for example, the contractor implements a recommended cost avoidance or a cost avoidance proves not applicable to a certain product line), the proposal impacts can be expected to vary. Therefore, a reassessment should be made in each proposal evaluation.

c. Any significant impact of cost avoidance recommendations will be reflected as questioned costs in the audit of price proposals when all of these criteria are met:

(1) The findings and recommendations have been discussed with the contractor as provided by 4-304.5. It is not necessary to have issued the operations audit report, or have received the contractor's reaction to the findings and recommendations. However, the proposal impacts should be adjusted as these events occur, if they result in adjustment of the recommended cost avoidance.

(2) The proposal audit has established that the recommended cost avoidance is applicable to the proposed contract performance and is not reflected in the contractor's estimated costs for the proposal. Note that a cost reduction may not be reflected in the proposal even though the contractor has agreed to make the needed improvements, or even if the recommendation has been implemented. Take care not to question costs:

(a) for a time period before the contractor could reasonably achieve the recommended economy or efficiency improvement,

(b) for work areas where the recommendation does not apply, or

(c) for proposal elements that adequately anticipate the expected cost reduction.

Technical assistance (see 9-103 and 9-306) may be needed on these points, especially where the proposed costs are based on assumed future conditions or performance methods that would differ from those in effect when the cost avoidance recommendation was developed.

(3) The impact calculated for the specific proposal reasonably reflects the contractor direct and indirect start-up costs and investment amortization necessary to achieve the recommended cost avoidance, allocated using the contractor's established cost accounting practices.

9-309 Evaluation of Methods and Procedures-Cost Estimates

a. Evaluation of a contractor's estimating methods and procedures may be divided into two broad areas: first, an evaluation and understanding of the contractor's prescribed methods and procedures; and second, an evaluation and understanding of the methods and procedures actually used in preparing the cost estimate. Work in these two areas may be performed concurrently or separately using, as a reference point, past or current cost estimates prepared by the contractor. In either case, consider the findings in both of these broad areas when planning and developing the audit program (see 5-1200).

b. The auditor's objective in these two areas is to examine the available data to the extent necessary to:

(1) form a sound opinion on the validity of the methods and procedures used to develop the cost estimates, and

(2) make sound judgments on the extent and nature of testing to be done in areas requiring further examination.

Also determine whether the results of recent estimating system survey work (5-1200) indicate that the estimating system is reliable enough to allow reduced audit effort on individual price proposals.

c. The extent of the auditor's evaluation may be influenced by the:

(1) experience gained in comparing earlier estimates with applicable actual costs,

(2) degree to which the contractor's estimating procedures agree with the accounting procedures,

(3) timeliness and depth of evaluation given contractors' estimating methods and procedures by other Government representatives, and

(4) results of operations audits that affect future costs.

d. Recommend changes in estimating methods and procedures when the evaluation indicates existing procedures are inadequate or improper.

9-310 Deficiencies in Specific Cost Estimates

a. This section deals with deficiencies in specific cost estimates versus deficiencies in overall cost or pricing data covered in 9-205. When any of the following deficiencies are encountered and are significant, the auditor should immediately notify both the ACO and the PCO in accordance with the guidance contained in 9-205.

b. Deficiencies in cost estimates may result from:

(1) the use of incorrect, incomplete, or noncurrent data;

(2) the use of inappropriate estimating techniques;

(3) the failure to consider or use all applicable factors or necessary techniques;

(4) the improper use of an estimating technique;

(5) an apparent deliberate concealment or misrepresentation of the data supporting the estimate either in the historical data from prior contracts or in the supporting documents prepared specifically for the proposal (see 4-700); or

(6) the failure to estimate in a manner consistent with the disclosed or established accounting procedures as required by CAS 401 (see Chapter 8).

c. Upon discovering a significant estimating deficiency during a proposal evaluation, immediately prepare a draft estimating system flash report and submit it to the contractor for comment. The auditor should prepare the draft report and coordinate it with the contractor at the time the estimating deficiency is found, rather than waiting until the proposal audit is completed. This procedure will provide for issuing the flash report at the same time or shortly after the proposal audit report is issued. Give the contractor a reasonable amount of time to comment on the draft report, usually 1 to 2 weeks would be sufficient. Upon timely receipt of the contractor's response, a separate audit report entitled "Estimating System Deficiency Disclosed During Evaluation of Proposal No. XXX" (flash report) should be issued to the ACO addressing both the contractor's comments and additional auditor comments. If the contractor does not respond within the timeframe requested, the auditor should issue the estimating system flash report without the benefit of the contractor's response and explain in the report that the contractor was provided an opportunity to respond but did not do so within the available time. This flash report should address each deficiency disclosed in the proposal audit that is either significant in dollar impact to total proposed costs or to specific cost elements.

d. Flash reports are not required if the estimating deficiency has been reported previously and the contractor's corrective action is currently being monitored by the Government. Such deficiencies are listed in the Contractor’s Organization and Systems section of proposal reports, as described in 10-308, until they are resolved (DFARS 215.407-5-70(g)(1). In addition, the explanatory notes of the price proposal audit report should describe the cost impact of any outstanding significant deficiency which affects the proposal.

e. Items that would normally be identified in an estimating system flash report when encountered include but are not limited to the following (also see 5-1200 and 10-400):

(1) The lack of clearly documented policies, standard procedures, and methods covering the contractor's estimating system. (Use judgment on the level of detail needed by small contractors with less than $50 million per year in Government sales.)

(2) Nonexistent, out-of-date, or inadequate support for factors used in the proposal (such as raw material, attrition, or normal production allowance).

(3) Failure to perform an adequate evaluation of proposed subcontracts prior to submission of the proposal.

(4) The lack of budgetary data beyond the current contractor fiscal year.

(5) Contractor policies requiring that all production effort remain within the company, regardless of the comparative cost of the effort.

(6) Proposing material on a stand-alone basis without considering other known requirements (spares, related programs, other production lots) that might be ordered at the same time.

(7) Proposing costs based on vendor quotes without considering historical data indicating that prices ultimately negotiated with vendors are lower than the prices quoted.

(8) Not considering or selectively using historical cost experience for similar programs.

(9) Not considering residual inventories.

(10) Applying escalation to firm vendor quotes.

f. This flash reporting policy does not negate the requirement for in-depth analysis of estimating procedures and practices. Periodic estimating system audits (5-1200) are still required. The frequency of these periodic audits may vary dependent upon the items identified in the flash reports.

g. When an estimating system deficiency is identified, consider whether the condition is likely to constitute defective pricing if not revised prior to negotiation and agreement on a contract price. If the auditor concludes the cost estimate is not current, accurate, or complete, take the following actions:

(1) Inform the contractor and request it take the necessary corrective action. Seek contracting officer assistance where applicable.

(2) When the contractor refuses to revise the cost estimate, attempt to obtain or develop the information through audit means.

(3) If the contractor is unwilling to correct potentially defective cost or pricing data and time or resource constraints make it impractical to sufficiently develop a recommended audit position, the audit report should advise the contracting officer of the inadequacies in the contractor's proposal (also see 9-205).

(4) For all proposals or other audits subject to U.S.C. 2306a, complete a Defective Pricing Lead Sheet (DCAAF 7640-22b) to rate the proposal for defective pricing potential. After completion of both parts, the original will be placed in the permanent file with a copy remaining in the audit working papers.

9-311 Evaluation of Individual Cost Estimates and Cost Realism

a. As appropriate, procedures should include:

(1) a review of operations audit findings and recommendations, including cost avoidance recommendations that have an impact on proposed costs (9-308);

(2) an analysis of reports of noncompliance with CAS and FAR Part 31 for possible application of the findings to proposal evaluations;

(3) reviews of available written estimating procedures;

(4) discussions with contractor personnel;

(5) examination of the methods and procedures actually followed;

(6) consideration of the data developed and the manner in which they were used;

(7) comparisons of past cost estimates with incurred costs; and

(8) analysis of cost trends.

b. Obtain information related to the following areas:

(1) The contractor's organization with emphasis on the various segments participating in cost estimating.

(2) The estimating methods and techniques actually used and the nature of the underlying data and judgments supporting each cost element.

(3) The attention given to special terms either contained in the request for proposal or to be imposed by the contract.

(4) The availability and use made of accounting, statistical, budgetary, and other data.

(5) The extent company-wide forward pricing factors are developed and used when preparing the cost estimates and whether these pricing factors are current (see 9-1200).

(6) The graphic analysis (such as time series and correlation charts) used in preparing the estimate.

(7) The degree of consistency between cost classifications used for cost accounting purposes (direct and indirect costs) and those used for cost estimating purposes, and the reasons for significant differences, especially on proposals submitted for like or similar items.

(8) The types of products manufactured and the manufacturing processes involved. This includes information from continuous monitoring of the manufacturing process for the effects of changes and/or modernization (see 14-800).

(9) The reliability of prior cost estimates, including an evaluation of cost areas where significant differences exist between estimated and actual costs and the reasons for these differences.

(10) The contractor's managerial controls and review procedures (to ascertain whether cost estimates were prepared using established company practices).

(11) The relationship of the contractor's technical proposal to the cost estimate. The technical proposal may contain information such as descriptions of the items to be produced, production schedules, cost estimating plans, adequacy of tooling on hand, and the specific instructions furnished each department responsible for preparing cost elements contained in the proposal.

9-311.1 Evaluation of Indirect Versus Direct Cost Classification

a. Evaluate the contractor's cost classification for consistent treatment of cost elements to determine whether the treatment given direct and indirect costs in estimating parallels the accounting treatment of incurred costs as required by CAS 401 and 402. Inconsistencies should be analyzed and the reasons for different treatment explained. A violation should be reported as a CAS noncompliance.

b. Compare the pattern of direct and indirect cost treatment of the proposal being audited with the current CAS Disclosure Statement and with other proposals recently submitted, particularly when the end items involve similar work. When the estimating basis is different, the difference should be thoroughly explored.

c. Differing direct versus indirect criteria among competitors and the exercise of special allocation provisions of certain Cost Accounting Standards requires that considerable attention be directed to consistency. Although differences are natural consequences of varying circumstances, be careful to avoid perceptions that inconsistent audit applications are causing or contributing to the accounting differences. Price proposal audit reports should clearly identify unusual cost accounting practices having a significant impact, particularly those requiring the use of any special allocation provisions.

9-311.2 Evaluation of Consistency in Estimating and Accounting

CAS 401 requires that the methods used for estimating costs should be consistent with the methods used for recording or accounting for costs. However, examination might disclose, for example, that while actual costs are used in estimating costs, standard costs are used in recording costs. Under these circumstances, compare the amounts shown for a selected number of items extended at suppliers' actual prices with the amounts for the items obtained by applying established standards and related variances. This comparison should allow the auditor to evaluate the propriety of the cost estimate

and to identify possible inequities resulting from using an estimating method which differs from the method used in accounting for costs. Similar comparisons could be made in other cost areas.

9-311.3 Comparison of Estimated and Actual Costs

When applicable, compare prior cost estimates with costs incurred. The information gained will not constitute conclusive evidence of the reliability of the contractor's cost estimating methods and procedures, but may disclose significant differences between estimated and actual costs. Reasons for the differences should be ascertained and considered in evaluating the reliability of the estimating methods/procedures and in determining the extent of selective tests in areas requiring further analysis.

9-311.4 Cost Realism Analyses

a. Cost realism analysis means an evaluation of the overall costs in an offeror's proposal to determine if costs: are realistic for the work to be performed, reflect a clear understanding of the requirements, and are consistent with the various elements of the offeror's technical proposal. The goal of a cost realism analysis is to ensure that the proposed costs are not significantly understated. FAR 15.404-1(d) requires that cost realism analyses be done on cost-reimbursement contracts. Cost realism analyses may also be performed on competitive fixed-price incentive contracts or, in exceptional cases, on other competitive fixed-price type contracts when:

(1) the solicitation contains new requirements that may not be fully understood by competing offerors,

(2) there are quality concerns, or

(3) past experience indicates that contractors' proposed costs have resulted in quality or service shortfalls.

Generally, cost realism analyses are conducted on competitive cost-reimbursement contracts; however, cost realism analyses may be performed on other acquisitions as well, at the discretion of the contracting officer. Depending upon the type of contract, the purpose of the evaluation differs. On cost reimbursement contracts, the purpose is to prevent offerors from gaining an advantage over competitors by proposing an unrealistically low estimated cost. In contrast, on fixed price contracts, the goal is to protect the Government from encountering problems in performance based on an unrealistically low price.

b. Cost realism analyses differ from traditional forward pricing audits. When a complete examination of the contractor's proposal is requested, the auditor is responsible for rendering an informed opinion as to the adequacy of the cost or pricing data for negotiation of a price. In contrast, cost realism analyses are generally performed on competitive cost-reimbursement procurements when adequate price competition is anticipated. FAR 15.403-1 and DFARS 215.404-1(d) prohibit the contracting officer from requesting cost or pricing data on competitive procurements and limit data requests to information that is necessary. The contracting officer is not required to conduct an in-depth cost analysis or to verify each and every item proposed. Rather, the evaluation of the competing proposals requires the exercise of informed judgment by the contracting officer. This means that the procuring agency's evaluation of the competing proposals was reasonably based and not arbitrary.

c. Auditor assistance may not be required on some cost realism analyses; therefore, the amount of auditor support requested will vary from agency to agency. Since contracting officers are not required to verify all items proposed, usually the auditor is requested to apply agreed-upon procedures for selected elements of cost. Often, we are requested to verify that:

(1) the rates are the offeror’s most current rates,

(2) the proposal has been prepared consistent with the offeror’s established practices, and

(3) there are no outstanding deficiencies that would significantly impact the proposal.

In some cases, the contracting officer may choose not to enter into communications or negotiations with the contractor. If the auditor is prohibited from discussing the proposal with the contractor, this prohibition will most likely have to be documented in the report's Results of Application of Agreed-Upon Procedures section, and needs to be communicated up front to the contracting officer.

d. A competitive procurement is considered low risk. The auditor should coordinate closely with the requestor to determine how to efficiently meet the objectives of the cost realism analysis. The evaluation should be performed as a desk review whenever possible. Every attempt should be made to do the cost realism analysis of the costs based upon information available in the audit files. Requests for other information (e.g., status of the estimating system, or uncompensated overtime practices) should also be addressed based upon information available in the FAO files. If known deficiencies exist, these deficiencies should be identified. Negative assurance should not be provided regarding the contractor's systems.

e. Generally, technical assistance should not be requested on cost realism analyses. A technical evaluation of proposals received is an integral part of a contracting officer's source selection procedures. The technical evaluation, together with the cost realism analysis, is used to make a "best value" determination and an ultimate award of the contract. Therefore, unless otherwise instructed in the request for services, the auditor should not request technical assistance. In addition, there is no need to qualify the report for lack of receipt of technical review, because we disclaim an opinion.

f. When reporting the results of a cost realism analysis or other application of agreed-upon procedures, the auditor should follow the reporting requirements in 10-1009, Results of Application of Agreed-Upon Procedures. The report should clearly indicate that the contractor's proposed costs were specifically evaluated for realism and possible understatement. Since a cost realism analysis is an application of agreed-upon procedures, the report should include a disclaimer of opinion. Since FAR 15.403-1 instructs contracting officers not to obtain cost or pricing data when conducting a cost realism analysis on a competitive procurement, there should not be any reference to the adequacy of the cost or pricing data. Auditors should not use the opinion matrix in 10-304.6c.

9-312 Pre-Established Forward Pricing Rates and Factors

Formal or informal agreements between contractors and the Government may exist which establish certain cost factors for use in forward pricing actions during specified time periods (such as forward pricing rate agreements and formula pricing agreements---a systematic method of pricing a large volume of small acquisitions). These factors may include indirect cost rates, labor hour rates, material and labor variances, material handling rates, and allowances for scrap and obsolescence. See 9-1200, FAR 15.407-3 and 42.17 for detailed guidance on the audit of forward pricing rate and formula pricing agreements. Periodically determine whether present conditions or intervening occurrences negate current applicability of these types of pre-established cost factors. Circumstances which may adversely affect their continued applicability are changes in business volume, changes in market conditions affecting material or labor costs, savings accruing from cost reduction programs, changes in manufacturing processes used to make products, and changes in the accounting treatment of direct and indirect costs. Board of Directors minutes may document major decisions that affect the above areas (see 5-109.2 and 14-605a.).

9-313 Evaluation of Cost Estimates After Costs Have Been Incurred

Under certain circumstances, a contractor's submission is evaluated after all or a portion of the costs have been incurred, such as in the case of pricing proposals, contract status reports, termination claims, and delay claims. In these cases, the audit of the submission should not be limited merely to a comparison with the actual costs. Refer to the appropriate section of CAM for pertinent guidance relative to the specific audit being performed.

9-314 Cost Estimates Based on Standard Costs

Guidelines for evaluating the validity of historical costs derived by using standard costs and related variances are contained in Chapter 6. The same guidelines apply when standard costs and related variances are used in preparing cost estimates. The basic principle underlying the use of standard costs in estimating is that the standard cost plus the estimated variance must reasonably approximate the expected actual cost.

9-314.1 Estimates Based on Revised Standards

A contractor may revise direct material and direct labor standard costs, adjusted by estimated variances, to develop direct material and direct labor cost forecasts. Review the basis for revising the standards and decide whether the estimated variances have been properly adjusted to reflect the changes made in the standards. When revised standards reflect only certain historical cost changes, the related variances must be adjusted so that the two combined will approximate the anticipated actual cost.

9-314.2 Variance Analysis

a. Direct material and direct labor cost variances may be segregated by contributing causes (such as price and rate variances, use and efficiency variances, and variances caused by make or buy decisions) and by product lines (with homogeneous products) to produce reasonably accurate prime product costs. When variances are segregated, make comparative studies of historical costs and cost trends. For this analysis, consider employing techniques such as

(1) time series charts, plotting the percentage relationship of a major direct variance element (material or labor) to related standard costs within the product line, and

(2) improvement curves, plotting the unit or cumulative average direct material or direct labor costs (standards and related variances) for successive quantities of end products produced.

b. Measure the effect of anticipated changes so that historical costs may be adjusted to a basis comparable to that underlying the forecasts. Adjustments may be necessary when the following conditions exist:

(1) The planned production within a product line may be of a continuing nature, whereas, in prior periods, a number of related products were initially put into production causing high start-up prime costs.

(2) The planned sales and production volume within a product line may be substantially higher or lower than previous periods. Changes in volume have an impact on quantity discounts on direct material purchases, direct labor efficiency, and other factors which contribute to variances from standard costs.

(3) The planned reduction in inventories on hand may lead to unusual rework effort and result in high nonrecurring variance cost.

(4) The planned changes in make or buy policies for specific components and in the product mix within a product line may have an impact on direct material and direct labor variances previously caused by a volume change.

9-314.3 Variances by Product Line

When standard costs and the related experienced variances are used by a contractor in estimating prime costs, establishing the reasonableness of the estimates will be difficult unless the contractor's accounting system provides for segregation of variances by product lines. Analyze recorded product line data to determine whether the contractor's estimate reasonably approximates expected actual costs. Available statistical analyses of the variances may provide more appropriate costs for specific products than recorded overall vari-

ances. Statistical data of this type may be used to appraise direct material or labor cost estimates based on applying overall variances to standard costs.

9-314.4 Consistency in Using Standards

When a contractor employs standard costs and submits multiple proposals, the direct material and direct labor standard costs should be consistent for pricing all procurements. Verify that standards are current before they are compared with cost estimates. However, these standard costs are generally not applicable for pricing items:

- not in continuous production,
- being phased out of production, or
- being produced under special production runs.

9-315 Evaluation of Statement of Income and Expense

a. In some circumstances, the contractor's Statement of Income and Expense should be evaluated for each organizational element comprising a profit center with its own cost estimating and proposal responsibility. Consider for further study and operations audits areas of favorable or unfavorable results of operation. Comparisons should also be made to the contractor's budgets as discussed in 5-500. In considering what areas might warrant further study, attempt to identify those factors which influenced operating results without reflecting on the soundness of the contractor's estimating procedures. Examples of these factors are unusually high profit rates compared with the estimated rates because of the introduction of more efficient production and management techniques, or unusually low rates of profit (or losses) resulting from deliberate low bids because of competition.

b. When a detailed study is to be made, obtain any further segregations of the income and expense statement that are available. This includes segregation by:

- commercial business;
- Government business; or
- major categories of Government business by product, contract, and type of contract.

The analysis should compare the segregated data with the corresponding data shown in sales forecasts, company budgets, and cost estimates used by management in the conduct of the business.

c. Be alert to situations where the profit rates, based on an analysis of financial statements or other summary information, appear to be out of line (e.g., significantly higher than would be anticipated based on the profit rates negotiated). In these cases, determine the reason(s) for the high profits. Consider the results of this evaluation during future proposal, estimating system, and defective pricing audits.

9-316 Evaluation of Contractor Cost Controls

a. The adequacy and effectiveness of the contractor's system for controlling costs should be evaluated. This is done to decide whether the projected costs are being considered when preparing cost estimates. In other words, are there controls on the cost level used to control operational costs over a selected time period (budgets) and to do they achieve specific cost reductions (efficiency studies)? The evaluation of the cost controls should include the following:

(1) an analysis of the contractor's budget system---preparation of the budgets, operations covered, its use in controlling costs, relationships of the various segments contained in the overall budget, and comparisons of past estimates with costs actually incurred; and

(2) an analysis of past, current, and planned cost reduction programs with emphasis on the nature of the programs, the cost savings achieved, and cost savings goals established for future periods.

b. Many major Government contracts contain clauses requiring an approved Earned Value Management System (EVMS) for performance measurement on selected acquisitions (11-200). On proposals expected to result in contracts covered by DFARS clause 252.234-7002, EVMS, when a contractor has proposed to use a previously accepted EVMS, the auditor should provide comments on any deficiencies that are affecting the EVMS on other contracts. These comments should include the impact of other contractor system deficiencies (such as those disclosed during audits of material management and accounting systems, labor, other accounting systems, budgets, and billing systems) that are being reported EVMS surveillance reports (11-203.5.c). Provide the comments in the applicable note or an appendix to the proposal audit report (see 10-306 and 10-308).

9-317 Evaluation of Cost Reduction Programs

a. Cost reduction programs include:
(1) value engineering,
(2) work simplification,
(3) design review,
(4) time and motion studies,
(5) organizational structure reviews, and
(6) suggestion and energy conservation programs.
These programs provide for greater economy and efficiency and may also indicate the effectiveness of a contractor's operations. Except for "value engineering," the general nature of these programs is adequately described in the titles. According to FAR 48.101, value engineering is a "formal technique by which contractors may:
(1) voluntarily suggest methods for performing more economically and share in any resulting savings or
(2) be required to establish a program to identify and submit to the Government methods for performing more economically.
Value engineering attempts to eliminate, without impairing essential functions or characteristics, anything that increases acquisition, operation, or support costs."
b. In evaluating cost estimates, determine whether the contractor has considered specific cost reductions anticipated resulting from cost reduction programs other than value engineering. FAR Part 48 contains a discussion of the contract provisions that cover value engineering incentives and value engineering program requirements and their impact on pricing.

9-318 Evaluation of Plans for Plant and Facility Improvements

Some contractors are accomplishing substantial technological advancements on the factory floor. Improvements in the contractor's plant and facilities frequently generate substantial reductions in labor and material requirements. Evaluate the contractor's plans and budgets for improvement of plant and facilities (see 14-600) during the proposed contract period and ascertain whether applicable production cost reductions are reflected in the cost estimates. Evaluate the data submitted by the contractor to justify any new or additional Government-furnished equipment or other facilities scheduled to be provided and the timetable for implementation of new equipment and manufacturing processes. The contractor's justification for these items normally will provide a good basis for determining whether applicable cost reductions are reflected in new work cost estimates.

9-400 Section 4 --- Evaluating Direct Material Cost Estimates

9-401 Introduction

a. This section presents guidelines for evaluation of direct material cost estimates.

b. Direct material costs may include estimates for raw materials, purchased parts, subcontracted parts, packaging, freight, interdivisional transfers, vendor tooling, and other material directly identified with the engineering effort or the manufacture of a product. If the costs of scrap, spoilage, rework, process loss, obsolescence, and similar items can be reasonably estimated through the development of forward pricing factors or other means, then these should also be charged direct. It is important, however, to ensure that the method of estimating and costing these items complies with the applicable Cost Accounting Standards (see Chapter 8).

c. When direct material cost estimates are evaluated, the auditor should consider both the validity of the estimated prices and the quantitative and qualitative material requirements. Appendix D and 9-306 provides detailed guidance on the technical review aspects of material cost estimates and the procedures for requesting assistance.

9-402 Direct Materials Estimating Methods

a. The method of estimating direct material cost depends on the type of accounting and statistical data available to the contractor and the bases for this data. The available data may be based on directly applicable experience for:

(1) an entire product, as in the case of follow-on procurement, or

(2) certain parts and components comprising a product, as in the case of an estimate for an item substantially similar to or related to an item previously produced.

The data may also be based on general production standards or on previous production experience. Examples include factors like direct material cost per pound of product and ratios of direct material to direct labor for similar products.

b. The four basic procedures for estimating direct material are:

(1) estimate quantity requirements;

(2) determine raw material requirements, convert measurements as necessary, and estimate actual yields;

(3) estimate current prices; and

(4) adjust estimated prices for cost trends and quantities and project total cost.

Note that prior to applying these procedures, the auditor should analyze individual material estimates from a qualitative perspective to ensure that the proposed material effectively satisfies the Government's requirements.

9-402.1 Source of Material Cost Estimates

Information on which to base direct material cost estimates usually may be obtained from one or a combination of the sources listed below:

(1) Cost records, appropriately adjusted, for the last completed contract.

(2) Cost records for the last lot or a selected number of lots for the last completed contract.

(3) Experienced direct material costs, plotted on an improvement curve, for the same or similar product or components.

(4) Priced bills of material.

(5) Appropriately adjusted, priced bills of material for a related product.

(6) Direct material costs incurred for a pilot run of a prototype model.

(7) A prior cost estimate adjusted to reflect current needs.

(8) A budget prepared for the period during which the same or similar item was produced.

(9) Experience factors and ratios established for related or unrelated products of similar size and complexity.
(10) Operations time sheets.
(11) Engineering drawings.

9-402.2 Extent of Auditor's Evaluation

a. Direct material cost estimates should be evaluated based on the validity of the estimated prices and the quantitative and qualitative material requirements. Factors which influence the scope of audit include:
(1) the materiality of the proposed direct material costs,
(2) the adequacy of the contractor's material related cost or pricing data (see 5-1200),
(3) the adequacy of the contractor's estimating procedures for determining material requirements (see 5-1204.1),
(4) the extent to which actual estimating and material requirements practices follow established procedures,
(5) the contribution of other Government representatives in evaluating the quantitative and qualitative requirements for a specific proposal, and
(6) the results of operations audits of material related functions.
The contractor's classifications of direct materials in cost estimates must be consistent with classifications in the accounting system, as required by Cost Accounting Standard 401. Inconsistencies should be brought to the contractor and the contracting officer's attention so that appropriate action can be taken.
b. Whenever the auditor needs the assistance of a specialist to form an opinion on the measurement of costs, such assistance should be obtained. The auditor should:
(1) identify the specific type of assistance needed,
(2) communicate with the technical specialist, and
(3) assess the impact of technical specialist findings in formulating the audit opinion (see 9-306 and Appendix D).

9-403 Price Proposals Bill of Material Evaluations

a. A properly prepared bill of material (BOM) generally will provide a sound basis for estimating direct material costs. The BOM will usually contain a detailed listing of the types and quantities required for raw material and for each component and part. It may also include allowances for expected losses; defects; spoilage during processing; scrap generated; common supply items such as welding rods, nuts, bolts, and washers; or other additives to the basic material requirements. When it contains only the basic material requirements, loading factors stated as a percentage of material costs may be applied to provide for expected costs of material losses and common supply items. The auditor needs to ensure, however, that the estimated costs supporting these loss allowances or loading factors are not also included in the contractor's indirect cost estimates in noncompliance with CAS 401 or 402 (see 8-401 and 8-402).
b. At some contractor locations there may be both an engineering and manufacturing BOM. The engineering BOM will list all parts required to produce the end products. However, engineering may be unable to estimate certain quantity requirements such as length of wire. In such a case, manufacturing will develop detailed material requirements in the form of a BOM that will be used as a manufacturing aid. The auditor can use this to further define the material requirements of the engineering BOM.
c. Bills of material at large contractors are usually loaded into computer data bases which provide the capability to request information in many formats. Additional information such as description, where-used, item number, and dollar value may also be available in the data base.
d. A BOM can usually be provided for an end product or any subassembly. The most common sorts are:

(1) Part Number Ascending Order. This bill of material is sorted by ascending part number showing total quantity required for each part of an end item. A detailed report may give further information including where the part is used (see D-408.3).

(2) Assembly/Subassembly (Christmas Tree). This BOM is hierarchical and lists major assemblies followed by the various levels relating to subassemblies. It is often referred to as a "Christmas Tree" because of its pyramidal or Christmas tree shape (see D-408.3).

9-403.1 Evaluating Quantity Estimates

a. When the estimate relates to a follow-on procurement and prior experience exists, the audit should include, but not be limited to, the following procedures:

(1) Obtain the engineering BOM that supports the contractor's proposal. An engineering BOM is preferable to a manufacturing BOM because of its correspondence to engineering drawings. If the auditor intends to select a manual sample of parts, an ascending/descending BOM with prices is usually necessary. Higher assembly information must be part of this BOM, or available in a supplemental document to ensure that the lower level parts are identified and verified to their appropriate higher assemblies. For a computer based bill of material, the part numbers may be in ascending/descending order or assembly/subassembly order. The preferred method for sample selection is to use one of several available software tools including DATATRAK III.

(2) Determine that the bill of material is current and that, based upon the applicable specifications, it reflects all anticipated changes in the unit quantitative requirements.

(3) Prepare a sampling plan. Select for evaluation either a random stratified sample or dollar unit sample of parts. Guidance on performing a sample is contained in Appendix B. Although the sample should be designed to validate bills of material quantities to engineering drawings, the sample should also be used to validate pricing to the extent that this is practical.

(4) Obtain detailed engineering drawings for the sampled parts. Separate engineering drawings may not be available for purchased parts, but may be available as part of the next higher assembly drawing. Also, an initial BOM may be incomplete and contain undefined parts which do not have engineering drawings. A large number of undefined parts usually indicates a need for technical specialist assistance.

(5) Compare sample part quantities and specifications (dimensions, tolerances, etc.) on engineering drawings to the BOM and note any discrepancies.

(6) Identify how the contractor calculated part quantities and the number of parts to be produced from raw material. Pay special attention to the contractor's use of "rounding" when calculating raw material factors. Verify the accuracy of the contractor's calculations by working through several part estimates and note any discrepancies.

b. When the estimate relates to a completely new product, the contractor may have only rough sketches or design prints for a prototype. The types and quantities of required materials may have been developed primarily based on the personal experiences and judgments of contractor personnel. Such estimates should be given close scrutiny because errors that duplicate material items are often found. Estimates for completely new products often require the use of technical specialists (see 9-402.2b).

9-403.2 Using Operations Time Sheets

An operation time sheet (see D-408.4) usually includes a description of the discrete manufacturing operations and associated times necessary to build the part, and may disclose material quantity, tools, fixtures and labor standards. They are a main source of labor information as discussed in 9-504.4. However, they may also be used as a substitute for a BOM for cost estimating purposes. Care should be taken when operations time sheets are used in conjunction with bills of material to ensure that costs are not duplicated.

9-403.3 Using Engineering Drawings

Material requirements are normally determined from engineering drawings. These drawings illustrate and provide essential information needed to design and manufacture a product. This includes:
(1) physical characteristics,
(2) dimensional and tolerance data,
(3) critical assembly sequences,
(4) performance ratings,
(5) material identification details,
(6) inspection tests,
(7) evaluation criteria,
(8) calibration information, and
(9) quality control data.

9-404 Evaluating Contractor's Direct Materials Pricing Procedures

9-404.1 Sources for Pricing

Sources for pricing components include:
(1) standard costs,
(2) previous purchase order prices adjusted for quantity differences,
(3) current vendor quotations, and
(4) current order placement prices. In evaluating the contractor's pricing procedure, consider the following:
a. The sources of arriving at the prices used for each element comprising the total direct material estimate or the priced BOM.
(1) When the source is standard costs, determine whether the variance factor applied is realistic compared to past and current experience, and probable future trends.
(2) When prices are developed from previous purchases, identify the source of the prices (stock record cards or purchase orders) and ascertain if the prices used are current and appropriate for the estimated quantity required.
(3) When prices are developed from current vendor quotations, determine the extent of bid solicitations and the reasonableness of prices submitted.
(4) Contractors generally maintain inventories of parts and components which are incorporated into regularly manufactured products. Inquiries should be made to ascertain the extent that available inventory has been considered in deciding the source of proposed material. When parts included in the inventory are to be used in the fabrication or production of items included in a proposal, verify the unit costs applicable to the inventory. Procedures for verifying inventory costs are included in 6-300.
(5) Regardless of the source used, compare the prices in the proposal with:
(a) those quoted by competing suppliers for comparable quantities,
(b) recent quotations for the same or similar items,
(c) costs incurred by the contractor for the same or similar items and
(d) the cost of any available inventory not specifically identified to other contractual requirements.
b. The type of subcontract or purchase order to be awarded. When conditions warrant the use of a cost-type or fixed-price redeterminable subcontract or purchase order, evaluate the price which the contractor has included in the estimate. Assistance of the auditor at the subcontractor location may be needed in making this evaluation (see 9-104).
c. The consistency with which the material pricing sources are used. When a variety of material pricing sources are used in costing the BOM, consistency in estimating procedures is not possible unless there are guidelines which closely define the governing factors. This becomes apparent when the contractor has a recurring, substantial dollar

proposal volume. Closely scrutinize the propriety and reasonableness of material price estimates when there are inconsistencies in estimating procedures. Be alert for violations of the applicable Cost Accounting Standards.

9-404.2 Effect of Purchasing Procedures on Prices Paid

Economical buying practices generally result in obtaining the lowest prices for maximum quantities consistent with need, required quality, and delivery schedules. The contractor's purchasing practices (see 5-1302) should be tested for reasonableness of quantities, quality, and the prices of direct materials, not only for parts in inventory, but also for parts required to be purchased under the proposed procurement. When current vendor quotations are used to support the contractor's direct material cost estimate, determine the extent to which the contractor followed economical buying practices. Vendor quotations should be examined to determine whether they were submitted in response to the procurement under consideration, and whether prices are appropriate in light of required quantities and specifications. When effective competition does not exist, as in the case of sole source vendors, the contractor's source for estimating material prices should be given close analysis.

9-404.3 Using Previous Purchase Order Prices

The contractor may use prices paid for the same items in previous purchases to estimate the material cost of follow-on procurements when current vendor bids have not been obtained. Determine the extent to which;

(1) recent purchase orders were selected to obtain applicable prices and adjusted, where necessary, to reflect price trends,

(2) purchase order prices selected are for comparable quantities required for the follow-on procurement,

(3) quantity discounts were given when increased quantities are to be purchased, and

(4) consideration has been given to eliminating high start-up costs.

9-404.4 Pricing of Company-Produced Components

Under certain circumstances, contractors may propose materials and supplies based on price rather than cost when they are sold or transferred between any division, subsidiary or affiliate of the contractor under common control. In these cases, ascertain whether the specific circumstances meet the criteria described in 6-313. If the audit discloses items that are improperly based on price rather than cost, appropriate adjustments should be made to eliminate the intracompany profit (plus any inapplicable indirect costs).

9-404.5 Pyramiding of Costs and Profit on Material Purchases

a. Most major programs require the use of subcontractors, not only to obtain facilities and skills which may not be available within the upper-tier contractor, but to broaden the procurement base and to meet requirements for utilizing small business. However, the auditor should be alert to instances where a proposal may be excessive because of unreasonable pyramiding of costs and profits. This may occur between divisions, plants, or subsidiaries of a company or between subcontractors and upper-tier contractors. The contractor's procurement program should be reviewed to determine whether the planned subcontracting pattern is reasonable. The auditor should not limit his or her considerations to first-tier subcontracts, but should coordinate with auditors at subcontractor locations to disclose unreasonable pyramiding of costs or profits at any of the levels of the procurement chain where significant costs are involved.

b. Situations likely to result in excessive or unreasonable pyramiding of costs include the following (where questionable practices seem to exist, consult with Government technical and procurement personnel as appropriate):

(1) Intracompany transactions through which items are charged to the contract at a list price (see 9-404.4) or at a cost plus unnecessary or unreasonable handling charges.

(2) Purchases from a subcontractor who acts merely as an intermediary/agent rather than as a manufacturer. Items may be drop-shipped direct to the upper-tier contractor's plant or they may pass through the subcontract plant for minor additions, changes, or testing which could be done more economically and as well at a lower or an upper-tier contractor's plant.

(3) Purchases by an upper-tier contractor of items which are identical with or similar to items being purchased by the Government and which could more economically be supplied as Government-furnished property.

c. When proposed material costs include loadings added by the prime contractor and upper-tier subcontractors, and the added amounts appear to be disproportionate compared to their planned work contribution, the audit report should comment on the increased costs and profit attributable to the pyramiding. The report should state:

(1) the estimated savings which will result by eliminating the intermediary and shortening the procurement chain,

(2) the considerations underlying the treatment of the direct procurement as Government-furnished items, and

(3) the degree to which the component or item involved can be treated independently from the system for which it is to be procured.

9-404.6 Subcontract Decrements

a. Vendor quotations and contract prices are frequently subject to change. These changes occur when:

(1) vendors agree to make voluntary price adjustments and refunds in the event purchases exceed a predetermined level,

(2) vendors agree to reduce a competitive quote, or

(3) profits become excessive.

If significant amounts of these changes are attributable to inefficient prime contractor purchasing practices, the auditor should recommend corrective measures be taken including:

(1) improving the prime or upper tier subcontractor's purchasing practices and

(2) recognizing the impact of the changes in cost proposals.

The auditor at the prime or upper tier subcontractor level should also advise the auditor at the (lower) subcontractor level to reappraise the subcontractor's estimating procedures.

b. Information concerning patterns of reductions from quotes to actual prices paid may be useful in evaluating a cost estimate. Information about historical reductions is cost or pricing data and should be disclosed to the Government. In addition, DFARS 215.407-5-70(d)(2)(ix) requires contractors to use historical experience when appropriate. Contractors should, therefore, analyze the pattern of historical reductions, determine its applicability to the subject procurement, disclose the analysis, and reduce proposed cost, if appropriate. None of these steps, however, relieves the contractor of its responsibility for performing cost or price analyses as required by FAR.

c. If there is a pattern of price reductions, review the prime contractor's or upper tier subcontractor's analyses of quotes and subcontract prices. Determine whether the contractor considered the pattern in estimating material and subcontract costs. Evaluate the method used to analyze the price reductions. The contractor may apply a decrement to cost estimates based on patterns that are company-wide, program-wide, contract specific, or vendor specific. Ascertain what cost data were used to develop the decrement factor and confirm that the factor is properly and consistently applied to vendor-quoted base costs. For example, if the decrement factor was developed using both competitive

and noncompetitive quotes, the factor should be applied to both competitive and noncompetitive quotes. The data used to develop the decrement should be accurate, current, and representative. If the contractor has failed to use experience adequately in estimating costs, it may be necessary to develop a decrement for use in evaluating material estimates.

9-404.7 Using Trade Information

Regularly published trade information may be useful when evaluating the reasonableness of estimated prices. Information on industry-wide cost trends may also be useful, especially when contractors' estimates for follow-on procurement include increases in direct material prices based primarily on unsupported percentages. Information published in financial and industry papers usually reflects prices of basic commodities, trends and forecasts of wage increases by industry, and opinions by experts on economic trends. Trade publications can be of assistance in evaluating the contractor's material price estimates for aluminum and steel, especially when purchase orders are "future" commitments based on prices for the delivery date. Follow-on orders for large quantities may result in prices lower than are indicated by general market conditions discussed in trade publications because of quantity discounts or improved vendor efficiency.

9-404.8 Use of Consolidated Material Requirements

a. DoD Instruction 4245.12 (entitled, Spares Acquisition Integrated with Production --- SAIP) specifies that when required in accordance with the Instruction, spare part orders are to be combined with prime contract orders for production components to achieve lower bill of material component unit prices. Furthermore, a review of previous direct material purchases (see 9-404.3) may disclose that bill of material components are required for two or more contractor programs. When appropriate, proposed bill of material component unit prices should be based on the total production schedule quantity requirements (i.e., for both production and spares).

b. When SAIP requirements are imposed by the contracting officer, the auditor will be requested to, as part of his/her overall proposal audit, ascertain if the contractor or subcontractor has complied with the SAIP agreement. An evaluation, as determined by the auditor, will be conducted to ensure that prices for spares and identical items used in the production of end items reflect savings as a result of combined ordering.

9-405 Make or Buy Decisions – Direct Material Cost Estimates

A contractor must decide whether to make or buy parts and components. Responsibility for this decision is usually delegated to key personnel from the production, tooling, engineering, accounting, production planning, and purchasing departments. Factors considered in arriving at a make or buy decision include:

(1) previous experience,
(2) future requirements,
(3) relative costs,
(4) market conditions,
(5) delivery schedules,
(6) available capacity,
(7) finances,
(8) staffing,
(9) subcontractors' capabilities, and
(10) availability of materials.

Review the guidance in 14-600 as part of the evaluation of the contractor's proposed make or buy decisions.

9-405.1 General Considerations

A contractor's make or buy decisions may have a significant impact on direct material cost estimates. In determining the scope and extent of the proposal audit, evaluate the adequacy of the contractor's make or buy policies and procedures. This should include determining whether:

(1) the factors listed in the preceding paragraph have been considered,

(2) the contractor was effective in communicating with its estimators to ensure that the estimate properly reflects the make or buy decisions,

(3) past make or buy decisions reflected in prior estimates were followed, and

(4) the results of operations audits of the various manufacturing functions involved in a make decision indicates any weaknesses.

9-405.2 Special Considerations in Make or Buy

Be alert to special factors involved in make or buy decisions. These include:

(1) intracompany procurement,

(2) changes in make or buy,

(3) simultaneous actions involving both the making and the buying of the same parts, and

(4) an extensive time lapse between the proposal submission date and the actual contract date.

These factors are discussed below.

a. Purchases by a contractor from one of its divisions, affiliates, or subsidiaries may be classified as either "make" or "buy" depending on circumstances. When the reimbursement to the subsidiary is on a cost basis, the purchase would be considered a decision to make the item. When the reimbursement is based upon a competitive price, the purchase would be considered as a decision to buy the item. Evaluate make items involving significant direct material estimates of the contractor and its subsidiaries, affiliates, and divisions. The cost estimates for make items should not include charges by both the affiliate and the contractor in areas such as engineering, field service, and product warranty. Evaluation techniques for buy items are similar to those used for competitive outside vendors. Special attention, however, must be given to determining whether contractor practices permit affiliates to obtain business by meeting the lowest bid submitted by outside vendors. This practice may not result in fair pricing and may reduce and tend to eliminate competition on future procurements. The audit report should include comments on any intracompany procurement practices which do not result in fair prices.

b. It is not unusual for a contractor to change make or buy decisions. When a contractor's plant facilities or those of its affiliates are not operating at full capacity there may be an incentive for the contractor to change from a decision to buy to a decision to make. A change from buy to make may require additional engineering, tooling, and starting load costs; additional labor operations with related indirect costs; and the elimination of the vendor price for the component. Conversely, a change from make to buy will result in the addition of a vendor price for the component and the elimination of direct labor and related overhead. In evaluating the estimated cost, determine whether the contractor has properly reflected the offsetting effect of changes in past make and buy patterns on all related cost elements in the proposal. If a proposed change in make or buy policy results in a significant increase in cost to the Government, evaluate the contractor's justification for making the change. The auditor may ascertain the extent to which make or buy policies are changed, by comparing ratios of direct material to direct labor on current and prior procurements for the same or similar products. Discussions with contractor personnel responsible for make or buy decisions should provide the auditor with useful information. This information should also be noted for follow-up in subsequent operations audits of the area.

c. When an evaluation discloses that a contractor makes and also buys the same part or component, determine the reasons for this practice and the propriety of the cost basis used for the material included in the proposal.

d. An extensive period may elapse between the proposal submission date and the negotiation date. Whenever feasible, determine through reexamination of data relating to make or buy programs whether significant changes have occurred in make or buy decisions during the interim period and whether these changes will affect estimated costs.

9-406 Evaluating Major Subcontract Proposal Cost Estimates

When the decision is to buy instead of make, subcontract costs will be reflected in the direct material portion of the contractor's cost estimate. In evaluating subcontract estimates, consider the contractor's procurement procedures, including controls exercised over subcontractors' costs and the type of subcontract or purchase order to be issued by the prime contractor. The prime contract auditor will specifically evaluate each pricing submission and available data to determine the need for any subcontractor/intracompany assist audits as discussed in 9-104 and 9-105.

9-406.1 Contractor's Procurement Procedures

a. Procedures employed by a contractor for evaluating subcontractor estimates may include using engineering departments to prepare independent estimates for comparison with subcontractors' price quotations and field audits of subcontractors' quotations by company audit personnel or independent public accountants. The auditor must determine if the contractor's procurement procedures are adequate when planning the extent of his/her testing and evaluation (see 5-1302).

b. The auditor must also consider the result of operations audits of any related areas in making this appraisal. The contractor is usually concerned with obtaining the best subcontract prices available so that its proposed price will be competitive. However, if the prime contract is noncompetitive, give special attention to determining the adequacy of the contractor's procurement procedures.

c. The contractor is required to include the results of subcontract reviews and evaluations with its own cost or pricing data. Because of time constraints, however, the contractor might not complete the analyses of subcontracts prior to submitting its own proposal. In that case, ensure that reasonable schedules are planned to accomplish them and evaluate other actions by the contractor to assess the prices that its vendors have proposed. In an appendix to the audit report, list all subcontracts for which the contractor has not completed FAR-required price or cost analyses (see 9-104.1 and 10-308). If the contractor neither performs cost or price analyses nor takes alternative measures, an estimating system deficiency exists.

d. When a contractor's basic procedures are deficient, actual procedures do not conform with prescribed procedures, or when current data is not sufficient to provide a satisfactory basis for evaluating the reasonableness of the subcontract estimate, further testing of major subcontracts may be necessary. This may be done by reviewing the available data at the contractor's plant or by arranging for an assist audit of the subcontractor's submission (see 9-104.2).

e. When there is history on similar subcontracted components, the contractor should analyze its experience, determine the applicability of its experience to the subject procurement, disclose the analysis, and reduce its proposal, if appropriate. Failure to adequately use experience should be reported as an estimating system deficiency. If this occurs, review the purchasing department's files of previously negotiated subcontract prices or the results of prior assist audits and use previous exceptions or negotiation reductions in evaluating proposed subcontracts. The fact that reductions are not definite does not excuse the contractor from preparing an analysis or submitting such information as cost or pricing data.

9-406.2 Significance of Type of Subcontract or Purchase Order

The type of subcontract to be awarded should conform with the provisions of FAR Part 16 as they apply to prime contracts. The type of subcontract should influence the direction and scope of the audit work to be performed. For example, if a redeterminable or incentive type subcontract is contemplated, ascertain if the prime contractor has included anticipated subcontract ceiling prices or target prices in the proposed direct material cost. Subcontract ceiling prices do not constitute valid estimates due to the possibility that a lower price may ultimately be negotiated.

9-407 Direct Materials Requiring Special Consideration

9-407.1 Government-Furnished Material and Reusable Containers

a. Become familiar with the types and amounts of material which will be Government-furnished and verify that the contractor has not included cost estimates for such material in the proposal.

b. Review the estimated costs of packaging and shipping and segregate the costs included for containers. When the costs are significant, ascertain if reusable Government-owned containers are available. This is an area where considerable savings can accrue. For example, the auditor, in cooperation with the technical inspector, might determine that the cost to modify available Government-owned containers would be considerably less than the estimated cost of new containers or that used containers of the type needed will be available at the scheduled shipment date.

9-407.2 Residual Inventories

When pricing a follow-on contract, consideration should be given to the ownership and value of materials which are residual from a preceding Government contract and usable on the proposed contract.

a. Where the preceding contract is a closed cost-type contract, the residual materials normally will be Government-owned and, if its use is contemplated, should be included in the proposal at no cost. However, the contractor should propose residual material from an open cost-type contract at actual cost. In these cases, the contractor should have internal controls to ensure that materials are transferred at cost if the new contract is awarded. Internal controls should be designed to protect the Government from being billed more than once for the same material.

b. Where the preceding contract was fixed-price subject to price adjustment, terms of the settlement should be evaluated to determine ownership. If Government-owned, the materials should be included in the proposal at no cost. If contractor-owned, it should be included at the lower of actual costs or current market price.

c. Title to materials residual from a firm-fixed-price contract normally will rest in the contractor and the materials may be included in a follow-on contract, priced at the lower of actual cost or current market price. However, if there is a substantial amount of such inventory, it may be appropriate to comment on the amount of this inventory when reporting on a proposed follow-on contract.

d. The "Title" provision of the Progress Payments clause provides that those contract terms referring to or defining liability for Government-furnished property shall not apply to property to which the Government shall have acquired title solely by virtue of the provisions of the progress payment clause. Upon contract completion, title to all property which has not been either delivered to and accepted by the Government shall vest in the contractor under this clause. Special provisions of the contract or negotiation settlement may provide for other final disposition of any residual inventory.

9-407.3 Scrap, Spoilage, and Rework

a. The estimated cost of scrap and spoilage may be included by contractors in proposals as a direct cost, as a percentage factor applied to some other base cost, or as a part of indirect cost. Determine whether the contractor's accounting procedures give proper recognition to salvageable material generated under Government contracts and whether the method of estimating scrap and spoilage cost is consistent with the accounting method for the proposed contract and complies with the applicable Cost Accounting Standards. Also, consider the economy and efficiency of the contractor's operations in the area. When the experienced scrap, spoilage, and rework costs on previous procurements for the same or related products are available, utilize this data in evaluating the reasonableness of the current estimate. Graphic analysis may be very useful for this purpose (Appendix E). A time series chart may be used to plot the movement of these costs or the percentage relationship to a volume base (such as direct material cost), on a monthly or less frequent interval. A scatter chart may likewise be groups of units produced. As a general rule, scrap, spoilage, and rework costs are higher during the early stages of a contract and reduce progressively as production techniques improve. In evaluating chart data, highlight those plot points that indicate abnormally high scrap, spoilage, and rework costs. The reasons for high costs should be analyzed and an appraisal made of the probability of their recurrence. Information of this type can usually be obtained from scrap committee reports or departmental efficiency reports.

b. Special attention should also be given to the contractor purchasing parts from surplus or salvage dealers, especially where the contractor has declared parts surplus and then repurchases similar parts at a later date. This may indicate poor procurement practices and/or a condition reportable under 4-700 or 4-800. (In this connection, if the auditor encounters a situation where a surplus or salvage dealer proposes to furnish parts on Government contracts using surplus parts that they acquired through normal Government channels, report this situation to Headquarters, ATTN: OAL, in accordance with 4-803.)

9-407.4 Process Loss

Process loss is the difference between the amount of material required at the beginning of a process and the amount used for the finished part. Scrap loss is defective material while process loss is the material lost during the manufacturing process. Process loss may be estimated using an overall factor, or separate factors for major subelements (such as trim loss, chip loss, and excess casting material). Bill of material quantities for items manufactured from raw material (such as sheet metal, bar stock and composite) frequently are adjusted to include process loss factors. As with scrap, determine whether:

(1) the contractor's accounting procedures give proper recognition to process loss material generated under Government contracts, and if the loss is potentially significant; and

(2) the method of estimating process loss is consistent with the accounting method for the proposed contract and complies with Cost Accounting Standards.

When historical data on process loss is available, utilize this data in evaluating the current estimate. Graphic analysis as discussed in 9-407.3 may be useful. As a general rule, process loss rates should not vary significantly from previous contracts unless a new process or different material is introduced.

9-407.5 Obsolescence and Inventory Adjustments

a. Treatment in Estimates. Obsolescence and inventory adjustments may be included in cost estimates as percentage factors applied to a cost base or as a part of indirect cost. In determining the reasonableness of the contractor's costs for obsolescence and inventory adjustments, consider the following:

(1) The treatment of those costs for accounting and estimating purposes complies with applicable Cost Accounting Standards. This includes determining whether the estimates are valid for the method employed, and whether the treatment given the costs will result in an over-recovery by the contractor.

(2) The percentage factors derived from past experience as a basis for estimating costs of obsolescence and inventory adjustments. Ascertain the period used as the base and whether the contractor considered (i) the exclusion of nonrecurring and abnormal write-offs and (ii) transfers-back of obsolete material to productive inventory.

(3) The factors which may have caused obsolescence. Ascertain, distinguish, and evaluate the reasons for obsolete material. Obsolescence may result from engineering changes or from material purchases in unreasonable quantities because of inadequate purchasing or record-keeping procedures.

b. Evaluation Guidance. Determine the reasonableness of the obsolescence factor contained in the cost proposal. Faulty procurement practices, inadequate records, inefficient store---keeping, or lack of standardization may result in unreasonable obsolescence estimates. When the charge for obsolescence appears unreasonable, recommend elimination of the unreasonable portion from the estimated costs. If the evaluation indicates faulty procurement practices, recommend corrective action to improve the contractor's procurement practices and procedures. The condition should be noted for follow-up in a subsequent operations audit of the procurement function. When obsolescence is due to engineering changes, evaluate the loading factors based on current conditions. For example, when firm specifications have not been developed and the item to be made is in the development stage, the contractor's cost estimate may contain a relatively high obsolescence factor; on the other hand, the contractor's proposal should not include an obsolescence factor if the contemplated procurement is for an end item for which specifications are firm and no further change is contemplated. When circumstances justify the inclusion of a loading factor for obsolescence because of engineering changes, determine that over-recovery will not result because of inconsistencies in procedures followed in estimating and accounting. For example, over-recovery may occur if the contractor includes in his estimate a loading factor for obsolescence due to engineering changes and also includes the cost of the obsolete materials in his claim or proposal for an engineering change when materials are made obsolete by the change (see D-408.6e).

9-408 Using Direct Materials Cost Trend Data

9-408.1 Material Cost Scatter Chart

A graphic analysis and study of the trend of direct material costs per unit experienced in the manufacture of the same or a comparable product will assist in evaluating the costs included in estimates. Data plotted on time series charts may have only limited value when developing and studying trends of direct material costs, because there is generally little or no direct relationship between material cost and the time element. However, plotting the relationship on a scatter chart may reveal definite trends/patterns which can be helpful in evaluating direct material cost for additional units to be manufactured. When historical data include the direct material cost of the pilot run of a prototype, this cost should not be accepted as representative of the probable cost of succeeding production runs. Pilot runs may take place on the regular production line or in a model shop and may be aimed at simulating actual factory conditions; however, various production methods are often tested which contribute to abnormally high direct material costs per unit. High costs of pilot runs are generally the result of excessive scrap and spoilage, changes in material specifications to better adapt the product to large scale production, and initial purchases of small quantities (see E-100).

9-408.2 Material Cost Improvement Curve

Using an improvement curve is generally associated with evaluating direct labor hour estimates, but may also be used in evaluating the estimated prices of direct material parts and components. Factors which may contribute to improvement in the direct material cost per unit include:

(1) job familiarization, which reduces the amount of scrap and rework loss,

(2) lower prices as purchase volume increases, and

(3) introduction of new sources and new aspects of material quality after the initial stages of test and experimentation.

Consider the use of improvement curves for plotting vendors' prices for parts and components which are repetitively purchased. The plotting of quantities (unit or cumulative) versus billing prices may develop patterns which can be useful in arriving at reasonable prices to be paid for follow-on purchases. In evaluating the direct material cost portion of a prime contractor's proposal, the auditor may also plot prior related total material cost experience on log-log paper to ascertain if a measurable rate of improvement in the material cost per unit has occurred. Ascertain if the contractor's material cost estimate falls within a reasonable range of the cost indicated based on a possible or probable continuation of the experienced improvement rate. When the contractor's total direct material cost forecast or forecasts of costs of selected components are significantly higher than what the probable costs would be (based on a continuation of the related experienced material cost patterns), ascertain the reasons for the excess.

9-500 Section 5 --- Evaluating Direct Labor Cost Estimates

9-501 Introduction

a. This section states procedures to be followed in evaluating direct labor cost estimates. Factors which influence the scope of audit include:

(1) the materiality of the labor cost,

(2) the adequacy of the labor related cost or pricing data (see 9-200),

(3) the adequacy of the contractor's estimating procedures for determining labor requirements (see 5-1200),

(4) the degree of the contractor's compliance with its estimating procedures,

(5) participation by other Government representatives in evaluating labor costs,

(6) results of prior operations audits,

(7) audits of Disclosure Statements,

(8) compliance with applicable cost accounting standards, particularly with regard to consistency between estimating and accumulating costs (CAS 401), and

(9) use of standard time methods.

b. If the risk factors described in 9-501a indicate problems or uncertainties about the way labor costs were proposed, it may be necessary to obtain assistance in reviewing technical aspects of the proposal. If so, refer to Appendix D which provides detailed guidance on the technical review aspects of labor cost estimates and the procedures for requesting assistance. Key elements of this guidance have been summarized and incorporated below.

9-502 Methods of Estimating-Direct Labor Costs

9-502.1 Basis for the Estimate

a. Direct labor cost estimates can usually be grouped according to one of two methods used in developing the cost estimates. There are those estimates developed primarily from historical direct labor costs (see 9-503) and those developed primarily from the application of technical data (see 9-504). The method used in arriving at an estimate will depend on the nature of the procurement and the extent of the contractor's experience with the labor requirements of the proposed contract. When the contractor is proposing on a follow-on contract, the labor estimate should be based on prior labor experience, adjusted for expected changes for future work. When the contractor is proposing on a research and development contract or a production contract for which the contractor has no prior cost experience, the auditor should expect the labor estimate to be based on technical data.

b. Although there is little uniformity in the way contractors categorize labor for the purpose of estimating costs, direct labor can generally be grouped into three major categories:

(1) manufacturing,

(2) engineering, and

(3) support.

For estimating labor requirements and costs within these categories there are many techniques which may be used. Selection of the most appropriate estimating technique and use of high quality estimating data are necessary to produce reasonable and accurate labor estimates. Seven of the most common techniques listed in order of increasing estimating accuracy are:

(1) judgment and conference,

(2) comparison,

(3) unit method,

(4) factor method,

(5) probability approaches,

(6) cost and time estimating relationships, and

(7) standard time method (see D-407.2).

c. Labor cost estimates based on historical data are generally developed through one of the following methods:

(1) comparison,
(2) unit method,
(3) factor, and
(4) cost and time estimating relationships.

Labor cost estimates based on technical data generally use:

(1) the judgment and conference method,
(2) probability approaches and
(3) standard time methods.

d. The most common type of data used in preparing labor cost estimates are:

(1) actuals for the same or similar item or activity;
(2) labor standards with adjusted historical efficiency factors;
(3) standard cost with forecast adjustment factors; and
(4) tentative, judgmental, or rough estimated hours.

9-502.2 Classification of Labor

When labor cost estimates are extrapolated from the recorded labor costs, the labor classification in the estimate will follow quite closely that used in recording labor costs. When labor cost estimates are developed from technical data, all labor attributable to furthering the prime requirement under the prospective contract may be considered direct labor; while labor engaged in support of the contract activities may be considered indirect labor. Either basis of labor classification may be present in any specific case. The auditor must evaluate and report on the direct labor cost estimates within the classification framework used by the contractor but should be alert for possible over or under recovery of costs because of deviations from applicable cost accounting standards, inconsistencies in the classification and treatment of labor costs, and in the development of labor rates applicable to individual cost estimates. Inconsistencies are likely to occur in the treatment of nonrecurring, contingent, or special labor cost items. Deviations, when combined with weaknesses in the internal cost estimating controls, can result in duplication of labor costs within the estimate by inclusion in both the direct and indirect labor categories.

9-503 Direct Labor-Cost Estimates Based on Historical Cost

When historical cost data are available, the estimated direct labor cost will probably be a projection of that data. Such a direct labor cost projection should not be accepted merely on the assumption that the cost pattern or trend will continue unchanged during the period of the proposed contract. It is necessary to consider other related factors, some of which are discussed below.

9-503.1 Current Nature of the Labor Cost Data

a. Factors which affect the productivity of labor normally will not be the same today as they were last week or last month. It is not sufficient to use labor costs accumulated in the past, adjusted only for changes in the labor rate, or to use the labor cost for the last job lots produced; the last job lots may well include labor cost incurred over an extended period of time. The cost data used in the estimate should be based on current experience, adjusted for anticipated reductions, modernization of manufacturing processes and practices (14-800), or other variations, and developed in accordance with the applicable cost accounting standards.

b. The objective in evaluating the base used by the contractor for the projection of a direct labor cost is to arrive at an amount which would represent today's cost for performing each direct labor task. In the case of standard costs, this occurs when the cur-

rent normal variance, rather than the average variance over an extended period, is used as the base. Plant and personnel records should be reviewed for changes in labor efficiency or pay rates that would not be reflected in current cost data. A relatively simple check would be to compare the most recent cost for individual labor operations with that used by the contractor in developing its estimate.

9-503.2 Guidance for Evaluating Estimates Based on Historical Data

The first step in evaluating labor estimates is to determine and assess the basis which the contractor used to estimate costs. The contractor's proposal should identify the sources of data, the estimating methods, and underlying rationale used. The contractor should analyze and use historical experience where appropriate. If the labor estimating technique applied makes use of historical data, the following steps should generally be performed:

a. Identify the historical data used to develop the labor cost estimate.

b. Ascertain the reliability and accuracy of the data. Audits of timekeeping and labor charging practices previously performed by the office may provide the needed level of understanding and confidence.

c. Evaluate the content of the data to assure that it is representative and contains all costs that are purported to be there. Compare supporting data to other sources of historical information such as operational staffing. Inconsistencies may indicate exclusions of pertinent historical data. Determine whether valid reasons exist for excluding data.

d. Test for consistency of data over a given period. Look for accounting system changes, reclassification of costs from direct to indirect and vice versa, and consider the results of previous cost accounting standard (CAS) audits. If the data is inconsistent (either historically or prospectively), the auditor should request the contractor to make appropriate adjustments.

e. Assure that nonrecurring costs are removed from historical data. Pay special attention to manufacturing setup costs which are lot quantity sensitive. Other nonrecurring costs may be in the historical period, but are not expected to occur in the forecast period. These costs should not be used to estimate future costs.

f. Assure that other non-representative data are excluded. For example, some historical inefficiencies may not be expected to recur. Likewise, some historical events are unique and should not be used as a basis for predicting future costs.

g. Make sure the data is current. Data which is too old may not reflect expected conditions (e.g., facilities, equipment, management, organization, modernization of manufacturing practices and processes, and staffing). Several years of historical data may be useful in identifying important trends.

h. Assure that historical data is obtained from the same facility where the proposed end-item or product will be manufactured. If the data was obtained from a different facility, determine its acceptability for estimating purposes.

i. Examine the relationship between lot costs and equivalent units produced. If the relationship is not consistent, it may indicate either changes in production (e.g., engineering design changes, make vs. buy changes) or inaccurate measurement of equivalent units in beginning and ending inventories.

j. Draw a conclusion regarding the suitability of historical data for making estimates.

9-503.3 Labor Cost Trends

When evaluating the direct labor cost estimate, ascertain whether the contractor, in arriving at the labor cost projection, considered seasonal, "learning," and other factors that cause trend fluctuations and analyze the historical labor data covering a sufficient period of time and in sufficient detail (by departments, production centers, or processes) to disclose seasonal trends. One of the more common reasons for fluctuations in labor costs is the periodic overloading and underloading of plant facilities. Whether fluctuations in historical labor costs should be reflected in the projection and, if so, whether they should be averaged or treated individually, can be determined only by analysis of

the contractor's direct labor and associated experience and proposed plans which might affect labor costs. It should not be assumed that past trends will continue, rather, the auditor should judge whether the conditions that produced the current trend are likely to continue and, if so, how such conditions will affect future costs. The use of any reasonable correlation of facts will assist in determining the presence of a labor cost trend and evaluate its causes, as a condition for projecting that trend. Correlation analysis and similar techniques (see Appendix E and EZ Quant), when applied to cost centers or production areas, usually will disclose significant trends in labor costs or in the relationships between labor costs and changes in labor efficiency.

9-503.4 Proposed Nonrecurring Costs of Labor

Nonrecurring costs usually are not disclosed by a routine audit of labor costs. Nonrecurring costs; e.g., the temporary production of a part normally purchased, are frequently obscured because they are usually treated and charged as direct labor costs without further identification or segregation. Review of labor costs for selected tasks, jobs, or cost centers not associated with a normal job or process and a review of job lot records for unusual jobs may reveal nonrecurring costs. When the current estimate provides for nonrecurring costs, the auditor should weigh the probability that the costs will materialize. If it is considered likely that the cost will be incurred, the auditor should evaluate the reasonableness and allocability of the costs. If it appears unlikely that the costs will be incurred, they should be questioned.

9-503.5 Proposed Engineering Changes Costs

Cost reductions resulting from prior engineering changes and included in recorded costs should be evaluated in estimating costs of follow-on procurement. The auditor should determine that the cost of expected engineering changes which will be priced as contract changes are not provided for in the current proposal. A review of the language in the invitation for proposal and related correspondence may indicate that the production requirements are less than definitive, and that modifications will be necessary in the future.

9-503.6 Setup Time Cost

a. The auditor should ascertain the types of labor that the contractor normally classifies as setup time costs and review the method of accounting for such costs before evaluating the estimates of direct labor for setup time. Setup time costs are the costs required for changing over a machine or method of production from one job to another, and include the time for tearing down the previous setup and preparing the machine or process for the new operation. Setup may also include the time for the production and inspection of the first acceptable piece or test group of pieces. The time required to clean up the work area during or at the end of a production period is not included as setup time, except when it is necessary to make regular readjustments of a setup during the production cycle. The readjustment time may be charged either as production or setup time, depending on the contractor's accounting policy and the extent of the readjustment. When the setup for a process job is recorded as the first operation on an operation sheet, the time and cost may be similarly charged. The possibility of overlapping and duplication in the estimates of setup, tear down, handling, cleanup, and other setup cost elements which may or may not be charged as direct labor should be considered in each audit.

b. Adequate segregation of setup costs by categories such as departments, jobs, product lines, components, and operations will enable the auditor to make comparisons between the estimated setup time and costs for new procurements, and the actual time and costs for previously produced products of the same or similar type; and between a specific estimate

and the actual setup time costs. Results of the comparisons should assist in evaluating the overall acceptability of the contractor's direct labor estimates for setup time and costs. The auditor should have a general knowledge of the caliber of labor required to perform the setup work in order to appraise setup costs. There is little comparison; for example, between the setup requirements for a tape controlled milling machine and those for a simple drill press. Knowledge of such factors will enable the auditor to more accurately appraise the efficiency and cost effectiveness of the estimated setup time. This is particularly important when the contractor uses a single setup cost rate as a rule-of-thumb method for computing setup time.

c. In evaluating the estimate for setup cost, the auditor should determine whether an approximate optimum number of items is scheduled for each production run and whether the estimated number of setups is reasonable. He or she should also consider factors affecting the size and frequency of production runs. These include the length of time over which delivery is to be made, the number of production lines, the number of production shifts, production scheduling, machine utilization, production capacity, tooling requirements and the tools available, and competing demands for the use of production facilities.

d. The contractor's procedures for planning setups in determining the efficiency and reasonableness of setup time costs should be evaluated. Estimates for setup costs should take into account the disruption in production or time lost for the use of facilities for other purposes during prior setup operations. Comparison of predetermined efficiency setup targets with actual costs for each setup provides a means for measuring setup efficiency and cost effectiveness.

9-503.7 Applicability of the Labor Cost Data

Cost data used should be directly applicable to the proposed contract. When the estimate is for the continued production of a product currently or recently produced, the applicability of the cost data can be determined by examination of operation sheets and production schedules and plans. The auditor should examine, on a selective basis and in cooperation with Government technicians, blueprints, product specifications, and contemplated production methods for the new product. When appropriate, contractor personnel should be interviewed to ascertain probable significant changes in engineering production methods and the effect those changes might have on current cost data. When an evaluation indicates that significant technological changes have occurred since the cost data was accumulated, adjustment of experienced costs is necessary before projecting the experience cost pattern. Adjustment of the direct labor cost experience is especially important when the estimate applies to a product that is relatively new or has been materially modified from that produced in the past. The auditor should be alert to features of the contemplated production that might indicate a significant deviation from the normal labor pattern and its effect on the cost data.

9-503.8 Variances-Direct Labor Cost Estimates

Variances between estimated and actual cost are generally a consequence of either human error or changed circumstances. They can result from:

(1) careless accumulation of supporting data,
(2) incorrect design information,
(3) unexpected delays causing premiums to be paid for overtime,
(4) unexpected processing problems requiring deviation from the manufacturing plan,

(5) failure to rework preliminary estimates to produce an accurate finished estimate,
(6) reliance upon estimators who are not familiar with job processes,
(7) making a "guesstimate" and then "padding" it to protect against unanticipated costs,
(8) failure to consider all quantities being built, and
(9) inappropriate use of learning curves or other techniques.

9-504 Direct Labor Hours Based on Technical Data

9-504.1 Coordination with Technical Representatives

a. Under appropriate circumstances, the auditor may make an adequate appraisal of a direct labor cost estimate through the use of labor cost data. However, because of the relationship of cost data with technical data, the appraisal should not be confined to labor cost data alone, but should include an evaluation of the technical aspects of a proposal by examination of production data, plans and related engineering data. When resorting to the use of technical data, the auditor should coordinate his or her efforts with technical personnel.

b. Whenever the auditor needs the assistance of a specialist to form an opinion on an element of the measurement of costs which is not an accounting or related financial subject, such assistance should be obtained. The auditor should:

(1) identify what type of technical specialist is needed,
(2) decide upon the best source for the technical specialist assistance,
(3) achieve good communications with the technical specialists,
(4) assess the impact of technical specialist findings upon the audit opinion, and
(5) report on the uses of technical specialists or the impact of their nonavailability. (See 9-306 and Appendix D.)

9-504.2 Guidance for Evaluating Estimates Based on Technical Data

Specific areas in which the auditor may make inquiry, either in anticipation of coordinating with the technical representative or conducting the audit independently, include a review of:
(1) the labor hour estimate,
(2) operation time and shop methods,
(3) operation time standards, and
(4) the contractor's labor productivity. Further guidance on each of these four areas is provided in subsections 9-504.3 to 9-504.7.

9-504.3 Direct Labor Hour Estimates

Conditions influencing the contractor's use of technical data to estimate labor hours include:
(1) the elimination of supplementary assembly lines originally established to accommodate temporarily accelerated production schedules or other emergency measures;
(2) the introduction of more efficient and cost-effective material issuing and handling procedures to eliminate or prevent bottlenecks and reduce work stoppage;
(3) improved techniques in the training of employees;
(4) more efficient transfers of employees between assembly lines, work areas, departments, shifts, and jobs;
(5) modernization of manufacturing processes;
(6) the introduction of new manufacturing machines; and
(7) the introduction of special tooling. To determine whether labor hour estimates reflect recently improved conditions, the auditor should compare current labor opera-

tion sheets with those in prior periods and with those reflecting advance production schedules.

9-504.4 Evaluation of Operation Time Sheets and Shop Methods

When the contractor is unable to support its estimate with experience data, the auditor should seek other justification from the contractor, such as technical determinations, to assist in appraising the reasonableness of the data and bases underlying the cost estimate. An evaluation of operation time sheets or similar documents which reflect the estimated time required to perform each production operation generally will in the aggregate provide a basis for evaluating the estimated direct labor hours included in a contractor's cost estimate. Appraisal of the data contained in the operation sheets, requires familiarity with the contractor's products, plant organization and processes, manufacturing operations, tooling, machines, and the manufacturing complexities of the product. Operation time sheets should reflect current shop methods, production planning data and the most current time studies. The auditor should determine that the operation time sheets do not include as direct labor, operation which will be recorded as indirect labor and whether provisions for contingencies have been included in the estimate, especially in costing a new product. These and similar inclusions, if not justified, will result in an overstatement of the estimated direct labor hours and violate CAS 401 and 402. Documents supporting operation time sheets and production control records should be examined and discussed with Government technical personnel.

9-504.5 Operation Time Standards

a. Operation time standards (i.e., the predetermined estimates of the time required to perform each operation) are usually reflected in operation sheets. These standards may or may not represent the same time factors used to develop the accounting standard direct labor costs or the actual labor costs as recorded in the contractor's cost accounting records. To perform a more meaningful evaluation, the auditor should determine the relationship between operation time standards and direct labor standards established for accounting purposes.

b. The basis for establishing operation time standards may vary depending upon company policy. Contractors may base standards on the number of units which can reasonably be produced by an employee under normal or average operating conditions; or may establish ideal operation time standards (i.e., standards based on nearly ideal conditions-as a means of encouraging maximum productivity). The auditor should analyze the contractor's time study methods and other bases used to establish time standards for each operation and should also analyze factors other than operation time, such as provisions for rework, setup, and other non-operational time which may have been included in the standards. Information of this type can be of value in appraising the reasonableness of cost data, such as the efficiency factors used to modify the operation time standards in arriving at the estimated number of direct labor hours for a specific proposal.

c. To illustrate: a contractor employing operation time standards based on attainable conditions, may compile monthly efficiency reports which indicated a 90 percent departmental efficiency factor. This productivity experience may be considered reasonable and in keeping with management expectations. On the other hand, where ideal operation time standards are established, a 60 percent departmental efficiency factor may be reasonable.

d. The auditor will find that operation sheets may or may not reflect a lower cost per unit for successive production lots. The auditor should determine whether a downward trend is present or is likely to develop and, if so, whether it has been reflected in the cost estimate. Time series diagrams and correlation studies of departmental efficiency rates which disclose short or long range trends will assist in the evaluation of the labor estimates. When labor cost standards-as used in the contractor's cost accounting system-

are based upon data reflected in operation sheets, a time series analysis of monthly product labor efficiency variances will assist in determining the existence of a trend.

9-504.6 Labor Productivity

a. Within limits, the productivity of direct labor, as measured by the quantity of product produced by a specified volume of labor, normally increases as production continues. The improvement may be due to the adoption of improved methods and tools or the increased efficiency of the individual worker. The amount of improvement per unit of product generally is high during the early part of the production cycle and decreases as production is stabilized, processes are refined and additional experience is gained. After production has stabilized, the rate of improvement may not be measurable except over a substantial period of time. When semiautomatic or automatic machines are used, production may become completely stabilized and the rate of improvement will approximate zero until a change is made in the product or in the production method. As production tapers off near the close of a period of stabilized production, labor productivity tends to decline toward a negative improvement rate. Reduction in production effort may be due to the wearing out of jigs and tools, the transfer of the more skilled workers to new jobs, or a slackening of effort by the remaining workers.

b. The auditor's primary interest in labor productivity is in measuring current productivity and past trends, and determining the causes of past trends so that the likelihood of continuance during the contemplated production period may be assessed. Causes and effects can be separately measured, provided the change is sufficiently pronounced and not obscured by other factors. A change in tools or the introduction of a highly improved production process might be related to a specific reduction in the required labor hours; or a change in design might be related to an increase in labor hours. Factors which affect productivity operate interdependently, and it is difficult to evaluate separately the effect of any one factor. However, an overall measurement of productivity may be made by correlating labor hour requirements with related successive quantities of output. One method of measuring the overall change in productivity is by the use of the improvement or learning curve. This technique and its application to direct labor hour estimates are discussed in EZ Quant.

9-505 Evaluation of Estimated Direct Labor Rates

a. Direct labor rates used to estimate direct labor costs may be at expected individual or expected average rates. The latter rates may be either separately estimated for each proposal or pre-established for pricing many proposals submitted over a given period of time. There is wide variation in the methods and extent to which contractors combine the various direct labor grades and functions and associated pay rates for the purpose of cost estimating. Variations arise because of differences in the type, size, and importance of labor operations; in the type and arrangement of production facilities; in the manner and extent of departmentalization; and in the type and dollar values of Government and commercial contracts and products.

b. In the evaluation of direct labor rates, both individual rates and average rates, consideration should be given to hours worked in excess of 8 hours per day or 40 hours per week by salaried employees, particularly in the evaluation of fixed price proposals. Estimated labor rates may be based on the number of hours available during a year using an 8 hour day and a 40 hour week. However, evaluations of actual labor hours incurred may have determined that salaried employees generally work in excess of 8 hours per day and 40 hours per week. The estimated direct labor rates used should therefore reflect the total hours the employee is expected to work during the year. See 6-410.

c. FAR 37.115, Uncompensated Overtime, does not encourage the use of uncompensated overtime. Its associated solicitation provision, FAR 52.237-10, is to be inserted in all solicitations valued over the simplified acquisition threshold, for professional or technical

services to be acquired on the basis of the number of hours to be provided. FAR 52.237-10 defines "uncompensated overtime" as "hours worked in excess of an average of 40 hours per week by direct charge employees who are exempt from the Fair Labor Standards Act (FLSA)." Service contracts are usually awarded on the basis of the tasks to be performed rather than the number of hours to be provided. However, if a service contract is awarded on the basis of the number of hours to be provided and the contractor proposes "uncompensated overtime" hours, then this solicitation provision requires the contractor to identify in its proposal the "uncompensated overtime" hours and rates. This includes "uncompensated overtime" hours that are in indirect pools for personnel whose regular hours are normally charged directly. This FAR provision also requires that:

(1) the contractor's accounting practice for estimating "uncompensated overtime" be consistent with the accounting practice for accumulating and reporting these hours,

(2) the contractor include a copy of its policy on "uncompensated overtime" with its proposal, and

(3) the contracting officer conduct a risk assessment and evaluate any proposals received that reflect such factors as unrealistically low labor rates that may result in quality or service shortfalls and unbalanced distribution of uncompensated overtime among skill levels and its use in key technical positions.

d. Auditors should notify contracting officers of any apparent noncompliance with the FAR requirements, specifically, if the contractor proposes uncompensated overtime hours but fails to identify the number of such hours and corresponding hourly rates. Auditors should also notify contracting officers if the contractor fails to submit a copy of its policy addressing uncompensated overtime with its proposal.

9-505.1 Individual Employee Labor Rates

a. Individual rates may be used when the persons who will perform the work under the proposed contract are known. A determining factor in the award of a contract may be the "know-how" of specific individuals, and their agreement to perform the work under the contract. In other cases, individual rates may be used when the procurement being audited requires a caliber of employees whose pay rates are not representative of the average rates paid within their labor classifications.

b. While the use of individual rates in cost estimating will produce precise results, average rates within labor classifications are generally developed and employed for practical purposes. Either approach may result in reasonable estimates provided a consistent practice is followed and deviations will not affect proper recovery of anticipated costs.

9-505.2 Average Labor Rates

a. The development of average labor rates by contractors may include a single plant-wide average or a separate average rate for a function, grade, class of labor, cost center, department, or production process.

b. The use of average rates is generally warranted because within each unit of an operating plant there is usually a labor norm and cost pattern for each production situation and associated group of workers. Average rates, properly computed and applied, will express the labor norm and equalize the effect of the indeterminable factors usually associated with other methods. The use of average rates is preferable, for example, when the contractor is unable to project with any degree of reliance the:

(1) identity of those who will perform each operation and correspondingly the individual rates of pay;

(2) exact production processes to be used, particularly when the contractor has no applicable experience; and

(3) precise labor requirements.

c. The inclusion of inapplicable types or quantities of labor in the computation of an average rate is not in itself reason for not accepting the rate. The auditor should determine whether the inclusion significantly distorts the average from the probable norm for the contemplated production.

d. It would be improper for a single average to combine equal quantities of high- and low-cost labor if they were not to be used equally in production, or to compute an average group of pay rates without weighting; that is, without regard to the number of employees receiving each wage. The use of weighted averages is necessary to give proper effect to all factors.

e. There are a number of methods for computing weighted averages. A generally accepted method is to obtain weighted averages from the total projected payroll for each production unit for the contract performance period adjusted for any abnormal labor cost conditions.

f. In summary, factors which the auditor should consider in evaluating proposed average labor rates include:

(1) the reasonableness and acceptability of the labor classification;

(2) the probability that relatively the same grades of labor will be used in performing the contract as were used in developing the estimate, and the probable effect of any material deviations;

(3) the accuracy and propriety of the method used in computing the averages;

(4) the impact on the average rates of projected increases or decreases in the general level of labor costs; and

(5) the significance of any deviation from past practices in developing the rates, in their application, or in the normal and proposed methods of distributing costs when incurred.

9-505.3 Pre-established Labor Rates

a. Value of Pre-established Labor Rates. Contractors may estimate labor rates for use in computing the estimated direct labor cost portion of all proposals to be submitted during a specified period of time. The contractor may estimate the production labor hours for a contract and compute a cost estimate by applying an average labor rate for each manufacturing department, production function, or type of labor. This procedure is inexpensive and is a workable procedure because it:

(1) recognizes a continuing uniformity in the manufacturing process within a plant, which has considerable validity, especially when separate rates are used for each production function and

(2) promotes consistency in estimating methods and compliance with applicable cost accounting standards. (See 9-1200 for general guidance on forward pricing rate agreements.)

b. Limitations on Pre-established Labor Rates. Labor rates are not applicable to all businesses or to all labor conditions or manufacturing processes within a business. The customary use of labor rates by a contractor in developing direct labor cost estimates does not make their applicability automatic. There are definite limitations on the use of such rates. Their use is based on the assumption that the manufacturing process is relatively stable and prior labor usage patterns are not expected to change significantly in the future. The use of labor rates must be examined in each case to determine whether the contemplated production methods and requirements parallel the conditions as to labor usage presupposed in the development of the rates, or whether conditions are present which indicate that the rates should be modified or rejected. This appraisal must be made even though the rates have been approved on an overall basis by Government procurement activities. The audit report should contain appropriate comments whenever the evaluation of labor rates discloses that the rates are unreasonable or not properly applicable to the work to be performed.

9-505.4 Rate Impact of Contractor's Labor Usage

The auditor usually can expect, in the absence of indications to the contrary, that production labor norms will be applicable insofar as factors such as the pay differentials for unskilled labor, longevity, efficiency, piece work premium, and shift premium are concerned. The same assumptions cannot be made for factors such as the pay differentials for skilled workers, specialists, technicians, engineers, and others. Usage patterns vary and variations are often due to the nature of the production involved. The auditor therefore must consider both current usage and future labor plans. The proposed and probable labor patterns for production under the contract must be considered. The auditor must also think about the consistency of those patterns with other plans for the prospective production period; the availability of the various classes of labor; and the normal methods of using, assigning, recording, and charging the labor costs to commercial and Government products and contracts. Significant deviations from the normal pattern should be supported by adequate justification for the auditor's consideration in evaluating the estimates.

9-505.5 Use of Permanent Audit Files

The effect of pay differentials and usage factors may be evident from a review of the proposal, the supporting papers, and production plans. The operation and effect of other factors may require an examination of past proposals and experience on corresponding contracts; sales forecasts; long- and short-range budget plans; facility usage plans; and labor, hiring, assigning, and training programs. A current record of findings should be kept to reduce the amount of audit work and to facilitate the coordination and integration of the auditor's examination of each proposal with the contractor's over-all operations and plans. This is particularly helpful when the auditor evaluates a number of proposals submitted by one contractor or performs a number of audits of one contractor's records over a period of time. For example: examination of the permanent files may indicate that a current proposal contemplates a higher than normal labor-hour cost based on the intention to use only top grades of engineers for a part of the proposed production. The permanent file records for other contracts and pricing proposals for the same period may show that costs were based on average rates which also included the wages of the same top grades of engineers for the same periods of time. Identification of inconsistencies, such as shown in this example, requires close integration of current and past examinations and is essential in the evaluation of labor cost estimates.

9-505.6 Trends of Labor Rate Experience

a. The current average hourly rates paid for each labor classification may be used by contractors as a starting point for computing future rates. These should be verified by examining current payroll records.

b. The average rates should be adjusted for any planned or expected changes in the wage scale and any trends that may be present in the historical pattern or that can be expected to carry forward into the contemplated production period. This will require an analysis of the historical labor and payroll data for a period of time sufficient to disclose any trend that may be present. The analysis should be in sufficient detail by intermediate periods to disclose significant deviations from the trend as well as the pattern of any periodic deviations that have a material effect on the trend.

c. The period to be covered by the analysis cannot be predetermined. Seasonal and longer term fluctuations generally require that experience factors be examined for a minimum of two business years. A longer period of time may be necessary in special circumstances. However, the use of a longer period will not necessarily increase the validity of the trend data developed because changes in organizational structure, size or composition of the labor forces, general economic conditions, and other factors affect-

ing the rates may be encountered over a long period; these factors may not be appropriate for consideration when estimating rates for future periods.

9-505.7 Factors Influencing Validity of Average Labor Rates

a. Personnel Policies and Actions. The auditor should evaluate the effect of proposed personnel actions on the estimated average hourly labor rates and determine whether actions which have a material effect on these rates are in accord with the normal personnel policy, and whether resulting rates are reasonable.

(1) Wage Agreements. The auditor should determine whether consideration has been given to the terms of all current wage agreements and prospective changes. In evaluating agreements which provide for changes based on cost-of-living indices, the auditor should analyze current and past trends and determine their future significance. Information contained in the labor rate reports published by the Bureau of Labor Statistics, Department of Labor, Washington D C, and by state and local agencies may furnish data for this type of analysis.

(2) Other Personnel Actions. It is not practicable for the auditor to isolate and measure the precise effect of every personnel action on average hourly rates. Merit increases, promotions, and changes in size and composition of the labor force occur continually, are interrelated, and have a cumulative effect on average hourly rates. The auditor should determine the composite effect of the personnel actions and determine whether any over-all current average hourly rate trends exist which will continue during the contemplated production period or whether there are indications that new trends are likely to develop. The major factors should be analyzed and the trend indicated by each type of action determined even though the effect of each action on the average labor hourly rate cannot be measured directly. The possible effect of personnel actions on average hourly rates may be estimated by relating each major action with the over-all change in average hourly rates through the use of graphic techniques such as time series diagrams and correlation analyses. These techniques and their application to average direct labor rate estimates are discussed in Appendix E.

b. Change in Labor Force. Changes in the size and character of the labor force affect average pay rates. These changes accompany increases or decreases in production volume. A material increase in volume usually will result in a decrease in the average rate because of new hiring at lower entrance level or at rates below the average. The opposite result can be expected when production volume decreases. The first groups of employees to be separated are generally in the lower pay levels of their respective labor classifications. The possible effect on labor cost of a contractor's plans to increase or decrease the labor force because of changes in production volume can be estimated by correlating past changes in the number of personnel and changes in the average pay rates for each plant unit or labor class. In evaluating planned changes in the number of personnel a further correlation might be made of the labor force or labor payroll with production volume, as measured by units, cost of sales, or other means.

c. Multishift and Overtime Operations. When evaluating average labor rates the auditor must consider multishift and overtime operations. Premium payments for multishift and overtime may have a direct effect on the average direct labor hourly rates, depending on the method used in classifying and distributing costs. When premium payments are recorded as overhead, they should not be reflected in the average direct labor hourly rate. When treated as part of the direct labor charge, premium payments should be segregated from average direct labor hourly rates. If not segregated, fluctuations in the amount of premium pay will tend to distort any trend or other data developed in analyzing changes in the regular pay rates.

9-600 Section 6 --- Evaluating Estimated Other Direct Costs (ODC)

9-601 Introduction

This section provides guidance for evaluation of estimates of the various types of costs usually referred to as "other direct costs."

9-602 Definition of Other Direct Costs

a. In addition to direct labor and direct material, other types of expenses, under certain circumstances, may be specifically identified to a specific job. These are generally referred to as “other direct costs.”

b. Costs classified by contractors as ODCs vary in treatment, but may often include among others:

(1) engineering,
(2) special tooling,
(3) packaging,
(4) travel and subsistence, and
(5) field service.

9-603 Objectives and Scope

a. The audit objectives when auditing ODCs are to determine whether:

(1) the contractor's classification is proper,
(2) the underlying data in support of the estimates is valid, current, and applicable,
(3) the costs as reflected in the estimates are reasonable,
(4) the costs are estimated using acceptable procedures applicable in the circumstances, and
(5) the contractor has properly considered all factors which might have a bearing on the validity of the estimated costs.

b. The scope of the auditor's evaluation of ODCs will depend upon:

(1) the significance of the amount,
(2) the adequacy of the contractor's procedures for estimating costs,
(3) the degree of uniformity in estimating procedures, and
(4) the consistency of estimating procedures with disclosed accounting procedures and CAS.

Some contractors consider ODCs as being directed wholly toward the production of complete end products and consequently do not include these expenses in cost estimates for spare parts. Others contend that spare parts production has an impact on both the types and amounts of these expenses, and therefore provide for such estimates in spare parts proposals. Regardless of which method is followed, determine the propriety of ODCs for either end products or spare parts and verify that the method of treatment complies with disclosed practices and other CAS requirements.

9-604 Other Direct Cost Evaluation Considerations and Techniques

The contractor may include in ODCs, costs referred to as start-up, design and production, and continuous or maintenance engineering. To perform an effective evaluation, the auditor must have knowledge of the contractor's practices, policies, definitions, concepts, accounting treatment, results of prior operations audits, and estimating methods (see 5-1200) that effect ODCs. Guidance applicable to factors which should be considered in evaluating ODCs are contained in the following paragraphs.

9-604.1 Application of Percentage and Conversion Factors

a. Packaging, field service, and various types of engineering and tooling costs may be estimated by applying percentage to some other basic cost or conversion factors (e.g., number of staff-hours per month) to basic estimates of required staff-months of effort.

b. In auditing conversion factors applicable to direct labor hours per staff-month, for example, ascertain whether the contractor considered excluding time for holidays, vacations, sick leave, idle time, and similar items of an indirect nature. Failure to make proper allowance for indirect time in the conversion factors normally results in overpricing the contract and noncompliance with CAS 402 where applicable.

c. Percentages and conversion factors may be applied separately for each estimate, or they may be submitted or proposed periodically for incorporation in all proposals. In either instance, and notwithstanding previous agreements, evaluate the propriety of percentage and conversion factors for applicability in the current proposal.

9-604.2 Government-Furnished Material

In some cases, the Government will furnish materials or services to the contractor on a "no charge" basis. Government-furnished materials may include special tools, shipping containers, or other items which may be classified by the contractor as ODCs. In these cases, verify that estimated costs for Government-furnished materials are not included in the proposal.

9-604.3 Use of Accounting Data

Contractors' accounting records which provide reserve accounts for ODCs based on the quantity of end products produced or shipped, may be used in evaluating estimates. When reserve accounts are maintained, credit entries are based on estimated amounts per unit applied to the quantity of end products produced or shipped. Debit entries are made for the expense actually incurred. An analysis of these reserve accounts should assist in determining the reliability of the contractor's prior estimates. Large credit balances may indicate overestimating and large debit balances may indicate underestimating actual costs.

9-604.4 Analytical Techniques

a. Various analytical techniques can be used in evaluating the reasonableness of ODCs. Graphic analysis usually is an appropriate evaluation tool for studying experienced cost patterns as they relate to various types of ODCs. Time series charts are useful in depicting the experienced movement of expenses or percentage factors related to some base cost over a time period. Scatter charts are used to show linear relationships of a specific other direct cost to some other volume base to which it bears a close correlation.

b. The comparative analysis technique may be applied using as reference points available engineering data, budgets, loading charts, previous proposals for similar items, and industry standards and experience.

c. When the contractor's proposal contains significant engineering or tooling staff-hour estimates, the estimates can be compared with related staff-hours specifically identified with the directly chargeable total plant engineering or tooling labor base used in the computation of the proposed engineering or tooling overhead rates. When the use of analytical techniques discloses significant differences, obtain further information from the contractor in support of the estimate. When differences cannot be adequately justified, the audit report should contain appropriate comments and recommendations.

9-605 Specific ODC Evaluation Considerations

Expenses generally classified as other direct costs (ODCs) and audit considerations related to them are discussed in the following paragraphs.

9-605.1 Engineering

Engineering costs included as ODCs generally fall into two categories--design and production. The type of engineering effort included in each of these categories depends on the individual contractor's practices. Because engineering effort required for a specific procurement of a complex product or for research and development involves technical determinations, assistance from Government technical personnel should normally be solicited when evaluating proposed engineering staff-hour estimates. An understanding of the various fields of engineering specialists is important when fashioning requests for technical specialist assistance. The major engineering fields (i.e., industrial, mechanical, electrical, chemical, and civil) and several subspecialties are discussed in Appendix D.

a. Design Engineering. Data accumulated in the contractor's accounting system or adjunct statistical records which may be helpful in evaluating estimates for design engineering include:

(1) the total number of basic design hours expended on previous contracts of similar complexity,

(2) the number of various types of drawings required, and the average number of hours expended per type of drawing for prior contracts of varying degrees of complexity,

(3) the percentage factors for support engineering (the direct engineering effort other than that expended by detailed designers working in the design department), and

(4) percentage factors for engineering effort incidental to changes made during production which represent refinements of the product to attain improved performance.

b. Production Engineering. Production engineering generally represents engineering effort expended during the life of a contract, beginning with the completion of the initial design. Initial design is usually segregated from other engineering effort in the contractor's accounting or statistical records. Design changes for which costs are not segregated may occur during the life of the contract. In evaluating the reasonableness of production engineering estimates, evaluate the contractor's methods and supporting data. Include an evaluation of similar type engineering hours expended on previously completed projects of like complexity.

c. Analytical Techniques. The plotting of engineering hours of contracts of similar complexity, by month, will generally indicate the extent of design and production engineering effort related to significant points of contract performance. Graphic analysis may also indicate definite patterns of engineering contract costs compared to deliveries. When the estimate involves a follow-on procurement, or the run-out portion of an existing contract, using graphic analysis of prior experience is of particular importance in evaluating proposed engineering costs. The analysis should provide:

(1) An appraisal of the reasonableness of the monthly production engineering hours estimated by the contractor.

(2) A determination whether there is a marked reduction in engineering hours after the initial delivery.

(3) An appraisal, at an interim point, of the reasonableness of the contractor's estimated production engineering hours for the run-out portion of contracts subject to price redetermination or for setting successive targets under incentive type contracts.

9-605.2 Special Tooling and Special Test Equipment

a. Special tooling is designed:

(1) to reduce the requirements for production/manufacturing labor hours and costs,

(2) to speed production, and

(3) to improve techniques, tolerances, and finished parts.
The term includes jigs, dies, fixtures, molds, patterns, special taps, special gauges, and special test equipment used in the production of end items. The term does not include general-purpose tools, capital equipment, expendable tools, small hand tools, tools acquired prior to the contract, replacement tools, and items of tooling which are usable for the production of items not required under the contract.

b. Special test equipment means either single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special-purpose testing in the performance of the contract. Testing units comprise electrical, electronic, hydraulic, pneumatic, mechanical, or other items or assemblies of equipment that are mechanically, electrically, or electronically interconnected to become a new functional entity. This causes the individual item or items to become interdependent and essential in the performance of special-purpose testing in the development or production of particular supplies or services. The term special testing equipment does not include:

(1) material;

(2) special tooling;

(3) buildings and nonseverable structures (except foundations and similar improvements necessary for the installation of special test equipment); and

(4) equipment items used for general plant testing purposes.

c. Audit Considerations

(1) The contractor may support the total tooling cost estimate (including estimated tooling hour requirements) by a detailed listing of the type and quantity of each special tool required, with the related estimated purchase or fabrication cost. To evaluate their reasonableness, compare the estimates for a selected group of these tools with actual costs or actual hours expended for similar tools in previous production, appropriately adjusted. Adjustments may be necessary to reflect differences in the number of tooling hours because of increased or decreased complexity of the product or improvements in methods and techniques. Replacement and maintenance type tools recorded as indirect costs, and items of a capital nature which should be obtained under a facility contract, should be excluded from the list of special tools.

(2) For follow-on production orders, determine whether any of the production tools purchased or fabricated on prior contracts will be available for use on the proposed contract and whether the cost estimate has taken this into account.

(3) The use of graphic analysis to reflect the relationship between tooling costs of projects of like complexity with related delivery schedules will assist in evaluating the reasonableness of tooling costs in the current estimate. This type of analysis should provide information similar to that discussed in 9-605.1c.

(4) Determine whether expensive tools are justified and whether a sufficient number of employees with required skills are available to use the tools properly.

(5) Establish whether proposed special test equipment is justified. It must meet the definition for such equipment, and current inventories of Government- or contractor-owned special test equipment should be evaluated to determine whether the equipment is available (see 7-200).

d. Liaison with Government Engineering Personnel. Maintain liaison with available Government engineering personnel familiar with the requirements of the proposed procurement and obtain information on:

(1) the availability of Government-owned tooling and special test equipment,

(2) the propriety of the numbers and types of tooling and special test equipment provided for in the estimates in relation to the production requirements,

(3) possible savings which may be accomplished through improved tooling, and

(4) the overall reasonableness of the estimated costs for tooling and special test equipment proposed by the contractor (see Appendix D-200).

9-605.3 Packaging

a. Packaging specifications are usually included in the request for proposals. These mainly depend on whether the item packaged will be shipped to a point within the United States (domestic) or overseas. Domestic packaging usually does not require special treatment provided it meets generally accepted end item packaging methods. The related cost may be classified as either an indirect cost or an ODC as long as it complies with the proposed accounting system to be used in costing the contract and all applicable Cost Accounting Standards. Packaging for overseas shipment requires special treatment, and the applicable costs are generally classified as ODCs. The special treatment accorded overseas packaging, as prescribed by Government specifications, requires that crating materials be of a better grade than those used for domestic crating; and the packages must pass a water and moisture proofing test. When packaging cost estimates are based on complex technical determinations and the dollar amount is significant, it usually is appropriate to request the assistance of a Government packaging specialist (see Appendix D-205).

b. The reasonableness of the contractor's packaging cost estimate may be evaluated by comparing it with costs incurred for similar types and kinds of packaging. Graphic analysis (e.g., time series or scatter charts) showing the unit packaging material and labor costs for related items or the relationship of packaging cost to shop cost over an extended period, may be used to plot the experienced costs for further analysis. Statistical data usually available in the packaging department can be used for this comparison. In addition, review information regarding instructions for packaging under various specifications, packaging standard hours arrived at by scientific means, and packaging bills of material if available. When experienced cost trends are plotted on charts for further study and analysis, ascertain whether:

(1) all nonrecurring costs have been eliminated,

(2) the packaging specifications of the current proposal are comparable to those which generated the experienced costs, and

(3) the contractor has considered the possible impact to packaging material and labor cost trends resulting from expected changed market conditions.

9-605.4 Travel and Subsistence

Travel and subsistence costs usually include the costs of transportation and per diem, (lodging, meals, and incidental expenses) incurred by personnel while in travel status. When included as ODCs, the estimate usually is based on the contemplated number of trips, places to be visited, length of stay, transportation costs, and estimated per diem allowance. Questionable estimates for this cost may arise from such errors as the following:

a. Per diem rates projected that exceed allowable per diem costs after they have been escalated for expected inflation. Per diem rates are set forth in the (1) Federal Travel Regulations (FTR) established by GSA for the 48 Continental United States, (2) Joint Travel Regulations (JTR), Volume 2 established by DoD for Alaska, Hawaii, Puerto Rico, Northern Marianna Islands and territories and possessions of the U.S.,and (3) Department of State Standardized Regulations for locations not covered by GSA or DoD (FAR 31.205-46(a) and P.L. 99-234). For example, to estimate 20X9 per diem rates, the latest established rates for meals and lodging should be increased/decreased by a factor that reflects the forecasted economic change from the current established rate expiration date to 20X9. Refer to DCAAP 7641.74, Use of Economic Indexes in Contract Audits.

b. Transportation rates projected in excess of lowest customary standard, coach, or equivalent air fare offered during normal business hours.

c. Projected transportation costs for personnel to be transferred computed by using other than proper departure points.

d. Mileage allowances projected in excess of actual needs.

e. Excessive projected trip costs to a Government activity or subcontractor location for engineering coordination because the required number of trips and/or length of stay has been overstated.

f. A comparison of the current estimate with experienced costs of prior procurements of a similar nature indicates that the current estimate is unreasonable.

9-605.5 Field Service

Contracts may contain provisions requiring contractor engineering personnel to service delivered equipment. The cost, usually referred to as field service expense, may be included in the contractor's estimate as a separately identifiable ODC, or as a part of indirect cost. Whichever method is used, it must comply with the accounting system to be used in costing the contract and all applicable cost accounting standards. The cost of installation, maintenance and repair, and the development of operating instructions may be identified in the contractor's records as Field Service Expense, Guarantee Expense, Warranty Expense, or Reserve for Guarantee. Establish whether the procurement being audited provides for field service. An evaluation of the field service estimate should include:

(1) evaluation of the data in support of the estimate,

(2) comparative cost analysis, including the use of graphic analysis where appropriate,

(3) discussions with other Government representatives regarding complex engineering determinations, and

(4) evaluation of the degree of conformity to the policy stated in FAR 22.1006.

9-605.6 Royalties

The contractor's cost estimate may include provision for royalties as a separately identifiable ODC or as part of indirect cost. Determine whether royalties are proper for inclusion in the price and whether the contract will include royalty reporting requirements and royalty escrow or recapture provisions (FAR 27.202-1). The nature of the contractor's cost support for this element should be evaluated and addressed in the report.

9-605.7 Preproduction and Start-up Costs

Contractor's proposals should identify preproduction, start-up, and other nonrecurring costs, including such elements as preproduction engineering, special tooling, special plant rearrangement, training programs, initial rework or spoilage, and pilot runs. These costs may be susceptible to verification by a review of detailed documentation. In some instances, an analysis of experience on prior contracts by means described in Appendix E will help to establish the reasonableness of costs proposed. Ascertain the proposed handling of such estimated costs. If the total costs are not to be charged to the contract being audited, determine whether the contractor intends to absorb the residual costs or recover them on subsequent orders.

9-700 Section 7 --- Evaluating Estimated Indirect Costs

9-701 Introduction

This section provides guidance in evaluating estimates of indirect costs. These include manufacturing expense, engineering expense, tooling expense, material handling expense, selling expense, and general and administrative expense. Guidelines are also provided for evaluating indirect cost rates used in estimating indirect costs.

9-702 Estimated Indirect Costs - General

The evaluation of indirect costs and rates requires that the auditor have:

(1) an understanding of the applicable evaluation considerations and techniques,

(2) an insight as to what reasonably may be expected to occur in future operations of the contractor and the probable influence on projected indirect costs and overhead rates, and

(3) knowledge of the contractor's disclosed accounting policies particularly those for distinguishing direct costs from indirect costs (see CAS 402) and the basis for allocating indirect costs to contracts. (See Chapter 8.)

9-702.1 Evaluation Considerations and Techniques

a. The audit considerations in evaluating estimated indirect costs are similar to those used in the audit of historical costs because many estimates are based on historical costs. Audit guidance and procedures applicable to the audit of indirect costs and the evaluation of contractor's policies, procedures, and internal controls which affect indirect costs are presented in 6-600. The effect of findings and recommendations developed through operations audits should be applied to estimated or proposed indirect costs and overhead rates (see 9-308b). Audit leads noted during the course of the audit should be documented for follow-up in future operations audits of those indirect cost areas where it appears the contractor is not employing the most effective, efficient, or economical operations.

b. The auditor should consider the use of graphic analyses and statistical techniques in evaluating estimated indirect costs. Techniques of graphic analyses are discussed in Appendix E. These techniques alone do not provide a basis for firm forecasts of costs; however, in appropriate circumstances, they can provide a basis for ascertaining whether estimated costs are within a cost range of what can reasonably be expected in the future.

9-702.2 Anticipated Future Operations

Evaluation of indirect cost estimates requires consideration of anticipated future operations of a contractor (see 5-500 on audit of budgets). To determine what may be reasonably expected to occur, the auditor should utilize analyses and projections of historical cost patterns and related data. When audits of historical costs are not reasonably current, and other methods of satisfying the audit objective are not available, the report should be qualified using the guidance in 10-304. Other methods of satisfying the audit objectives include reliance on certified final contractor overhead submissions, the work of internal or independent auditors, or CAS compliance audits. It should not be assumed that historical cost patterns and the results of overhead audits for prior years will continue without change; the auditor must consider contemplated changes which may influence the projections. Examples of changes and possible effects are discussed in the following paragraphs:

a. A change in the accounting policies governing the treatment of certain indirect expenses. This may include reclassifications of expense from direct to indirect, and new methods of accumulating and allocating indirect cost. Changes of this nature may affect

the estimates for indirect costs and the computation of indirect cost rates. The auditor should be alert for accounting changes which would require the contractor to revise its Disclosure Statement (see 8-303).

b. A change in management objectives as a result of economic conditions and increased competition. For example, the management may have placed emphasis, in the past, on a program to increase sales, whereas it now emphasizes a program to reduce costs. The auditor should ascertain the programs that management is stressing and determine that possible results have been considered.

c. A change in manufacturing processes and practices. Changing manufacturing operations can affect the flow of cost. Modernization changes may affect estimates for indirect cost and the computation of indirect cost rates. For example, technological modernization can include acquisition of expensive new machinery which increases depreciation costs and the overhead pool. This new machinery may require fewer labor hours and result in reduction of a direct labor base for allocating overhead. The auditor should be alert for changes to manufacturing processes and practices which can highlight accounting system weaknesses (see 14-800) and should consider whether:

(1) The accounting system accurately assigns costs to products and equitably allocates costs.

(2) The accounting system allocates costs to develop future product technology to existing products which receive no benefit.

(3) The accounting system reflects savings resulting from technological improvements.

(4) The accounting system integrates relevant data collected by newly implemented information systems.

9-702.3 Classification of Cost as Direct or Indirect

The auditor must determine whether cost items are directly or indirectly allocable to the proposed contract and that the estimated costs have been properly classified as direct or indirect. The auditor's evaluation of the allocability of cost items should disclose any deviations from the contractor's usual direct and indirect cost classification. When deviations are disclosed, the auditor should determine the reasons for the differing treatment. Deviations may cause inequitable distribution of costs or they may be proper and warranted. The principles underlying the accounting and estimating classification for direct and indirect costs should be sufficiently flexible to reflect changes in operations. CAS 402-"Consistency in Allocating Costs Incurred for the Same Purpose" was established to insure that each type of cost is allocated only once and on only one basis to any contract or other cost objective (see 8-402).

9-703 Evaluation of Indirect Costs

9-703.1 General

The scope and extent of the audit of estimated indirect costs will depend on individual circumstances. As a minimum, the auditor should determine:

(1) the extent to which underlying data in support of the estimates are valid, current, and applicable to the proposal being audited,

(2) that the contractor has considered factors and conditions which have a bearing on the propriety of the estimated costs and the related allocation bases, including operations auditing recommendations for increased efficiency and economy, and

(3) that the results are mathematically correct.

9-703.2 Classification of Indirect Costs

There are two general considerations in classifying indirect costs:

a. A determination that the cost is assigned to the correct indirect cost pool; for example, manufacturing, engineering, material handling, occupancy, or general and administra-

tive. The auditor should evaluate the composition of indirect cost pools to determine whether the accounts included are properly classified and whether further refinement in cost categories is required, and

b. A determination that indirect costs have been properly classified by characteristics; that is, variable, semivariable, and nonvariable. Variable costs will vary directly and proportionately with its related volume base. Semivariable costs may vary directly but less than proportionately, with volume; further, the costs may remain relatively fixed between certain production limits and advance by steps, an example of this is supervisory wages. Nonvariable costs, on the other hand, will remain fairly constant, but the percentage relationship will vary inversely with an increase or decrease in the related volume base.

9-703.3 Advance Agreements (Indirect Cost)

The auditor should determine whether the contractor has entered into advance agreements with the Government. Advance agreements may limit recovery of certain indirect costs such as independent research and development expense, bid and proposal expense, and recruiting expense.

a. When advance agreements cover indirect costs included in the estimates, the auditor should determine that allocations to Government contracts are within the agreed limitations.

b. FAR 31.205-18 and DFARS 231.205-18 no longer require advance agreements for IR&D and B&P costs for CFYs that began after September 30, 1992. However, for larger contractors that incur substantial IR&D and B&P cost certain ceiling limitations apply for the three CFYs beginning after September 30, 1992. For CFYs 1996 and beyond, there is no requirement to calculate or negotiate a ceiling for IR&D and B&P costs.

c. Advance agreements covering forward pricing indirect cost rates may be entered into between contractors and contracting officers to reduce the time and effort required to evaluate the indirect cost rates used in each contract proposal. (See 9-1200 on forward pricing rate agreements). Circumstances on which the rates were developed may be subject to change or the contemplated procurement in itself may invalidate the propriety of the agreed upon rates. The auditor should not accept the rates without determining that they are reasonable and appropriate for the procurement being evaluated (see 9-312).

9-703.4 Allocation Bases

a. An equitable allocation of indirect costs to jobs, departments, processes, or cost centers is dependent upon the bases used. Bases commonly used include direct labor dollars, direct labor hours, production costs, input costs, and cost of sales. With the advent of technologically advanced manufacturing machinery, bases such as machine hours, process time, and operational movements will become more widely used (see 6-606.3c., 6-610.2e., and 9-702.2).

b. The evaluation of the bases used involves a determination of the accuracy of the data included in the base and equity of the resulting allocation. Because movement to an ACMS can encompass new types of allocation, the contractor may not be able to support the proposed base with accumulated historical data. The contractor may have to support the proposed base with a combination of documentation, such as production projections, historical data, employee interviews, manufacturer machine capability, and specifications and engineering analysis. Auditors should be open to verifiable forms of documentation which may be generated by the new system.

c. The auditor should review the FAO audit of mandatory annual audit requirement No. 18 related to indirect allocation bases (see 6-606). In evaluating allocation bases, the auditor should determine that the base estimates reflect valid trends. Trends may be evaluated through analysis of ratios, budgets, and sales and production volume forecasts. Anticipated changes, such as proposed increases or decreases in wage rates and material

prices or implementation of modernized manufacturing processes and practices, should also be considered when such factors will influence the base. Further discussion of matters to be considered by the auditor in evaluating the contractor's estimate of future business is included in 5-507.2.

d. The auditor should review the applicable portions of the SEC filings to determine if off-balance sheet arrangements or related party transactions exist (see 14-301f(15) and 14-306). If any off-balance sheet arrangements or related party transactions exist and receive benefits of the parent company or a segment, determine that those entities are included in the appropriate allocation bases for an equitable share of indirect costs.

9-703.5 Individual Indirect Costs

The auditor should review selected accounts included in the indirect cost pools to evaluate the reliability of specific estimates. In evaluating projections, the auditor must consider historical cost patterns and the probable effect of anticipated changes. The auditor should review the FAO audit of mandatory annual audit requirements related to indirect cost comparison with prior years and budget (No.15), and indirect account analysis (No.16). In selecting accounts to be audited, the auditor should consider the following:

a. Indirect costs questioned in prior periods, especially those expressly unallowable, that are required to be eliminated by CAS 405,

b. Indirect costs of a nonrecurring nature,

c. Indirect costs that are usually recovered as direct charges or in separate loading factors, such as packaging or obsolescence,

d. Indirect costs which show significant differences between historical cost and estimated cost,

e. Indirect costs of a semi-variable or variable nature which do not show significant differences between historical cost and estimated cost despite a significant change in volume, and

f. Indirect cost of a nonvariable nature which show significant variations between historical cost and the proposed estimated cost.

9-703.6 Indirect Labor

Indirect labor usually represents a substantial portion of indirect costs. The auditor should review the FAO audit of mandatory annual audit requirement related to changes in direct/indirect charging (No.7). In evaluating indirect labor, the auditor should analyze variable, semi-variable, and nonvariable classifications of indirect labor in a current representative period. The ratios of each category to direct labor should be computed and compared with similar ratios for estimated cost. Projections of indirect labor requirements and the related costs can also be compared with manpower budgets. Indirect labor wage rates may be verified by reviewing personnel or payroll records. When projected costs include wage increases, the auditor should ascertain whether the proposed increases have been approved by management and are in accordance with applicable agreements.

9-703.7 Indirect Material

It is desirable to differentiate the treatment of the nonvariable, semi-variable, and variable components of indirect material cost contained in the contractor's projection. Ratios of these expense classifications to appropriate bases should be computed only when practical. To further facilitate evaluation, similar ratios can be computed from historical cost data. Categorizing the recorded indirect materials into these classifications requires that the auditor exercise judgment in determining whether the additional evaluation effort needed for this type of analysis is warranted. For instance, when the contemplated procurement is not large in dollar amount, it is probable that treatment of indirect material expense as variable with the level of production activity would be expedient. Comparisons may be made of estimated requirements with budget requirements or estimated prices with current prices. When the proposed contract is a fixed-price incentive type with successive targets, or a fixed-price contract with prospective price redetermination and the contractor expenses the cost of indirect materials at the time of purchase, the auditor should recommend the establishment and maintenance of indirect material inventories. Implementation of this recommendation would preclude the loading of indirect material costs during the experienced or retroactive portion of the contract.

9-703.8 Payroll Costs - Estimated Taxes and Fringe Benefits

a. After establishing the estimated total direct and indirect labor requirements, the auditor should evaluate related payroll costs. The provisions of union wage agreements and the possible effect of anticipated wage negotiations should be evaluated to establish the validity of employee benefit costs included in the cost estimate. The auditor should be aware in evaluating the estimate for payroll taxes that assessments cease upon reaching the taxable pay ceiling. The extent of labor turnover will influence the projections for payroll tax estimates; when turnover is low, the cost will be semi-variable in nature, when the turnover is high, the cost may be more variable in nature. The auditor should evaluate rates for unemployment insurance to determine if the estimate reflects possible adjustments in the rate.

b. Pension and retirement plan costs frequently are related to payroll costs. In evaluating the reasonableness of pension and retirement costs, the auditor should perform the following steps:

(1) Determine that the amount projected is in accordance with the company plan.

(2) Ascertain that the pension plan has been approved by the Internal Revenue Service, and by the Department of Defense, if required.

(3) Determine that proper adjustment has been made for any reversionary credits that may be due.

(4) Determine that when rates are based upon actuarial data and have recently been revised or are scheduled to be revised, the effect of the new rates has been considered.

(5) Verify that the contractor has used the pension plan’s long-term valuation interest rate to estimate the pension plan’s actual return on assets in computing the projected pension costs and in determining if the projected pension costs will be limited by the assignable cost limitation (i.e., if the actuarial value of assets exceeds the actuarial accrued liability plus current normal costs). Since volatility in the equity and bond markets makes predicting the actual rate of return on assets speculative at best, the contractor’s long-term valuation interest rate (i.e., the rate used to compute the CAS 412 pension cost) is the best available estimate of the actual rate of return on assets. Accordingly, projected pension costs resulting from the use of a rate of return on assets less than the contractor’s assumed long-term valuation interest rate should be questioned. The risk in this area is greatest when the pension plan is at or near full funding status. If the contractor’s pension plan is at or near full funding status, the auditor may need to advise the contracting officer of the risk associated with such circumstances, even when there is no questioned pension cost. (See 10.304.7d(2).)

(6) Review the history of the contractor's estimating procedures to determine if forward pricing projections for prior years have exceeded actual pension costs for those periods. If the history indicates a pattern of excess pension projections that is attributable to substantial actuarial gains, then an analysis of the effect of the actuarial assumptions on the forward pricing projections should be performed.

(7) If a CIPR review is planned to be performed by the cognizant DCMA CIPR team, contact the ACO and obtain pertinent information on the plan's funding level, including any technical analysis that may impact forward pricing projections.

(8) If a CIPR review is not planned or has not been performed within the past year, and pension costs have a material impact on forward pricing rates, request assistance from the DCMA Insurance/Pension Specialist in the review of estimated pension cost and/or pension funding level.

9-703.9 Plant Rearrangement

Plant rearrangement costs may result from the introduction of new products, consolidation or expansion of departments, changes in production requirements, or changes in manufacturing techniques. In evaluating the detail supporting the projection of plant re-arrangement cost, the auditor should determine that like costs which will be reimbursable as direct costs under other contracts have been excluded from the estimate. Plant rearrangement costs applicable to a specific contract or project are normally not included in an indirect cost pool; plant rearrangement costs beneficial to all production effort are generally included in indirect costs. The guidance in Chapter 8 on CAS 402 should be applied to insure that plant rearrangement costs incurred for the same purpose are allocated only once and only on one basis. The auditor should review the plant rearrangement cost pattern in prior periods and compare actual costs incurred with previous estimates in evaluating the reliability of the current estimate. The auditor should be alert to costs categorized by the contractor as plant rearrangement but where the circumstances would indicate that they should more properly be included under the classification of "Plant Reconversion Costs." The definition and treatment of this latter category of costs are covered in FAR 31.205-31. The advice of Government technical personnel should be solicited to establish the necessity and reasonableness of proposed significant rearrangement costs.

9-703.10 Depreciation

The auditor should be familiar with current Internal Revenue guidelines and CAS 404 (Capitalization) and 409 (Depreciation). The contractor's forecasts for depreciation should be evaluated using Internal Revenue guidelines as recognized by current DoD instructions and in such Cost Accounting Standards as CAS 404 and 409 where applicable. The auditor should evaluate the necessity for new acquisitions, review the contractor's capital replacement or acquisition policy and ascertain whether:

(1) acquisitions have been approved by management,

(2) actual commitments have been made, and

(3) proper consideration has been given to lead time, installation costs, and rearrangement expenses (see 7-400).

9-703.11 Rent

Estimated rentals of machinery and equipment should be compared with costs incurred for rentals. Rental agreements should be evaluated to ascertain expiration dates and renewal and purchase options. The auditor's attention is particularly directed to FAR 31.205-36 for guidance in determining the reasonableness and acceptability of rental costs (including the sale and leaseback of facilities). In this connection, special emphasis should be on evaluating the contractor's policies and practices where significant portions of the plant and facilities are acquired by renting in lieu of purchase.

9-703.12 Occupancy Cost

The auditor should evaluate the reasonableness of costs associated with the use and occupancy of the contractor's facilities. These costs include insurance, taxes, heat, light, guard services, and maintenance expense. The evaluation should include a review of insurance coverage, tax records, assessment notice, utility bills, security requirements, and a comparison of estimated costs with the historical pattern of expense.

9-703.13 Excess Facilities

The auditor should determine whether estimated expenses for depreciation, rent, and occupancy include costs generated by excess facilities. When it is determined that costs attributable to excess facilities are included in the estimate, the auditor should be guided by FAR 31.205-17 and the provisions of the proposed contract. The auditor should consider any trends which might indicate the probability that excess facilities will develop during the period of the contract. An analysis of the contractor's budgets should provide insight in this area (see 5-500). Factors which may create excess facilities include reduced workload, acquisition of additional facilities, and shutdown of existing facilities. When the auditor's evaluation indicates the probability of a significant increase in costs of excess facilities which will be allocated to the proposed contract, the auditor should recommend that the contract contain appropriate dollar limitations.

9-703.14 Corporate or Home Office Assessments

Indirect cost forecasts made by an operating division will usually include the anticipated home office assessment to that division. The reasonableness of the assessment should be evaluated on the basis of services to be rendered or available to the operating division. The bases of assessment should be evaluated to determine that all components of the company bear an equitable share. An accurate determination at the operating level may prove difficult and may include prorations of unallowable home office and corporate expenses. When the amounts involved are significant, an assist audit of the home office expenses should be requested. The auditor at the operating unit should furnish the assist auditor with sufficient data as to the contemplated level of activity of the operating unit during the proposed contract period to enable the home office auditor to render an opinion as to the appropriate participation of the operating unit in the total allocable home office expense. When feasible, the home office auditor should arrange for the periodic audit of forward pricing home office rates applicable to operating divisions which have significant amount of Government business. The results of the audits should be forwarded to the auditors at the operating units for their use in evaluating proposals (see 6-804).

9-703.15 Miscellaneous Income and Credit Adjustments

The auditor is concerned with credit adjustments to indirect accounts, credits to direct accounts which should have been credited to indirect accounts, and miscellaneous income which has not been credited either to indirect or direct accounts.

He or she must consider whether the amount is correct, whether the period in which the adjustment or income is credited is appropriate, and whether the accounting treatment is acceptable.

a. As a minimum the audit should include a review of the contractor's financial statements, including the statements of cash flow, miscellaneous income accounts, and journal vouchers. The auditor should analyze the trends of the credit items in the periods covered by the estimate.

b. The auditor may find that the indirect expense pools have not been reduced by the amount of income received from such sources as scrap sales and rentals. Cash discounts taken and trade discounts may have been credited to income accounts.

c. Credit adjustments should be reflected in the indirect cost pools for amounts chargeable directly to contracts and amounts chargeable directly to termination proposals. The auditor should review the anticipated activity for contracts for technical services, overhaul, spare parts, and facilities, the costs of which are wholly or partially recovered either directly or on a fixed rate basis.

d. Credit adjustments should be applied against the expense originally charged; however, when the application of the credit would distort the expense projection, the credit should be shown separately as a reduction of the total indirect cost pool. Examples of such credit adjustment are worker's compensation insurance refunds, price adjustments on material purchases, and insurance payments under casualty claims.

9-703.16 Independent Research and Development and Bid and Proposal Costs

FAR 31.205-18 sets forth certain rules and procedures for establishing the allowability of IR&D and B&P costs. For CFYs beginning after September 30, 1992, the ceiling limitations have been removed for most contractors. However, ceiling limitations are still in place for three full CFYs after September 30, 1992 for larger contractors with substantial amounts of IR&D and B&P costs. For CFYs 1996 and beyond, the ceiling limitation is removed. IR&D and B&P costs forecast for these contractors should consider these limitations until they are removed. For those contractors where ceiling limitations are no longer applicable, the forecasted IR&D and B&P costs still need to be allowable, allocable, and reasonable and be of potential interest to DoD (see 7-1500).

9-704 Evaluation of Prospective Rates -- Indirect Costs

9-704.1 Evaluation of Rate

Indirect costs, while expressed as dollars, are calculated by the application of a rate to a selected cost base. To properly evaluate the acceptability and reasonableness of the contractor's indirect cost rates, the auditor should review the period covered by the rate and the propriety of the rate structure by which indirect costs are allocated to cost objectives.

9-704.2 Rate Period

a. The auditor should determine whether the period used in developing an indirect cost rate is appropriate for the contemplated period of contract performance. For example, if the rate used is based on projections covering a one year period and the period of contract performance is expected to cover two years, the rate may not be appropriate for the second year. When unable to support the use of such a single rate, the contractor should be requested to submit rates for the subsequent periods involved. When the period used by the contractor coincides with the period of contract performance, the auditor should determine that consideration has been given to all work anticipated during the forecast period which might influence the indirect cost rate. In evaluating the reasonableness of costs contained in long range estimates, the auditor may be confronted with an unwillingness on the part of the contractor to submit supporting data or an inability to submit reliable data. When there is reason to believe the contractor has data that relates to an estimate but is unwilling to submit it, the auditor should so notify the contracting officer and recommend that the contractor be required to make such data available (see also 1-500).

b. Long range projections may lack sufficient data on which to base a reliable estimate. When the estimates are not susceptible to a reasonable evaluation, the auditor should so inform the contracting officer and make appropriate recommendations. For example, the auditor might recommend that a proposed award be made on a flexible price basis in ac-

cordance with the provisions of FAR Part 16/DFARS Part 216, particularly when uncertainties in the long term indirect cost forecasts are combined with the possibility of contract changes and the indefinite nature of the particular Government program.

c. CAS 406 "Cost Accounting Period" was established to provide criteria for selecting time periods to be used as cost accounting periods for contract cost estimating, accumulating, and reporting. The Standard will reduce effects of variations in the flow of costs within each cost accounting period (see 8-406).

9-704.3 Propriety of Rate Structure

The equity of the allocation of indirect cost is dependent upon an evaluation of the rate structure. Contractors may compute separate indirect cost rates for indirect costs such as manufacturing expense or engineering expense, and the bases used in the computation of indirect cost rates may vary. Contractors modifying their cost accounting systems to an advanced cost management system may adopt the use of multiple rates (see 6-606.2c. and 6-608.1c.). Contractors must use the same rate structure for estimating purposes as they do for historical costing purposes. When a contractor employs a different rate structure for cost estimates, the auditor should inquire whether a change in its accounting system is planned. If a change is planned, the contractor must submit a cost impact statement resulting from the change and agree to an adjustment as required by FAR 52.230-6 of the CAS administration clause (see 8-500). The auditor should evaluate the change to determine if the different method causes inequitable results and the validity of the cost impact statement. A change in method is not improper by itself. The auditor should recognize that the impact of current procurement, changes in production mix, modernization of manufacturing processes and practices (see 14-800), and other factors may necessitate the revision of an existing rate structure to provide equitable cost allocations. The criteria used in determining the propriety of the number and types of indirect cost rates appropriate under varying conditions and the propriety of the related proration bases are discussed in 6-600.

9-704.4 Ceiling Rates

Indirect cost rates may be subject to sharp fluctuations. In periods of declining workloads, for example, indirect cost rates tend to increase because nonvariable costs are spread over a smaller allocation base. In the case of a corporate reorganization or a realignment of management functions, additional costs may be incurred which may result in an increase in indirect cost rates. When the auditor's evaluation indicates the possibility of a decline in workload, a change in management functions or any other factor which would result in significant fluctuations in the rates, the auditor should determine the effect on the rate computation. Where warranted, the auditor should recommend ceilings in the indirect cost rates to prevent the acceptance of an unreasonable amount of indirect costs in the negotiation of the contract price.

9-800 Section 8 --- Economic Price Adjustments

9-801 Introduction

This section provides guidance on the evaluation of economic costs.

9-802 General

There are essentially two ways that contract prices can reflect the impact of inflation over the contract performance period.

a. In the most widely used method, the proposed contract price includes current estimates of wages and prices that are expected to be experienced during contract performance. The preferred bases for current estimates are forecasts of future wage and price indices prepared by qualified, professional economists. Their predictions are based on econometric computer models of the U.S. economy which consider a large number of factors that influence wages and prices. Accordingly, when evaluating proposals by this method, follow the guidance for using economic forecasts explained in DCAAP 7641.74, Use of Economic Indexes in Contract Audits.

b. Alternatively, the contract proposal may be priced without escalation and an economic price adjustment (EPA) may be proposed. This arrangement is appropriate when there is serious doubt about the stability of future market or labor conditions during an extended contract performance period. When such expectations are not included in the contract price, and they can be separately identified, they may be covered by an EPA contract clause.

c. Use of EPAs have increased, primarily because of potential inequities that fixed-price contracting can produce in periods of economic uncertainty. Such adjustments are intended to protect both the Government and the contractor from the effects of abnormal wage and/or price changes which could cause significant losses or windfall gains for reasons beyond the control of the contracting parties.

9-803 Types of Economic Price Adjustments

FAR 16.203-1 specifies three basic types of EPAs and 16.203-4 addresses applicable contract clause coverage.

a. The first type provides for adjustments based on established prices. It is used where basic commodities and commercial items (i.e., steel, aluminum, brass, bronze, copper, and standard supplies) comprise a major portion of the contract work. Price adjustments are based on an increase or decrease from a specified level in published or established prices of either specific items or price levels of contract end items.

b. The second type provides for adjustments based on the contractor's experienced labor or material costs and is commonly referred to as the actual cost method. This type of adjustment is used when there is no major element of design engineering or development work involved and one or more identifiable labor or material cost factors are subject to change. Price adjustments are based on an increase or decrease in specified costs of labor or material actually experienced by the contractor during performance of the contract.

c. The third type is referred to as the cost index method. It is used when there will be an extended period of performance and the amount subject to adjustment is substantial. Although many variations can be developed, one approach is to select representative BLS labor and material indices and project them into the future. Price adjustments result only if the actual indices are outside a defined range about the projections.

9-804 Proposed Economic Adjustments - Evaluation Techniques and Considerations

a. Techniques to evaluate costs/prices subject to EPAs are dependent on:
(1) the appropriate contract clause,
(2) the contractor's accounting system, and
(3) other factors relevant to the proposed acquisition.
As appropriate, use evaluation techniques in the preceding sections of this chapter.

b. The evaluation techniques used in the audit of an adjustment under an EPA clause should be selected to assure that:

(1) economic factors already contained in the original price proposal are not duplicated,

(2) the base period of the contract clause is the same period used to establish the base price,

(3) the contemplated clause is the most appropriate for the anticipated contract environment,

(4) the contractor's accounting system is capable of identifying and segregating the specific economic costs subject to adjustment from those attributable to qualitative and/or quantitative changes,

(5) an adjustment will be made for only those economic changes beyond the control of the contractor, and

(6) for the EPAs based on established prices and actual cost, that the aggregate price of increases shall not exceed 10 percent of the original contract price (FAR 52.216-2 through 4). (The Chief of the Contracting Office may modify this limitation upwards.)

9-805 Unsatisfactory Conditions

Auditor vigilance is necessary to preclude unsatisfactory conditions as envisioned by 4-803. While the auditor should be involved in preaward economic decisions, it may not always be possible to do an audit evaluation before the contract is executed; such action may not be requested or time may not permit an audit based on the auditor's initiative. At all times, but especially when this is the case, the auditor must be alert to possible contractor windfall profits or other excessive cost recoveries due to the operation of the EPA clause. When these conditions are detected the contracting officer should be advised. All remedies should be exhausted at the FAO and regional level. If the situation continues, however, and resolution by the FAO or the regional office seems improbable, the condition should be reported in accordance with 4-803.

9-900 Section 9 --- Profit in Price Proposals

9-901 Introduction

a. This section provides guidance on the auditor's responsibilities related to profit or fee included in the contractor's price proposal.

b. FAR 15.404-4/DFARS Subpart 215.404-4 state the Government and DoD policies and procedures for determining profit and fee objectives for negotiated contracts. It is in the Government's interest and, therefore, the general policy of DoD and civilian agencies to offer contractors opportunities for financial rewards sufficient to stimulate efficient contractor performance, attract the best capabilities of qualified contractors, and maintain a viable industrial base.

9-902 Weighted Guidelines for DoD Profit Policy

a. The weighted guidelines method set forth in DFARS 215.404-71 is generally prescribed for use by contracting officers in computing the profit objective to be used in negotiating contracts with commercial organizations where cost analysis is performed (see 9-903 for other methods). Under this method, the contracting officer is required to perform the profit analysis necessary to develop a prenegotiation objective for each contract action. The weighted guidelines method expressly takes into account:

(1) the contractor's degree of performance risk in producing the goods or services purchased under the contract action,

(2) the contract-type risk assumed by the contractor under varied contract and incentive arrangements,

(3) the level of working capital needed for contract performance,

(4) the nature of the contractor's facilities capital to be employed, and

(5) contractor cost reduction efforts that the contractor can demonstrate will benefit the pending contract.

b. Contractors are encouraged to present the details of proposed profit amounts in the weighted guidelines format. This would facilitate a more complete discussion of the individual factors that will determine the overall profit objective. The contracting officer is required to utilize the weighted guidelines method in establishing a profit objective for each applicable negotiated contract and to document the files accordingly. This "initial" profit objective is, of course, subject to later discussion and revision, as part of the overall price negotiated for the contract. In establishing a profit objective for a prospective contract award, the contracting officer is required to consider all pertinent information, including audit data, available prior to negotiation. It is not, however, intended that the profit objective be computed based on precise mathematical calculations, particularly for sub-elements of the major profit factors.

9-903 Other Methods for Establishing DoD Profit Objectives

Other methods for establishing profit objectives may be used for the contract types set forth in DFARS 215.404-73. Generally, it is expected that such methods will ensure that the appropriate profit factors and the relative values of these factors are considered. In addition, DFARS 215.404-72 describes the modified weighted guidelines method for nonprofit organizations. The procedures for establishing fee provisions on cost-plus-award-fee contracts are described in DFARS 216.405-2 and 215.404-74. Note that it does not permit the use of the weighted guidelines method.

9-904 Civilian Agency Profit Policies and Procedures

Civilian agencies' profit policies and procedures are contained in FAR 15.404-4 and those agencies' FAR supplements to 15.404-4. These policies also provide for a struc-

tured approach to the profit objective to be used in negotiating contracts with commercial organizations where cost analysis is performed. NASA uses the structured approach, which considers contractor effort in each cost category, cost risk, investment, performance, socioeconomic programs, and special situations. DOE uses weighted guidelines, which consider sub-levels of the cost elements, contract risk, capital investment, independent research and development, special program participation, and other considerations. DOT uses weighted guideline methods for manufacturing contracts, research and development contracts, and services contracts. Risk percentage ranges are provided by contract type for each of the contract categories. GSA uses a structured approach that considers material acquisition, conversion direct labor, conversion related indirect costs, other costs, and general management. Other factors include contract cost risk, capital investment, cost control and other past accomplishments, Federal socioeconomic programs, and special situations and independent development.

9-905 Responsibility for Evaluation of Proposed Profit

a. Contracting Officer. After evaluating the contractor's cost proposal and establishing negotiation objectives on cost, the contracting officer is responsible for using the weighted guidelines method under DFARS 215.404-71 to complete DD Form 1861, Contract Facilities Capital Cost of Money. The completion of this form is a prerequisite to the completion of DD Form 1547, Record of Weighted Guidelines Application. These two forms are shown in DFARS 253.303-1861 and 253.303-1547, respectively. Note also that the contracting officer may request completion of these forms through normal field pricing support procedures (see 9-103 and DFARS 215.404).

b. DCAA. The auditor is responsible for determining that the contractor's financial and cost data supporting the profit allowance is fairly stated, and preparing report comments on this determination in accordance with the guidance in 10-304.7e. Examples of appropriate areas for comment are provided in the following paragraphs on specific profit factors. However, see 9-906.6 on limitations.

9-906 Audit Policies -- Profit Evaluations

In conjunction with the evaluation of the price proposal, examine the contractor's profit submission and books and records to develop comments on the major profit factors for inclusion in the audit report. Direct comments toward assisting the contracting officer in developing a profit objective for the contract and conducting the profit negotiations with the contractor. When methods other than weighted guidelines are used for establishing profit objectives, develop comments similar to those required under contracts where weighted guidelines apply. A percentage computation should not be shown in the report nor should the contractor's requested profit percentage be related to questioned costs. Also note that it is not Agency policy to initiate completion of the profit form, DD Form 1547, although the auditor may assist in evaluating or completing this form if specifically called upon to do so by the contracting officer.

9-906.1 Contractor Performance Risk

This factor under DoD weighted guidelines addresses the contractor's risk in fulfilling contractual requirements through consideration of two broad categories (technical and management/cost control). The auditor may include comments on these categories to assist the contracting officer in determining whether the profit objective for each category should be set toward the lower or upper level of the established percentage range. Examples of areas for comment include: reliability of management and internal control systems, reliability of cost estimates and the contractor's cost estimating system, and cost reduction initiatives and cost control (see DFARS 215.404-71-2).

9-906.2 Contract-Type Risk and Working Capital Adjustment

a. This profit factor under DoD weighted guidelines focuses on the degree of cost responsibility accepted by the contractor under varying contract structures and incentive arrangements. When appropriate, comment on the availability or extent of cost history, the length of the performance period, the extent of effort subcontracted, and the extent of any costs already incurred under an undefinitized contract action (see DFARS 215.404-71-3).

b. For fixed-price contracts with progress payment provisions, the contracting officer calculates an adjustment to consider working capital needs and adds it to the contract-type risk factor. With regard to this adjustment, comment on the accuracy of allowable costs, whether the costs properly exclude facilities capital cost of money (FCCM), and the accuracy of the deduction for progress payments (see DFARS 215.404-71-3(e)(3)). Note that the working capital adjustment is based on the contractor financed portion of total cost including G&A.

9-906.3 Facilities Capital Employed

a. This profit factor under DoD weighted guidelines recognizes the contractor's facilities capital to be employed during contract performance. The amount of recognition is separated among asset categories in proportion to the potential for productivity. The asset categories are land, buildings, and equipment. The designated profit rate ranges are 0 percent for land, 0 percent for buildings, and 10 to 25 percent for equipment. Note that profit recognition is limited to the investment in equipment. The auditor may comment on the accuracy and distribution of the facilities capital employed among the asset categories or on the extent of idle facilities (see DFARS 215.404-71-4).

b. No fee or profit will be allowed under a "facilities contract" (see FAR 45.302-2(c)) or for facilities purchased "for the account" of the Government under any other type of contract (see FAR 45.302-3(c)).

9-906.4 Cost Efficiency Factor

This profit factor under the DoD weighted guidelines is to provide an incentive for contractors to reduce costs. The profit objective may be increased if the contractor is able to demonstrate cost reduction efforts that benefit the prospective contract. When appropriate, the auditor may include comments relating to any cost reduction efforts claimed by the contractor. These efforts may include the contractor’s participation in Single Process Initiative improvements, elimination of excess or idle facilities, or other cost reduction initiatives employed by the contractor (see DFARS 215.404-71-5).

9-906.5 Offsets – Profit Evaluations

Be alert to the alternate approaches to the weighted guidelines method and that offset policies apply to certain pricing actions. DFARS 215.404-71-3(c)(3), 215.404-72(c), 215.404-73(b)(2) and 215.404-74(c) address specific types of offsets or exclusions in establishing a fee/profit objective. Concurrently, if the contractor does not elect to claim or propose FCCM, recommendations should be made to insert the clauses at FAR 52.215-16 and -17 into the contract, if not already incorporated in the solicitation.

9-906.6 Limitations

Establishment of an appropriate profit allowance is a crucial aspect of most contract negotiations. Except for the comments suggested above, which are intended to help the contracting officer by furnishing the information that he or she will usually wish to consider, the auditor will not initiate action in the profit area except upon specific contracting officer request. In this event, the auditor's effort will be limited to furnishing the information or factual data requested.

9-1000 Section 10 --- Audit of Parametric Cost Estimates

9-1001 Introduction

This section contains an overview and general guidance on auditing cost-to-noncost estimating relationships, primarily in the context of contractor price proposals. This section also contains guidance on the use of estimating standards in price proposals. It supplements guidance provided in this chapter, referenced appendixes, and in 10-300 which is applicable to proposal audits regardless of the cost estimating methods used. More detailed guidance can be found in Appendix D-400, Cost Estimating Methods. This supplementary guidance contains criteria contractors should meet before submitting proposals based on parametric cost estimates.

9-1002 Parametric Estimating Terminology

9-1002.1 Definition of Parametric Cost Estimating

a. Parametric cost estimating ("parametrics") has been defined as a technique employing one or more cost estimating relationships (CERs) to estimate costs associated with the development, manufacture, or modification of an end item (See D-405b). A CER expresses a quantifiable correlation between certain system costs and other system variables either of a cost or technical nature. CERs are said to represent the use of one or more independent variables to predict or estimate a dependent variable (cost).

b. Parametrics encompasses even the simplest traditional arithmetic relationships among historical data such as simple factors or ratios used in estimating scrap costs. However, for audit purposes our guidance will limit special consideration of parametrics to more advanced or complex applications. These may involve extensive use of cost-to-noncost CERs, multiple independent variables related to a single cost effect, or independent variables defined in terms of weapon system performance or design characteristics rather than more discrete material requirements or production processes. IT data bases and/or computer modeling may be used in these types of parametric cost estimating systems.

c. Parametric estimating techniques may be used in conjunction with any of the following estimating methods:

(1) Detailed --- also known as the bottoms-up approach. This method divides proposals into their smallest component tasks and are normally supported by detailed bills of material.

(2) Comparative --- develops proposed costs using like items produced in the past as a baseline. Allowances are made for product dissimilarities and changes in such things as complexity, scale, design, and materials.

(3) Judgmental --- subjective method of estimating costs using estimates of prior experience, judgment, memory, informal notes, and other data. It is typically used during the research and development phase when drawings have not yet been developed.

9-1002.2 Distinction Between Cost and Noncost Independent Variables

a. Although the basic criteria for cost-to-cost and cost-to-noncost CERs are generally comparable, the supplementary criteria in this section pertain to cost-to-noncost CERs. Audits of traditional cost-to-cost estimating rates and factors are covered in other sections of this chapter and in referenced appendixes.

b. Cost-to-noncost CERs are CERs which use something other than cost or labor hours as the independent variable. Examples of noncost independent variables include end-item weight, performance requirements, density of electronic packaging, number or complexity of engineering drawings, production rates or constraints, and number of tools produced or retooled. CERs involving such variables, when significant, require

that the accuracy and currentness of the noncost variable data be audited. Special audit considerations are described in the following sections.

9-1002.3 Uses of Parametric Cost Estimates

a. Parametric cost estimating is used by both contractors and Government in planning, budgeting, and executing the acquisition process. Parametric cost models are generally made up of several CERs and can be used to estimate the costs for part of a proposal or the entire proposal. The cost models are often computerized and may be made up of both cost-to-cost and cost-to-noncost interrelated CERs. The guidance contained in this chapter is intended to assist in the audit of parametric estimates, CERs, and/or cost models used in developing price proposals for negotiation of Government contracts.

b. Parametric cost estimates are often used to crosscheck the reasonableness of estimates developed using other estimating methods. Generally, it would not be prudent to rely on parametric techniques based on a broad range of data points to estimate costs when directly applicable program or contract specific historical cost data is available, as in the case of follow-on production for the same hardware in the same plant. Nor would parametric techniques be appropriate for contract pricing of specific elements such as labor and indirect cost rates which require separate forecasting considerations such as time and place of contract performance. The use of a parametric estimating method is considered appropriate, for example, when the program is at the engineering concept stage and the program definition is unclear, or when no bill of materials exists. In such cases, the audit evaluation should determine that:

(1) the parametric cost model was based on historical cost data and/or was calibrated to that data, and

(2) the contractor has demonstrated that the CER or cost model actually reflects or replicates that data to a reasonable degree of accuracy.

9-1003 Parametric Estimating Criteria for Price Proposals

When a contractor uses parametric cost estimating techniques in a price proposal, the auditor will apply all pertinent criteria applicable to any proposal along with the supplemental criteria provided in 9-1004.

9-1003.1 Disclosure of Parametric Estimating Data

a. The purpose of the Truth in Negotiations Act, 10 U.S.C. 2306(a), is to provide the Government with all facts available to the contractor at the time of certification and that the cost or pricing data was current, complete, and accurate (see 14-100). Parametric estimates must meet the same basic disclosure requirements under the act as detailed estimates.

b. Although the principles are no different, proposals supported in whole or in part with parametric estimating will present new fact situations concerning cost or pricing data which is required to be submitted. A fundamental part of the definition of cost or pricing data is "all facts . . . which prudent buyers and sellers would reasonably expect to have a significant effect on price negotiations" (FAR 2.101). Reasonable parallels may be drawn between the data examples provided in FAR for discrete estimating approaches and the type of data pertinent to parametric estimating approaches. For example, if a contractor uses a cost-to-noncost CER in developing an estimate, the data for the CER should be current, accurate, and complete (see D-406f).

c. Many contractors use parametric cost estimating for supplementary support or for crosschecking estimates developed using other methods. Judgment is necessary in selecting the data to be used in developing the total cost estimate relied upon for the price proposal. In distinguishing between fact and judgment, FAR states the certificate of

cost or pricing data "does not make representations as to the accuracy of the contractor's judgment on the estimated portion of future costs or projections. It does, however, apply to the data upon which the contractor's judgment is based" (FAR 15.406-2(b)). Therefore, if a contractor develops a proposal using both parametric data and discrete estimates, it would be prudent to disclose all pertinent facts to avoid later questions about full disclosure (see D-406f.).

9-1003.2 Evaluation of Parametric Cost Estimates

The auditor should address the following questions during the evaluation of parametric cost estimates:

- Do the procedures clearly establish guidelines for when parametric techniques would be appropriate?
- Are there guidelines for the consistent application of estimating techniques?
- Is there proper identification of sources of data and the estimating methods and rationale used in developing cost estimates?
- Do the procedures ensure that relevant personnel have sufficient training, experience, and guidance to perform estimating tasks in accordance with the contractor's established procedures?
- Is there an internal review of and accountability for the adequacy of the estimating system, including the comparison of projected results to actual results and an analysis of any differences?

9-1004 Supplemental Estimating Criteria

The auditor should also consider the following supplemental criteria when evaluating parametric cost estimates.

9-1004.1 Logical Relationships

The contractor should demonstrate that the cost-to-noncost estimating relationships used are the most logical. A contractor should consider all reasonably logical estimating alternatives and not limit the analysis to the first apparent set of variables. When a contractor's analysis discloses multiple alternatives that appear logical, statistical testing (see 9-1004.3) of selected logical relationships may be used to provide the basis for choosing the best alternative.

9-1004.2 Verifiable Data

The contractor should demonstrate that data used for parametric cost estimating relationships can be verified. In many instances the auditor will not have previously evaluated the accuracy of noncost data used in parametric estimates. For monitoring and documenting noncost variables, contractors may have to modify existing information systems or develop new ones. Information that is adequate for day-to-day management needs may not be reliable enough for contract pricing. Data used in parametric estimates must be accurately and consistently available over a period of time and easily traced to or reconciled with source documentation.

9-1004.3 Statistical Validity

The contractor should demonstrate that a significant statistical relationship exists among the variables used in a parametric cost estimating relationship. There are several statistical methods such as regression analysis that can be used to validate a cost estimating relationship; however, no single uniform test can be specified. Statistical testing may vary depending on an overall risk assessment and the unique nature of a contractor's para-

metric data base and the related estimating system. Proposal documentation should describe the statistical analysis performed and include the contractor's explanation of the CER's statistical validity. See Appendix E for information on techniques which may be used in the evaluation of the cost estimating relationships.

9-1004.4 Cost Prediction Results

The contractor should demonstrate that the parametric cost estimating relationships used can predict costs with a reasonable degree of accuracy. As with the use of any estimating relationship derived from prior history, it is essential in the use of parametric CERs for the contractor to document that work being estimated is comparable to the prior work from which the parametric data base was developed.

9-1004.5 System Monitoring

The contractor should ensure that cost-to-noncost parametric rates are periodically monitored in the same manner as cost-to-cost rates and factors. If a CER is validated and will only be used in a onetime major new pricing application, rate monitoring capability is not essential. However, if it is expected that the rates should be considered as an ongoing estimating technique, CER monitoring is critical. The contractor should revalidate any CER whenever system monitoring discloses that the relationship has changed.

9-1005 Areas for Special Consideration in Parametric Cost Estimating

9-1005.1 Parametric Estimating for Change Orders

Change order pricing using parametric cost estimating relationships may need to be considered in a different light than initial contract pricing actions. The contractor may use cost estimating relationships which are unique to change order proposals. In general, contractors do not segregate costs separately for individual change orders. Therefore, it is important that the contractor have a system in place to validate, verify, and monitor CERs unique to change orders. However, if the CER was applicable to the basic contract and change orders, the CER could be validated without cost segregation.

9-1005.2 Forward Pricing Rate Agreements

a. Contractors may submit proposals for forward pricing rate agreements (FPRAs) or formula pricing agreements (FPAs) for parametric cost estimating relationships to reduce proposal documentation efforts and enhance Government understanding and acceptance of the contractor's system. Government and contractor time can be saved by including the contractor's most commonly used CERs in FPRAs or FPAs. (See FAR 15.407-3 and 42.17 for basic criteria.) However, such an agreement is not a substitute for contractor compliance at the time of submitting a specific price proposal. FAR requires that the contractor describe any FPRAs in each specific pricing proposal to which the rates apply and identify the latest cost or pricing data already submitted in accordance with the agreement. All data submitted in connection with the agreement is certified as being accurate, complete, and current at the time of agreement on price on each pricing action the rates are used on, not at the time of negotiation of the FPA or FPRA (FAR 15.407-3(c)).

b. Key considerations in auditing FPRA/FPA proposals for parametric CERs follow:

(1) FPRAs/FPAs do not appear practicable for CERs that are intended for use on only one or few proposals.

(2) Comparability of the work being estimated to the parametric data base is critical. FPRA proposals for CERs must include documentation clearly describing circumstances

when the rates should be used and the data used to estimate the rates must be clearly related to the circumstances.

(3) Validation of all the parametric criteria (see 9-1003 & 9-1004) is especially important if a single CER or family of CERs is to be used repetitively on a large number of proposals.

9-1005.3 Subcontract Pricing Considerations

a. FAR 15.404-3(c) requires that when a contractor is required to submit certified cost or pricing data, the contractor will also submit to the Government accurate, complete, and current cost or pricing data from prospective subcontractors in support of each subcontract cost estimate that is:

(1) $11,500,000 or more,

(2) both more than the cost or pricing data threshold and more than 10 percent of the prime contractor's proposed price, or

(3) considered to be necessary for adequately pricing the prime contract.

Use of parametric CERs does not relieve a contractor of its responsibility to disclose planned subcontract procurements and the related subcontractor cost or pricing data.

b. When proposed material costs are based on parametric estimates, the contractor must demonstrate that the type of materials required for the proposal are the same as included in the CER data base. The auditor should perform audit procedures to determine if:

(1) materials included in the CER data base are not estimated separately in the proposal, and

(2) adjustments have been made to the CER data base for those items which were previously manufactured in-house and now are being purchased. If the CER data base has not been adjusted the contractor should provide a detailed cost estimate for purchased materials.

c. The contractor should explain any major differences between parametric estimates of subcontract costs and the subcontractor's quoted price and to provide the rationale for using the parametric estimate instead of the quote.

d. Consistency in subcontract cost estimating must be maintained within the contractor's estimating system. Any significant deviations from normal practices in the proposal must be identified and justified by the contractor.

9-1005.4 Parametric Estimating Efficiency

a. A primary justification for using parametrics is reduced estimating and negotiation costs. Contractors should perform a cost-benefit analysis before implementing an elaborate parametric estimating model. Their analysis should show that implementation and monitoring costs do not outweigh the benefit of reduced estimating costs. In many instances, new reporting systems may have to be developed to provide reliable noncost independent variables. In addition, the costs of CER validation and monitoring may be substantial.

b. When the contractor's cost-benefit analysis indicates that the parametric system implementation costs might outweigh the benefits of reduced estimating costs and/or increased estimating accuracy, the matter should be pursued for potential cost avoidance recommendations as discussed in 9-308.

9-1005.5 Data Base Adjustment Considerations

a. One basic criterion (see 9-1004.4) is that the parametric data base be comparable to work being estimated. However, a contractor may have to adapt a partially comparable data base to its cost history using a "calibration" factor. An example would be an adjustment to the data base to estimate the savings as a result of continuous improvement initiatives such as TQM. The utilization of complexity factors and/or adjustments to modify contractor devel-

oped in-house CERs is a valid technique. However, the use of such factors or adjustments should be fully documented and disclosed. In addition, this approach increases the contractor's burden to document compliance with the other criteria.

b. If a contractor does not support the adjustment factors, the contracting officer should be promptly notified (see 9-1005.7). In addition, the auditor should determine if a qualified or adverse opinion is required (see 9-211). The audit report should disclose the costs associated with the unsupported factors.

9-1005.6 Contract Administration Interface

a. Upon receipt of a request to audit a price proposal, the auditor will coordinate with the Plant Representative/ACO to make arrangements for any needed technical reviews of the proposal (see 4-103 and D-100). Because of the special nature of cost-to-noncost estimating relationships, and the possibility of limited cost history and added audit testing, complete coordination is especially important when parametric estimates are involved.

b. While the auditor will address special areas of concern as requested by the PCO and/or the Plant Representative/ ACO, the audit scope will be established by the auditor in accordance with the auditing standards (see 9-103.3), unless the PCO requests that the auditor evaluate only part of a price proposal (see 9-206 and 9-209).

c. Auditors should be available, on request, to explain applicable price proposal criteria and identify any prospective audit concerns to both Government and contractor personnel. An example of such audit advice would be to identify operating reports or records that have not been previously used to forecast costs and would therefore require added contractor support and audit testing. Such advance coordination will help avoid unnecessary contractor system development costs.

9-1005.7 Reporting of Estimating Deficiencies

All proposal and estimating deficiencies found during the audit of parametric estimating techniques should be immediately reported to the Plant Representative/ACO. These may include incorrect, incomplete, or noncurrent data and use of inappropriate estimating techniques. When a proposal evaluation discloses estimating system deficiencies, a separate report entitled "Estimating System Deficiency Disclosed during Evaluation of Proposal No. XXX" will be issued immediately after the deficiency is found (see 9-310).

9-1006 Estimating Standards

9-1006.1 Distinction Between Estimating Standards and Parametric Cost Estimating

a. In terms of historical evolution and sophistication, the terminology of estimating standards as covered in this paragraph might be viewed as falling between traditional cost-to-cost estimating rates and factors and the more advanced types of parametric estimating systems (see 9-1002). However, a contractor may elect to use any combination of these evaluating methods, perhaps in the same proposal.

b. Estimating standards are normally developed through the use of motion-time-measurement studies performed by industrial engineers. Parametrics, on the other hand, are developed by relating historical costs to one or more noncost drivers. While estimating standards usually represent cost-to-noncost relationships, they have traditionally been limited to narrower or more discrete elements of estimated cost than may be the case in more complex parametric CERs. Also, the logic of the estimating relationship and the appropriateness of the mathematics in estimating standards will usually be readily apparent.

c. Estimating standards will not necessarily require valuation under the criteria for parametric cost estimating relationships contained in 9-1003. Especially when such standards (e.g., hours/pound, hours/drawing, hours/page) have been in place and accepted by Government personnel, the evaluation guidance in this paragraph will likely be sufficient.

9-1006.2 Use of Estimating Standards

a. Estimating standards may be established by relating engineering and/or production costs (effort, time, and/or materials) to specific characteristics of a product such as composition, weight, size, or duration. This approach is designed to save estimating effort and has been used frequently in estimating construction costs and costs of recurring job orders such as printing. Many contractors use the technique in shop-order budgeting and production control.

b. Estimating standards may be used to estimate the cost of a single material item required for the work, or the cost of a single labor operation; for example, welding electrodes per ton of structural steel, press operations time per page, or guard-service costs per week. More complex, composite standards may be used to estimate costs of groups of components or broader classes of labor operations.

c. Use of estimating standards may be appropriate in contract cost estimating situations when there is a close correlation between an amount of production cost and the related product or process characteristic. The data sets being correlated must have been measured in a uniform manner. The cost data used should be verifiable by reasonable means. The units of measure used for base characteristics should be uniform and readily identifiable; the quantity or value of a characteristic should be readily determinable. Standards may be derived from industry-wide statistics but should be relevant and verifiable to the experience of the particular contractor using them.

9-1006.3 Applicability to Price Proposals

Traditionally, estimating standards have been used to estimate costs in lump sums, often including supervision, indirect costs, and occasionally general and administrative expense. To comply with FAR 15.408, Table 15-2 and cost accounting standards, the contractor will normally have to factor the estimate to identify the costs by cost element or function. Alternatively, a proposed cost based on an estimating standard might qualify for submission as an "other" cost element if the cost can be tracked as such and is a relatively minor part of the total proposal.

9-1006.4 Audit Procedures

a. Depending on materiality and risk of the costs estimated, the auditor should examine the development and application of estimating standards to determine whether their use is proper in the circumstances. Evaluate all cost and noncost data applicable to each significant estimating standard and determine whether the data has been properly used in the computations. Assure that the measurements and correlation are adequate for the purpose. Determine whether the basis for the standard (for example, the product mix, production rates, and production methods) is sufficiently similar or comparable to that contemplated in the estimate at hand.

b. When changes are contemplated in the design or production of an end item or the rate or method of production, the contractor's adjustments of the estimating standards require special scrutiny. Review by Government technical specialists may be necessary in this situation. c. During audits of historical costs, sufficient information may be readily available from which the auditor could develop estimating standards to use as one means of appraising recurring contractor estimates. However, this will not substitute for audit of cost estimates as submitted by the contractor.

9-1100 Section 11 --- Reserved

9-1200 Section 12 --- Forward Pricing Rate Agreements (FPRA)

9-1201 Introduction

a. It is DCAA policy that forward pricing rate agreements (FPRAs) between the Government and contractors receive consistent audit treatment. In consonance with this policy, this section presents audit guidance covering the establishment and monitoring of FPRAs at contractor locations.

b. The guidance presented herein is intended to supplement the detailed guidance presented in other parts of CAM, such as 9-700, on the audit of estimated rates.

9-1202 Definitions and Background

9-1202.1 FPRA

An FPRA, as discussed in FAR 42.17, is a written agreement negotiated between a contractor and the Government regarding certain rates and factors available during a specified period for pricing contracts or contract modifications. Such rates and factors represent reasonable projections of specific costs that are not easily estimated for, identified with, or generated by, a specific contract, contract end item, or task. These projections may include rates for such things as: labor, indirect costs, material obsolescence and usage, spare parts provisioning, and material handling.

9-1202.2 Forward Pricing Rate Recommendation (FPRR)

An FPRA, by definition, is a written agreement between the Government and its contractor. A contractor, however, may not always be willing to enter into an FPRA because of frequently changing business conditions or other circumstances. If, under these circumstances, the Government still wishes to use some form of preestablished pricing rates, forward pricing rate recommendations can be unilaterally established by the ACO. Although the establishment of an FPRR differs in some key respects from an FPRA, most of the audit guidance contained within this section applies equally to both types of rates.

9-1202.3 Forward Pricing Factor

A forward pricing factor is generally represented as a percentage or ratio that is applied to an existing cost or estimate in order to arrive at another, usually related, cost determination or estimate. Scrap, for example, is typically estimated as a percentage of unit material costs and then added to the unit material costs to develop total unit material costs. Other typical forward pricing factors include escalation, labor fringes, and special tooling.

9-1202.4 Formula Pricing Agreement

a. A formula pricing agreement (FPA) is a written agreement between a DoD contracting office and a large volume contractor which sets forth a methodology that the contractor agrees to follow when pricing items covered by the FPA. It differs from an FPRA in that, once established, the FPA may be used to determine the complete final price of individual orders. A typical FPA, for example, may be established to cover and expedite the acquisition of spares.

b. DCAA FAOs, as part of DoD's field pricing support team, are requested to audit both contractor FPA and FPRA submissions. All FPA and FPRA submissions must be prepared

and supported with cost or pricing data that is current, accurate, and complete. Contractor certification to this effect is required at the time agreement is reached on the formula price and/or at the time of agreement on individual orders over $700,000 (see 9-1207). This difference aside, much of the audit guidance contained herein for FPRAs is also generally applicable to the audit of an FPA.

9-1203 FPRA Initiation, Application, Use, and Expiration

a. The establishment of an FPRA may be initiated by either the contractor, PCO, or ACO whenever it is determined that the benefits to be derived from such an agreement are commensurate with the effort of establishing and monitoring it.

b. The Government normally enters into an FPRA with contractors having a significant volume of pricing actions with the Government. This avoids having to establish new rate estimates every time the contractor bids on new work. In determining whether to establish an FPRA, it is the ACO's responsibility to consider whether sufficient benefit can be derived from such an agreement.

c. Contracting officers will use FPRA rates as bases for pricing all contracts, modifications, and other contractual actions to be performed during the period covered by the agreement, unless the ACO determines that changed conditions have invalidated part or all of the agreement. Any conditions affecting the agreement's validity will be promptly brought to the ACO's attention.

d. FAR 42.1701(c) requires an FPRA to include specific terms and conditions covering expiration, application, and data requirements for systematic monitoring to assure the validity of rates. The agreement must also provide for cancellation at the option of either party and require the contractor to submit to the ACO and to the cognizant contract auditor any significant change in cost or pricing data.

9-1204 Rate Identification and Support

Offerors are required in each price proposal to specifically describe the FPRA, if any, to which the rates apply and to identify the latest cost or pricing data already submitted in accordance with the agreement. (See FAR 15.407-3(a) and the instructions in FAR 15.408, Table 15-2 I.G. for submitting a contract price proposal.) All data submitted in connection with the agreement, updated as necessary, form a part of the total data that the offeror certifies to be accurate, complete, and current at the time of agreement on price for an initial contract or for a contract modification (see Certification, 9-1207).

9-1205 Audit Scope

a. The scope of an FPRA audit needs to be tailored to the individual contracting circumstances. At a minimum, however, the auditor should:

(1) Appropriately consider:

(a) the materiality of bases, pools, and rates;

(b) the results of prior DCAA audits and adequacy of contractor internal controls;

(c) the historical differences between the contractor's forecasted and actual rates;

(d) changes in the contractor's organization, operations, manufacturing processes and practices (see 14-800), business volume, and allocation bases;

(e) the mix of Government and commercial business and types of Government contracts; and

(f) Board of Directors minutes for documentation of any major decisions affecting the contractor's organization and operations.

(2) Determine that the contractor's:

(a) estimating practices comply with disclosed cost accounting practices;

(b) projected business volume, allocation bases, and indirect costs are reasonable and in consonance with the contractor's internal plans;

(c) rate data are valid and correct; and
(d) rate computations are mathematically correct.
b. The rates covered by an FPRA, although "preestablished" for periods of general use on more than one proposal, are audited in much the same manner as the forward pricing rates applied in the audit of individual price proposals. Many of the steps for auditing forward pricing rate estimates are also similar to the steps for auditing historical costs and rates. Therefore, prior to determining the FPRA audit scope, the auditor should become familiar with the CAM guidance covering the audit of both forward pricing rates (see 9-700 for indirect costs and 9-500 for direct labor) and historical cost rates (see 6-600 for indirect costs and 6-400 for direct labor).

9-1206 Evaluation

a. Budget Evaluation Compatibility. Rate forecasting procedures are closely tied to the contractor's budgeting procedures. Therefore, auditors should evaluate the budgeting procedures and related practices to:
(1) ascertain that, in the aggregate, the data upon which the judgments are made are sound and consider all available and relevant contractor data, and
(2) determine whether the data supporting the proposed rates are compatible with company budgets and agree with the general conditions, standards, staffing factors, and other criteria used for planning and budgetary purposes. Further guidance on the evaluation of contractor budgets and how it relates to an FPRA audit is provided in 5-500.
b. Estimating System Audits and Deficiencies. In evaluating an FPRA submission, the auditor should be familiar with:
(1) DCAA's guidance on estimating methods and system audits in 9-309 and 5-1200,
(2) the details of the contractor's estimating system, and
(3) the disclosures from the latest DCAA or joint estimating system audit.
At a minimum, the auditor should perform a thorough review of the permanent file for outstanding estimating system deficiencies. Contractor estimating deficiencies disclosed as a result of system audits or audits of individual pricing actions can also apply to the contractor's FPRA estimates. Similarly, estimating deficiencies disclosed during an FPRA evaluation can also apply to the audit of individual pricing actions. If an outstanding deficiency exists that has an impact on the FPRA evaluation or one is disclosed by the evaluation, then the auditor should adopt one of the reporting alternatives presented in 5-1213 and incorporate the deficiency accordingly into the FPRA evaluation report.
c. Comparison to Billing Rates. Because of the large degree of interdependence between billing rates and forward pricing rates for the current contractor fiscal year (CCFY), the auditor should expect both types of rates for the CCFY to be the same. It is therefore important for the auditor evaluating an FPRA submission with CCFY rates to carefully compare these rates and supporting data with the most recent billing rates and supporting data for the CCFY. Any significant differences between the rates must be fully explained and supported by the contractor. If the auditor determines that billing rates should be revised, the contractor should be requested to submit a new billing rate proposal. If the contractor refuses to submit a more current billing rate proposal the procedures in 6-705 are applicable (also see 9-1207, 6-706.1, and FAR 42.703-2 for further guidance).
d. Impact of Individual Pricing Actions
(1) Each pricing action needs to be initially evaluated to determine whether its impact upon the existing FPRA significantly changes the conditions upon which the FPRA was negotiated. FAR 15-407-3(b) requires that such changes be reported to the ACO. In assessing the changed conditions, the auditor should consider:
(a) the type of contract contemplated,
(b) the dollar significance of the pricing action,
(c) whether the performance period of the proposed contract action is significantly different from the period to which the rate agreement applies, and

(d) any new data or other information that may raise a question as to the acceptability of the rates.

(2) The auditor should also be alert to any pricing action which does not accurately reflect the agreed-upon rates, incorporates the correct rates from an FPRA which has subsequently been declared invalid, or appears to seek preferential pricing rates (see FAR 15.407-3(b) /DFARS 215.407-3.

e. Allocation Methods and Activity Bases

(1) General. Even though a contractor has well-established and regularly accepted procedures for formulating and applying FPRAs, the auditor needs to periodically perform an in-depth analysis to determine whether these procedures and the proposed allocation methods and activity bases are still equitable. Guidance for making this determination is provided in 6-600, Chapter 8, and 9-700.

(2) CAS. The Cost Accounting Standards (Chapter 8) play a significant role in the development of rates and factors. Therefore, when evaluating an FPRA submission, the auditor should review the permanent file for any outstanding CAS problems relating to the rates, and otherwise assess the current proposal for compliance with CAS.

(3) Rate Structure. Rate structure describes the number and types of rates established for a given set of conditions. It also determines how costs are to be allocated and the overall equity of the allocation. Contractors are required to use the same rate structure for forward pricing purposes as they do for historical costing purposes. Should a contractor employ a different structure for estimating its costs, the auditor needs to determine whether the contractor is changing its accounting system. If so, has the contractor submitted:

(a) a cost impact statement and

(b) a revised disclosure statement as required by FAR 52.230-6 and 3 of the CAS administration clause (see 9-704.3 and 8-303.3).

(4) Rate Period. The auditor needs to determine that the rates used for forward pricing purposes are appropriate for the contemplated period of contract performance (see 9-704.2).

(a) Indirect Cost Rate Periods. The rate period for indirect cost rate estimates should generally coincide with the contractor's fiscal year period or the historical rate period established for the allocation of the indirect cost. Except for those situations explained in 8-406.1, an indirect cost rate period should not be computed for a period longer than one year. In certain circumstances, however, it may be more equitable for contract costing purposes to use a shorter indirect cost rate period than the contractor's normal fiscal year. These circumstances are explained in 6-605.

(b) Labor Rate and Factor Periods. The period for determining forward pricing factors and labor rates will also usually coincide with the contractor's fiscal year or historical rate period. The applicability of the period, however, must be examined for each pricing action. This is to determine whether the contemplated contractual requirements parallel the conditions that were contemplated in the development of the rates and factors, or whether conditions are present which indicate that the rate periods should be modified. The audit report should contain appropriate comments whenever the evaluation of forward pricing rates and factors discloses that the estimated rate periods are unreasonable for the work to be performed. See 9-500 and 9-600 for further guidance, including the conditions under which forward pricing factors and labor rates should be modified.

(5) Forecasted Bases and Expenses. Auditors must use the knowledge and data that they obtain from audits of contractors' budgeting and estimating systems as the basis for determining the validity of the contractor's estimates of base and expense pool amounts. In addition, the auditor should evaluate the information available from cognizant Government acquisition and contract administration officials, as well as from outside sources. At a minimum, the auditor needs to verify that the forecasted allocation bases and estimated pool costs:

(a) are compatible with the contractor's current business volume estimates and developed in accordance with the latest management plans and

(b) appropriately consider the procurement requirements and limitations of the individual buying offices.

(See 6-700 and 9-700 for further guidance on the evaluation of forecasted bases and expenses.)

f. Assist Audits. Corporate and other organizational allocations can have a substantial impact on forward pricing rates. Therefore, assist audit planning should be coordinated with the involved DCAA audit offices to ensure timely receipt of feeder reports. The planning should be geared to the contractor's budget cycle. Requests for assist audits of allocated costs or rates should not wait until the receipt of a contractor's FPRA proposal. (Also see 9-104.5(b).)

g. Use of Technical Specialist. The auditor should refer to the detailed procedures in Appendix D and throughout Chapter 9 for guidance:

(1) in making decisions about whether technical specialist assistance is needed,

(2) identifying what type of technical specialist is needed,

(3) deciding upon the best source for the technical assistance,

(4) achieving good communications with the technical specialist, and

(5) reporting on the uses of technical specialists or the impact of their nonavailability.

9-1207 Certification

Contractors seeking to enter into a FPRA are required by FAR 42.1701(b) to provide the ACO with a proposal that includes cost or pricing data that are accurate, complete, and current as of the date of submission. No Certificate of Current Cost or Pricing Data is required, however, upon reaching a negotiated settlement on the FPRA (or other advance agreement). This is because the rates in the FPRA are covered by the certificates that are executed when the individual contracts and contract modifications are negotiated. That is, when an FPRA or other advance agreement is used in partial support of a later contractual action that requires a certificate, the price proposal certificate shall cover:

(1) the data originally supplied to support the FPRA or other advance agreement and

(2) all data required to update the price proposal to the time of agreement on contract price (see FAR 15.407-3 and FAR 15.408, Table 15-2).

9-1208 Monitoring FPRAs

Primary responsibility for updating rates rests with the contractor, and ACO staff members often assume most of the Government's responsibility for monitoring FPRAs. Notwithstanding this, the rates should also be audited periodically by the auditor to assure they are reasonably accurate. When appropriate, the auditor should:

a. Ensure that the rates are analyzed on a periodic basis by comparing the actual rates with the agreed-to rates. To avoid performing duplicate work, coordinate with the contractor and ACO and determine if they are tracking and analyzing rates. If the contractor is not tracking and analyzing rates, the auditor should recommend to the ACO that the contractor perform this effort as a condition of the FPRA.

b. Compare new outputs from the contractor's budgetary system against the contractor's actual expenditure patterns for the CFY and against the budgeted amounts initially provided to support the FPRA.

c. Inform the ACO of any significant variances disclosed from monitoring the FPRA rates. When unfavorable trends or patterns begin to surface, perform the audit steps necessary to verify the patterns, and report your findings to the ACO along with the recommendation that the contractor be requested to submit a revised FPRA proposal. If, on the basis of the facts at hand, the ACO does not agree that revised rates are war-

ranted, inform the FAO Manager for possible elevation of the issue(s), and consider performing more detailed audit steps to further support your position. Also see 9-1209 on reporting.

9-1209 Reporting on an FPRA

a. Report writing guidance in 10-200, 10-300 and the audit report shell report for activity code 23000, found on the DCAA intranet should be used for reporting the findings of FPRA evaluations.

b. While the establishment of an FPRA can be initiated by the contractor, PCO, or ACO, the ACO is responsible for:

(1) obtaining all new or updated submissions from the contractor (FAR 42.1701) and for

(2) processing the requests for DCAA audit when field pricing support is available (FAR 15.404-2).

c. Recommend a contract reopener or savings clause in forward pricing audit reports when external restructuring costs are included in forward pricing rates (Cam 7-1911).

d. The auditor is obligated to promptly report to the ACO any conditions which may affect the validity of an existing FPRA. Although oral notification and discussion of the conditions may be initially appropriate in some circumstances, such notification should be followed up by a letter or report when the notification is expected to be pursued. If, the ACO determines that the condition has invalidated the agreement, the ACO should provide notification of this fact to all interested parties and initiate revision of the agreement (see FAR 42.1701(c and d)).

e. Should the FPRA audit disclose a contractor estimating system deficiency which has not been previously reported, the auditor should report the deficiency using the guidance in 10-413 and should ensure that the deficiency is appropriately incorporated into the FPRA evaluation report.

9-1210 Auditor Involvement at FPRA Negotiation Conferences

FAR 42.1701(b) requires the ACO to invite the cognizant contract auditor to participate in developing a Government objective and to participate in the negotiations of the FPRA. Upon completing the negotiations, the ACO should prepare a price negotiation memorandum (PNM) and forward copies of the PNM and FPRA to the cognizant auditor, as well as to all contracting offices that are known to be affected by the FPRA. See 15-400 for further guidance on auditor support at negotiations.

9-1211 Requirement for Postaward Audit After Revision to an FPRA

Forward pricing rates reflect the contractor's best judgments of what future expenses will be. The cost or pricing data supporting these judgments must be accurate, complete, and current as certified by the contractor when individual contracts are negotiated (see Certification above). To support their certifications, contractors must ensure continual surveillance of the cost or pricing data supporting the FPRA rates. Whenever the auditor has an indication that forecasted rates should have been revised for significant changes to reflect more accurate, complete, or current cost or pricing data, pricing actions using the rates should be subject to a postaward audit. (See 14-100 for detailed guidance.)

9-1300 Section 13 --- Should-Cost Team Reviews

9-1301 Introduction

A should-cost team review, as discussed in FAR 15.407-4/DFARS PGI 215.407-4, is a method of contract pricing that employs an integrated team of Government procurement, contract administration, contract audit, and engineering representatives to conduct a coordinated, in-depth cost analysis at the contractor's plant.

9-1302 Nature and Purpose of Team Reviews

a. A should cost review is performed to:

(1) identify uneconomical or inefficient practices in the contractor's management and operations and to quantify the findings in terms of their impact on cost, and

(2) develop a realistic price objective which reflects reasonably achievable economies and efficiencies.

b. A should-cost team review represents a rigorous and detailed onsite proposal evaluation. It is a specialized approach to the establishment of a fair and reasonable price based on what a contract (normally a major production contract) should cost in the environment and under the conditions predicted for contract performance.

9-1303 Types of Should-Cost Reviews

a. The two types of should-cost reviews are:

(1) program should-cost and

(2) overhead should-cost. These should-cost reviews may be performed together or independently.

b. A program should-cost review is used to evaluate significant direct costs, such as material, labor and associated indirect cost. An overhead should-cost review is used to evaluate indirect costs. It is normally used to evaluate a Forward Pricing Rate Agreement (FPRA) with a contractor.

9-1304 Criteria for Performing Should-Cost Reviews

a. The decision on whether to perform a program should-cost analysis is made by the contracting officer. Considerations in deciding to conduct a program should-cost review are in FAR 15.407-4(b)(2). Further, DFARS PGI 215.407-4 (b) states that should-cost analyses shall be performed prior to the award of definitive major systems contracts in excess of $100 million when all of several conditions identified therein are met. Waiver of the should-cost requirement is made at a high level in accordance with Military Service procedures.

b. The decision to conduct an overhead should-cost review is made by either DCMA or the military department responsible for performing contract administration functions. These reviews should be conducted when the criteria in FAR 15.407-4(c)(2) and DFARS PGI 215.407-4(c) are met. The head of the contracting activity may request an overhead should-cost review for a business unit which does not meet the criteria.

9-1305 Team Makeup and Responsibilities

a. The should-cost review team (see Figure 9-13-1) normally consists of a team leader, a deputy team leader, a DCAA representative, an operations and administration officer, and three subteams: technical, management, and pricing. The Military Department establishing the team review will usually assign its own personnel as chiefs of the management, technical, and pricing subteams. Each subteam is comprised of contract administration and/or procurement office personnel responsible for the performance of specific functions.

b. After considering the results of DCAA operations audits, the technical subteam is responsible for the review and evaluation of a contractor's engineering, production, inspection, testing, and quality assurance systems. The technical subteam can also be expected to evaluate the technical aspects of proposed direct labor hours and material requirements. The management subteam evaluates the contractor's overall management approach and organizational structure and their impact on the estimated costs and proposed price. The pricing subteam obtains Government field pricing support on subcontractor and intracompany price proposals and/or cost estimates (see 9-104 and 9-105) and develops the Government's negotiation position.

c. As illustrated in Figure 9-13-1, the DCAA representative participates in the should-cost team review in an independent advisory capacity reporting directly to the team leader. Technical direction during the review will be provided by the auditor's supervisor.

9-1306 Processing Requests for Team Participation

a. DCAA will be responsive to requests received from Military Department procurement offices for contract audit participation in should-cost team reviews. Requests may either be processed through DCAA Headquarters or received directly by FAOs. Requests on reviews established by the Army are covered by a memorandum of understanding which is consistent with the guidance contained in this section.

b. When notified of a pending should-cost team review, the FAO manager, in conjunction with the regional audit manager, will assign a DCAA representative to the team. Selection criteria will include technical expertise, ability to establish and coordinate responsibilities of assigned personnel, and communication skills.

9-1307 Reserved

9-1308 Role of the Assigned Contract Auditor

The role of the assigned DCAA auditor in a should-cost team review is essentially the same as in a regular audit of a price proposal, as covered in other sections of this chapter. Specific DCAA responsibilities and functions as part of these team reviews are highlighted below.

9-1308.1 DCAA Audit of Contractor's Proposal

The contract auditor will perform a comprehensive audit of the contractor's proposal in accordance with other sections of this chapter. The auditor has primary responsibility to evaluate and report on all financial/cost aspects of a contractor's proposal and to determine the scope of audit. This responsibility includes but is not limited to an evaluation of the following:

a. Direct labor hours. (This aspect of the review includes application of improvement curves and may be accomplished in conjunction with efforts of the technical subteam.)

b. Direct labor rates.

c. Indirect cost rates.

d. Direct material pricing.

e. Labor and material usage factors (for example, labor standards realization and scrap).

f. Make-or-buy decisions.

g. Major subcontract costs (to include an evaluation of whether the prime contractor is properly discharging its responsibility for the review of subcontractor proposals).

h. Estimating methods and procedures.

i. Adequacy of the cost accounting system for the proposed contract.

9-1308.2 DCAA Coordination with Subteams

The contract auditor and members of the subteams may in some cases have related and overlapping responsibilities in some review areas. To avoid duplication, efforts of the auditor and the subteams should be carefully coordinated.

9-1308.3 Communication of Contract Audit Results

a. The contract auditor will promptly advise the should-cost review team leader of significant findings during the audit, and discuss interim findings fully with other team members as requested by the team leader or as needed to further coordinate the overall team effort.

b. Report on any operations audit performed during the should-cost review in accordance with 10-400.

c. Overall results of the contract audit work on the should-cost team review will be provided to the team leader through a formal audit report prepared in accordance with 10-300. The team leader and auditor should agree on an audit report due date at the start of the review. The due date must provide enough time for a complete audit of the proposal and auditor quantification of findings developed by the subteams.

9-1308.4 DCAA Assistance After Report Issuance

a. The contract auditor will provide contract audit assistance to the should-cost review team leader as needed after issuance of the audit report. An example of this type of effort is the audit of contractor proposal revisions, consistent with FAR 15.404-2(c). The DCAA representative will not, however, develop recommended Government "fallback" positions since inclusion of this type of recommendation in our audit reports or audit advice may compromise the Agency's independence and contravene the advisory nature of audit services. While necessary post-audit assistance may be extensive, it is not anticipated to be continuous in most cases.

b. The auditor will attend negotiation and other conferences if requested by the team leader or other procurement official. Since the responsibilities and functions of the auditor assigned in a should-cost team review are essentially the same as in a regular audit of a price proposal, the auditor's attendance at negotiation conferences will be governed by 15-400. Normally, the auditor should attend only those portions of the negotiation conference impacted directly by the audit.

9-1308.5 Establishing Appropriate Responsibilities and Functions

a. The DCAA representative should ensure that DCAA audit efforts and other functions on the team are consistent with the responsibilities of the contract auditor as stated in the DCAA charter (1-1S1). Early coordination of team responsibilities should provide an operating guide and checklist for the procurement office, team leader, and individual team members to use in defining and performing assigned functions. After the initial planning meetings with the other should-cost team members, the FAO should provide written confirmation to the team leader of the responsibilities of DCAA during the should-cost review. In addition, the FAO should maintain close and effective coordination with the team leader during the review to ensure DCAA responsibilities and the timing for accomplishing these responsibilities are properly communicated to those involved.

b. During planning meetings, ensure that the team leader has a clear understanding of DCAA's role. It should be made clear that DCAA will not abrogate its responsibilities for proposal audit or perform extensive clerical or other nonaudit tasks for the team.

c. If inappropriately proposed functional assignments cannot be promptly resolved with the team leader, or if another Government agency intends to perform DCAA responsibili-

ties, the FAO should immediately notify the regional office and Headquarters, ATTN: PSP.

d. At the conclusion of providing the requested audit services, the FAO is expected to issue an audit report following the general guidance contained in 10-200.

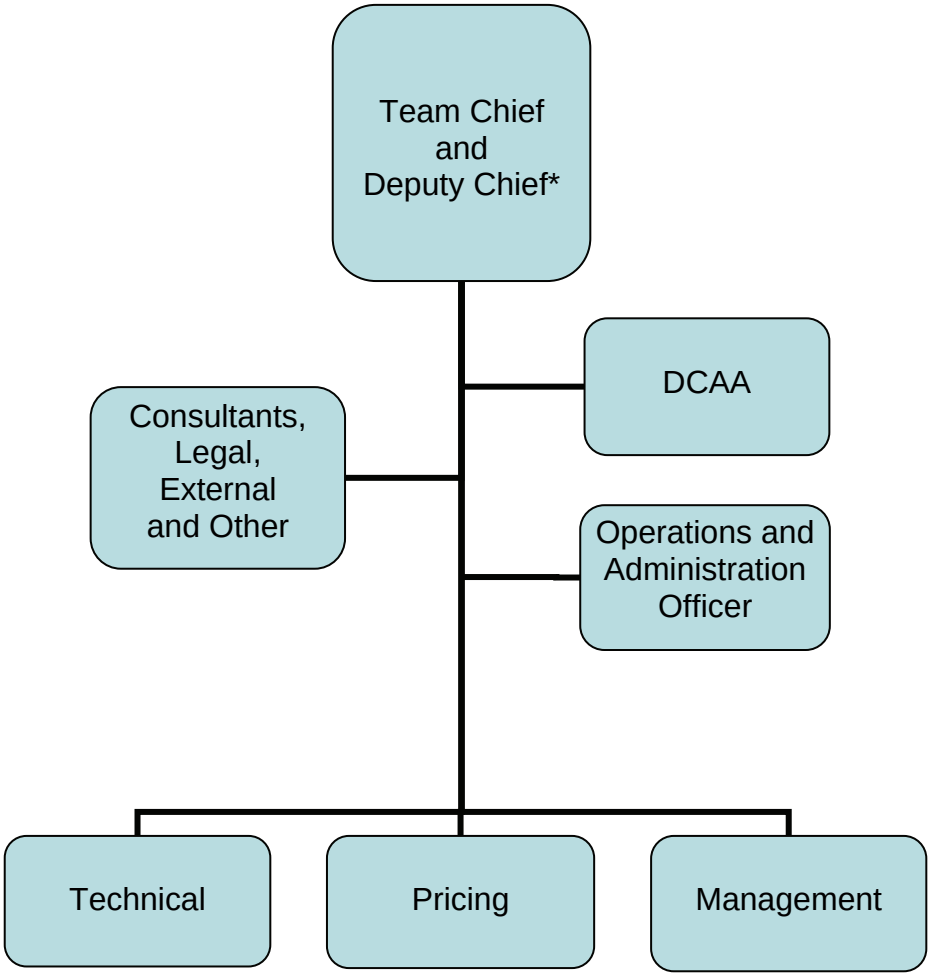
9-1309 Use of DCAA Operations Audits by the Should-Cost Review Team

a. The assigned DCAA auditor will furnish the should-cost review team leader a listing of the FAO's recently completed operations audits and any related information requested. The team leader can use this information in determining the scope of the should-cost review and assigning specific responsibilities to the subteams.

b. Recommendations contained in DCAA operations audit reports which are not yet implemented by the contractor should be quantified by the auditor and included in the audit report to reflect the impact on the proposal being audited. In this manner, the results of DCAA's audits of the contractor's operations will help the should-cost review team to estimate what the proposed contract should cost the Government under efficient and economical conditions.

c. If the team leader decides that supplemental economy/efficiency audits are required as part of the should-cost review in areas of DCAA interest, DCAA will be given the first opportunity to perform operations audits in those areas. The FAO should perform all such audits unless the FAO and regional office are unable to secure necessary technical assistance, or cannot assign sufficient staffing to complete the audits in time to meet the should-cost review schedule.

Figure 9-13-1
Should-Cost Review Team Organization Chart



*PCO or designated Contract Specialist.

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CHAPTER 10

10-000 Preparation And Distribution Of Audit Reports

10-001 Scope of Chapter

This chapter discusses the importance of DCAA audit reports and provides guidance in preparing quality reports. It presents standard report formats and describes the elements common to all audit reports. The chapter also includes specific instructions on format and content of audit reports for various types of major audit assignments.

10-100 Section 1 --- Audit Report Quality

Users of CAM Chapter 10 and the "shell" reports incorporated in Agency guidance should recognize that "standard" report language is provided as an example, not as mandatory wording. The DCAA auditor should exercise judgment in tailoring report language to the situation being reported.

10-101 Introduction

a. This section emphasizes the importance of audit report quality and describes the characteristics of a quality audit report. It also includes a brief discussion of some important report writing techniques to assist auditors in preparing quality audit reports.

b. Written audit reports are to be submitted to the appropriate officials of the organizations requiring or arranging for the audits. Copies of the reports should be sent to other officials who may be responsible for taking action on audit findings and recommendations, and to others authorized to receive such reports.

c. The issuance of a report is not intended to limit or prevent discussions of findings, judgments, conclusions, and recommendations with persons, including contractor personnel and management, who have responsibilities involving the area being audited. Except for conclusions and recommendations to the contracting officer with respect to reports covering forecasted costs (see 10-212.2c.) such discussions are encouraged (see 4-300).

d. In addition to the importance of the audit report in complying with professional standards, written reports are necessary to make the auditor's findings and recommendations less susceptible to misunderstanding. A written report

- communicates results to responsible Government procurement officials and occasionally to higher levels in the Department of Defense;
- is used in negotiation proceedings; and
- facilitates follow-up to determine whether appropriate measures have been taken in response to the auditor's findings and recommendations.

10-102 Importance of Audit Report Quality

Reports of some kind are necessary in all occupations. The importance of the DCAA audit report cannot be overemphasized. Audit reports are the principal means of conveying our audit results to contracting officers and other interested parties. Because effective reporting is a major factor in building and maintaining confidence in DCAA audit activities, we must continually strive to produce high quality reports. Auditors must exercise due care in preparing, reviewing, and processing reports to provide reasonable assurance that reports contain no grammatical and mathematical errors, and no errors of fact, logic, or reasoning.

10-103 Characteristics of a Quality Audit Report

The DCAA audit report must satisfy generally accepted government auditing standards (GAGAS) as outlined in 2-400 and 2-600. A good report will present the scope and results of a quality audit in an objective, concise, complete, and easily understood manner. Report findings and conclusions must be accurate and reasonable, must not be unfair or misleading, and must be supported by sufficient objective evidential matter. The report should also reflect common sense and good judgment in dealing with materiality, the level of detail provided and the requestor's needs.

10-103.1 Timeliness of Reports

a. Reports are to be issued on or before the dates specified and, in any event, as promptly as possible. To be useful, the audit report must be timely. The auditor should realize that every day of delay in issuing the report diminishes its value. Therefore, he or she should plan and conduct the work with the objective of reporting the results not later than the date the report is due.

b. The auditor should consider reporting significant matters to appropriate officials during the course of the audit work. Such reporting is not a substitute for a final written report, but it does alert officials to matters needing correction at an earlier date.

c. When a specified reporting date does not allow sufficient time to perform a complete audit (especially major proposals, sensitive evaluations, or where there is potential for significant audit findings) the auditor should request a time extension detailing the areas where work will be incomplete because of the time restrictions. When the extension is granted, the supervisor or FAO manager should confirm this due date extension in writing (e-mail is acceptable). If the extension is not granted, issue a qualified report advising the ACO and PCO that significant findings may result if audit effort continues. Include documentation of the above in the working papers. The auditor should not continue audit work after the report is issued. However, auditors should alert the ACO and PCO of any subsequent information that comes to their attention after the report date if it would significantly impact the results of the audit report issued. A supplemental report(s) confirming additional findings should be issued.

d. Care should be taken to ensure that the report cover sheet appropriately contains all key elements (Figure 10-2-1). A report mistakenly sent to an inappropriate address may either delay the negotiation process or render the report useless.

10-103.2 Report Content

The audit report should be easily understood. The subject of audit should clearly identify the area, system or the proposal being audited, reviewed or having agreed-upon procedures applied. Present the scope and the auditor's findings and conclusions objectively and completely, with appropriate support for positions taken, and provide recommendations for improvement, whenever appropriate.

a. Accuracy, Completeness, and Fairness. Report preparation, review, and processing procedures should be applied to produce reports that contain no errors of fact, logic, or reasoning. The need for accuracy is based on the need to be fair and impartial in reporting and to assure readers that what is reported is reliable. One inaccuracy can cast doubt on the validity of an entire report and can divert attention from the substance of the report. Although reports should be concise, they should not be so concise that they do not fully inform the user. Reports should contain sufficient information about findings, conclusions, and recommendations to promote adequate understanding of the matters reported and to provide convincing, but fair, presentations in proper perspective. Sufficient amounts of background information should also be included. Readers should not be expected to possess all the facts that the auditor has. Therefore, reports should not be written on the basis that the bare recitals of facts make the conclusions obvious or inescapable. If the auditor has conclusions or opinions that he or she wishes to pre-

sent, the auditor should state them clearly and specifically. Presenting valid findings in their true light is essential to the accuracy and the integrity of the report. These findings must be presented so they can be clearly understood.

b. Objectivity. Findings should be presented in an objective and unbiased manner and should include enough information on the subject matter to give readers proper perspective. Reports should be fair and not misleading and, at the same time, emphasize matters needing attention. The auditor should guard against any tendency to exaggerate or overemphasize deficient performance noted during the audit. The information needed to provide proper report balance and perspective should include:

- appropriate information as to why the examination was made;
- information about the size and nature of the activities or contract(s) to which findings relate; and
- correct and fair descriptions of findings so as to avoid misinterpretation.

Where audit sampling or other quantitative methods are used, a comment to that effect should be made part of the auditor's explanation of the individual cost elements involved. The audit report must disclose whether the auditor used either a nonstatistical or statistical sample as a basis for the audit conclusions. The report must also include details concerning the sample universe, the sampling method, and sampling unit. The report will state whether the statistical sampling results were projected to the sampling universe. Audit reports with projections will also include the confidence level and confidence interval boundary amounts. If the results were not projected, the report should explain the reasons

c. Adequate Support. Sufficient objective evidence to demonstrate or provide the basis for each matter reported, with an assessment of its accuracy or reasonableness, should support all factual data, findings, and conclusions in reports. Except as necessary to make convincing presentations, detailed supporting data need not be included in reports. Opinions and conclusions in reports should be clearly identified as such and should be based on enough audit work to warrant them. In most cases, one example of a deficiency can support only a finding of a deviation, error, or weakness; it cannot support a broad conclusion and a related recommendation for corrective action. When appropriate, audit reports should refer to other audit reports pertaining to matters covered. For example, comments pertaining to the adequacy of the accounting system, purchasing practices, and indirect cost rates should be referenced to reports issued on these subjects.

d. Recommendations. The auditor's report should contain appropriate recommendations whenever the audit discloses that the contractor's operations can be significantly improved. The auditor should also make recommendations to effect compliance with legal or regulatory requirements when significant instances of noncompliance are noted. If the auditor cannot make appropriate recommendations, the report should state why the auditor is unable to do so and what additional work needs to be done to formulate recommendations. However, the audit report is only advisory. Because recommendations are not directives, there is no contractual requirement for the contractor to comply. Therefore, reports must be worded in a manner that will induce confidence in, and acceptance of, the audit findings and recommendations. Tactful, tempered, and factual reporting can achieve the objective of acceptance without diminishing the auditor's independence. Conversely, sharp, critical, and inflammatory expressions should be avoided because they create resentment and an atmosphere in which the auditor's conclusions may be challenged. To ensure full and fair reporting, care and diligence should be exercised so that the audit report fully recognizes contractor difficulties, other pressing needs, and corrective action taken.

e. Issues Requiring Further Study. If the scope of the audit or other factors limit the auditor's ability to inquire into certain matters which he or she believes should be studied, report such matters and the reasons why they merit further study.

f. Recognition of Noteworthy Accomplishments. Information on satisfactory aspects, not just the deficient aspects, of operations examined, when significant and when warranted by

the extent of the work, should be included in the auditor's report. Such information is often necessary to fairly present the situation that the auditor finds and to balance the report.

g. Views of Contractor Officials. Except for audit findings in reports containing forecasted costs (refer to a listing of these reports at 10-212.2c.), one of the most effective ways of ensuring that reports are fair, complete, and objective is through advance reviews and comments by contractor officials. This produces a report that shows not only what was found and what the auditor thinks about it, but also what the contractor thinks about it and what, if anything, will be done about it. Comments on report drafts should be objectively considered and evaluated, and the report should appropriately recognize them. The auditor should drop a point or modify a position if he or she finds the contractor's argument meritorious. When a contractor promises corrective action, it should be noted in proper context but should not be accepted as justification for dropping a significant point or a related recommendation. However, if the advance comments oppose the auditor's findings or conclusions and are not, in his or her opinion, meritorious, the auditor should include the comments but should state the reasons for rejecting them.

h. Scope and Objectives. The scope of the audit should be stated in all reports. Special considerations applicable to application of agreed-upon procedures reports are discussed below in 10-103.2j. Some audits are more limited in scope than others; for example, those confined to specific functions, activities, or contracts. Such limitations should be clearly and explicitly identified. When successive audits vary in scope, the auditor should explain why particular work was or was not performed and should also define the limited nature or special aspects considered in performing the audit. The time period of the audit should be specified. The report should also include a summary of the objectives of the audit. This statement is essential to give the reader a background against which any reported findings may be considered. The contracting officer may request special coverage; this, too, should be mentioned in the report. The auditor is expected to conduct the audit (or application of agreed-upon procedures) according to generally accepted government auditing standards incorporated in the guidance in this manual. The report will state that the audit was performed according to generally accepted government auditing standards and will discuss the requirements of those standards adapted to the type of audit being performed. The Scope paragraph will state that tests of appropriate records, internal controls, accounting principles and operations were made as necessary. The scope also includes a statement identifying the criteria used to evaluate the proposal or functional area. Scope of Audit statements vary for system audits (10-407) and for cost accounting standards audits (refer to individual subsections in 10-800.)

i. Qualifications. When acceptable auditing procedures cannot be followed, or have been limited by unavailable or inadequate records, time, or other reasons, and the limitations have a significant effect on the conduct, scope, or results of audit, the auditor should provide comments in the scope of the audit and qualify the report. When a report is qualified, the Scope of Audit paragraph always starts with the following qualifier, “Except for the qualifications discussed below,”. The nature and impact of the qualification should be described briefly. A reference to the report section where details may be found should be provided.

j. Scope of Application of Agreed-Upon Procedures. For application of agreed-upon procedures (10-1007), the scope paragraph states that the engagement was limited to procedures specified by the requestor. The traditional scope paragraph, including control risk assessment, is omitted since an audit is not being performed. A qualifications section is not used since an audit opinion is not being given. However, a Restrictions on Procedures subsection, similar to the Qualifications subsection should be included when necessary to discuss items or circumstances that have prevented completion of all of the agreed-upon procedures.

k. Omitted Information. If the auditor is prohibited from including some pertinent data in the report, he or she should describe what has been omitted and the restriction that makes the omission necessary.

10-103.3 Audit Opinion - General

a. Subject to specific reporting limitations, the report will express the auditor's opinion and recommendations, both on the cost representations or financial statements taken as a whole or, where appropriate, on individual elements. The report will also state whether the financial data have been prepared in accordance with the Federal Acquisition Regulation (FAR), the related agency supplement, if any, and Cost Accounting Standards (CAS), if applicable and/or any other criteria used.

b. Material changes in accounting policies and procedures and their effect on the financial data are to be explained in the audit report. In addition, the report will comment on significant financial issues affecting the contractor's cost representations. Violations of legal or other regulatory requirements, including instances of noncompliance, will be explained in the audit report.

c. The contract auditor's work normally culminates in an expression of opinion on the acceptability of the contractor's cost representations or financial statements. However, cost representations or financial statements often reflect estimates, approximations, and matters of judgment or opinion, rather than absolute facts. Although other acceptable alternative accounting methods exist within the concept of generally accepted accounting principles, the governing regulations in CAS and in FAR limit the contractor's flexibility in presenting cost representations.

d. A contractor's cost representations may be prepared in accordance with its accounting system, may be based on statistical computations developed as part of the regular accounting system, or from adjunct statistical data; or the contractor may use a formula method for developing costs. The audit report should contain the auditor's opinion as to the acceptability of the methods used by the contractor. An explanation of the methods used should be provided if it is not otherwise evident.

e. The auditor should determine if any material changes have been made in the contractor’s accounting practices. Material changes and the reasons for them should be identified, and their effect on the financial representations, both historical and prospective, should be explained. The auditor should also state his or her opinion as to the propriety of the change. When applicable, CAS places some specific limitations on the extent of such changes and requires submission of price adjustment proposals as a result of changes made to previously disclosed or established cost accounting practices.

f. Events that occur after the audit may have a material effect on Government contract costs. Events, such as potential contract overruns, affect Government contracts directly, while other events, such as impending financial instability, affect all Government work. If such events occur before issuance of the audit report, they should be disclosed in the report. If an audit report has already been issued, but the impact on Government contract costs is significant, the auditor should issue a supplemental report.

g. The possibility that isolated errors of omission or commission will go undetected is always present. Therefore, the auditor cannot certify that all of the costs submitted by the contractor are correct. The auditor can only express a professional opinion as to the acceptability of the cost representations.

h. Before expressing an opinion, the auditor should have obtained and reviewed the available facts and performed, to the extent necessary, a searching and analytical review of the contractor's representations and supporting data. When necessary, the auditor should seek technical assistance from the contracting officer in those matters that fall within his or her purview, i.e., industrial engineering, production control, quality assurance, etc. The initial request should be oral, then confirmed in writing. The auditor should refer to and give effect to the technical findings and opinions of others in the audit report; when appropriate, attach a copy of the technical report to the audit report. If the auditor cannot get the necessary technical assistance before completing the audit, the opinion in the report should be qualified and should indicate the areas in which, and the extent to which, a technical evaluation is necessary. If the auditor disagrees with the technical evaluator’s recommendations, he or she should attempt to reconcile the differences. If the differences remain unresolved, a copy of

the technical report should be attached and an explanation provided in the audit report as to why the recommendations were not used (see D-302).

i. When a contractor's cost representation or financial report is sufficiently complete to permit an audit evaluation, but does not conform to requirements imposed by contracts, agreements, laws, regulations, or administrative procedures (for example, format, timeliness, or certifications), or when certificates or information required from Government personnel have not been received, the audit report should explain the deficiency. The effect that the deficiency may have on the validity of the cost representation should be commented on when possible.

j. A contractor's reports and statements, both financial and operational, should contain the information necessary to form an opinion on contract financial management aspects. The responsibility for providing such information rests with the contractor. However, the auditor should comment if the data provided are insufficient to disclose any matters that may have a material effect upon Government contracts.

(1) Adequate disclosure does not imply or require that every available item of information be furnished. Disclosure should, however, be fair and reasonably complete, but not so complex as to confuse or impede understanding. Information should be reduced to manageable and understandable proportions; without summarizing to such an extent that needed background or relationships are omitted or blurred.

(2) Weight should be given to materiality, which is the relative importance or relevance of an item included in or omitted from financial reports or contract cost statements. Apart from (a) the aggregate $10,000 materiality criterion for "Unallowable Costs Subject to Penalty" specified by FAR 42.709-5(b) (see 6-609.1f.(7)) and (b) the materiality of defective price findings (see 14-120.1), there are no universal ratios or percentages that can be used as standards of materiality for financial or operational processes or transactions. Materiality should be based on judgment. Six specific indicators of materiality that can be used individually or in combinations are:

- absolute dollar amount;
- ratio of amount of an item to an appropriate base figure;
- length of life of an asset;
- importance of the item to the accomplishment of the mission;
- importance to the maintenance of adequate controls (such as a pattern of small discrepancies); and
- characteristics of the items involved.

(3) The Cost Accounting Standards Board addressed the issue of materiality as it applies to CAS-covered contracts (48 CFR 9903.305). No one criterion was considered necessarily determinative. The criteria are:

- absolute dollar amount;
- proportion of the amount under consideration to contract cost;
- the relationship between a cost item and a cost objective;
- the impact on Government funding;
- the cumulative impact of individually immaterial items; and
- the cost of administrative processing of the price adjustment modification.

(4) Events that occur after the audit may have a material effect on the operations of the contractor or on its financial representations. Such events should be disclosed in a supplemental audit report (see 10-214 and 10-103.3f.).

k. For application of agreed-upon procedures reports, always disclaim an opinion, since an audit is not being performed (10-1009).

10-104 Good Writing Techniques for Effective Audit Reports

a. A very important aspect of performing a quality audit is communicating the results of that audit. Good fieldwork and analysis are wasted if the audit report is not effective in communicating our audit conclusions. Our customer is interested in a clear and concise audit opinion, with supporting data that are easily understood.

b. Natural writing ability is not necessary for effective audit report writing. Effective audit report writing first requires knowledge of good writing techniques, which can be acquired through training and practice. Each FAO's core library contains the third edition of Strunk and White's Elements of Style. The auditor should become familiar with this standard guide to basic rules of usage, composition and style.

c. Effective audit report writing requires selection of efficient ways of collecting the information needed for the report. The Audit Planning and Performance System (APPS) was developed so that the audit planning, documentation of the audit performance and the subsequent audit conclusions are written directly in the electronic working papers. A separate working paper package is established for each assignment. These working papers should be effectively used to draft the report. This process involves keeping the needs of the reader in mind throughout the audit so that the audit addresses all relevant issues and the auditor records the results in the format used to prepare the report.

10-104.1 Planning the Audit Report

a. Planning to write the report begins with the receipt of a request for audit and/or establishment of the assignment. Planning continues throughout the audit process, from the development of the audit program to the completion of the working papers and then the report itself. The report will not be effective unless the needs of the customer are clearly understood and addressed. If there is any confusion regarding the request or the special needs of the requestor, call the requestor immediately for clarification.

b. Early in the audit process, determine what is required for the audit report. Ensure that the audit program is properly designed so all necessary information is obtained during the course of the audit. Working paper packages should contain lead working papers that are supported by sufficient detail to support the conclusions made. A detailed summary posted to each lead sheet should be used to draft the report. This will save time since the explanatory notes to the audit report are being written at the same time the audit is being performed. The copy and paste software function easily transfers the lead sheet summaries to the draft audit report.

c. Auditor and supervisory time will be saved in the report writing and review phases when interim supervisory reviews are performed. Interim reviews are beneficial since corrections and revisions may be made timely and supporting notes verified for use in the report. This will result in a properly documented working paper package, containing all of the evidence of a well-planned audit, and working paper notes which can effectively be incorporated into the report.

d. Writing an audit report requires original writing combined with CAM suggested wording. Use the suggested paragraphs and carefully revise them to describe the audit situation. "Shell" reports are incorporated in APPS and available on the DCAA Intranet for use as an aid.

10-104.2 Organizing the Audit Report

a. The required structure for the organization of an audit report is prescribed in Chapter 10. Review the parts applicable to the audit area and tailor the audit program to include steps to gather and analyze the data necessary to comply with the guidance.

b. Section 10-200 presents specific requirements for all types of audit reports. The remaining sections of Chapter 10 discuss specific requirements for different types of audit reports. For example, section 10-300 describes price proposal audit reports and audits of parts of a proposal. Section 10-400 describes reports on audits of internal controls and operations audit reports. Keep in mind that 10-200 provides general criteria for all audits, then, where applicable, the remaining sections provide guidance tailored to specific audit areas.

c. The report can be more effective and useful to the reader if a summary of the situation is presented before going into detail. When explaining the audit position, first provide the audit conclusion, then follow with the supporting detail. The reader can then choose whether

or not to read all the supporting material. This “inverted-pyramid style” of writing presents the most important point first and follows with supporting detail (see 10-210.6).

10-104.3 Drafting the Audit Report

“Shell” reports contained in the APPS are intended to incorporate all required elements into the report. However, please bear in mind that any report language example (CAM or APPS) may be modified as appropriate. Since the shell reports are for general use, the language must be tailored to reflect each audit. For reports not available in shell format, ensure that all required elements are included. The general arrangement of the report and the report contents may be found in each section in Chapter 10 at the “Report Format and Contents” subsections. The CAM suggested paragraphs, with revisions when appropriate, may be compared to the Audit Report Quality Review Sheet for CAM compliance. A very important part of the writing process is revision. If possible, prepare the draft report simultaneously as the audit is being performed. This permits ample time for reviews and revisions by the writer and others.

10-104.4 Clarity and Precision in the Audit Report

a. Review the draft report to see if it is complete and balanced. Make sure CAM guidance is followed for the type of audit report being issued. For customer requested assignments, check the request for audit to see if all special items have been addressed. Then determine if the report has the level of detail appropriate under the circumstances. Keep in mind that the report will be read by persons who are not auditors or accountants. Does it read well and make sense to those outside of the auditing profession? Does it read well to readers who may not be familiar with a particular contractor's practices or audit history? Will it prompt the desired action? A good audit report is clear and concise, expresses a well-founded audit opinion, meets the customer's needs, and is in accordance with the CAM guidance and GAGAS.

b. Make the report concise, but provide enough detail for it to be useful. This includes exhibits and supporting schedules -- make sure that they are adequate. Do they provide enough information for a clear and complete explanation of the audit results and recommendations? When determining the amount of detail to include in the report, remember the report is generally written for more than one recipient or customer. Do these customers have the same background? How knowledgeable are the customers about the subject? The report should be written so that the readers will fully understand the entire report, no matter how many words are needed. A good explanatory note to an audit report, for example, would discuss the following:

- the summary of conclusions;
- the basis for the contractor's proposed or claimed amounts;
- the audit evaluation (include a description of procedures used to evaluate the area being described. If qualified, fully describe the effect of the qualification);
- the contractor's reaction (for price proposals see 4-304.2b); and
- the auditor's response if the contractor disagrees with the audit results.

c. Verify the facts and check the calculations. Ensure that amounts described in the results of audit agree with exhibits and that the exhibits agree with the explanatory notes. Technical errors cause confusion for the recipient and weaken a report considerably.

d. If time permits, allow the report to "cool," preferably overnight, so that the draft may be reviewed with a critical eye. If this is not possible, perhaps a peer will agree to review it.

e. Reread the report looking for grammatical and spelling errors. Use the spell-check feature on the word processing software to help. Make sure that all names are spelled correctly. Errors in spelling and grammar also weaken a report.

10-104.5 Responsiveness to the Customer in the Audit Report

When writing the report, focus on the customer's needs. In addition to meeting GAGAS requirements, the report must be useful to the primary report recipient. To accomplish this, focus on the customer. Remember that a report accomplishes nothing unless the reader becomes better informed or is moved to action.

10-104.6 Readability of the Audit Report

a. Shorter words and sentences promote understanding. When writing a sentence, be concise; eliminate unnecessary words. A busy reader will find the report easier to read and to understand. A sentence is wordy when it includes words that add nothing to the meaning of the sentence. For example, compare the following sentences.
Wordy: It is our understanding that the contractor's estimates were prepared by using vendor quotations that are considered outdated.
Better: The contractor based its estimates on outdated vendor quotations.

The Elements of Style, available in the FAO core library, at section II, item 17, lists commonly used expressions that should be eliminated from every sentence. For example,
Wordy: the reason why is that
Concise: because

Vary the sentence length. Break long sentences into shorter ones. The average sentence length should be about 17 to 20 words.

b. Put statements in a positive form.
Negative: The contractor's internal control system of recording labor does not meet certain requirements.
Positive: The contractor's internal controls over labor recording are weak.

c. When possible, write as if speaking. Imagine talking to the reader in a professional situation. Don't try to inflate the report with impressive words. Use ordinary words that the readers easily understand. Use short words in place of long ones whenever possible. Use action words and make writing direct rather than elaborately indirect. Use pronouns if the writing calls for them. For example, "At your request, we limited our audit to" correctly uses three pronouns "your," "we," and "our."

d. Use a variety of punctuation -- beyond the period and the comma -- to control emphasis and to help avoid monotony. Use the dash only when a more common mark of punctuation seems inadequate. For example, "The contractor did not adequately support many key decisions -- such as streamlining the acquisition process and entering production without a research and development phase." The dash is a mark of separation stronger than the comma that sets off material that results from a break in continuity or thought in a sentence. The variety of punctuation provided can help stimulate the reader's imagination, which aids in the delivery of the message.

e. Jargon, a specialized or technical language used by a select group, is difficult for persons outside of that group to understand. Avoid jargon; replace it with plain English. Consider these examples of bureaucratic jargon and the plain English replacements:

Bureaucratic Jargon:	Plain English:
afford an opportunity	let
due to the fact that	because
monetize	give a dollar value
utilize, utilization	use

Choose words and phrases carefully. Use short, simpler words and phrases for easier reading.

(1) Jargon also can be any language which clouds a sentence's meaning by hiding its main subject and verb. Compare the following sentences:

Difficult: Excess starting load costs were allocated by the contractor to the terminated portion of the contract on the basis of an unrealistically low projection of the labor costs which would have been incurred on the terminated units.
Better: Because the labor cost estimate was too low, the contractor allocated too much start-up cost to the terminated contract.

(2) Jargon also occurs when common words take on a special meaning within a profession and create confusion in the minds of those outside. For example, auditors frequently use the verb "monetize," meaning, to them, to determine a monetary value. This usage is inaccurate. "Monetize" actually means (a) to coin into money, or (b) to legalize as money. It should not appear in an audit report. Search for substitutes, such as "We have calculated the dollar value of the technical recommendations."

(3) Acronyms or abbreviations sometimes cause confusion. If an acronym is used frequently and is commonly understood by the report users, provide the complete words the first time followed by the acronym in parentheses -- for example, total quality management (TQM). Or, reverse the order if the acronym is more familiar than the words. In such case, provide the acronym first, followed by the words it stands for in parentheses -- for example, NASA (National Aeronautics and Space Administration). When in doubt about the familiarity of the acronym or abbreviation to potential readers, don't use it. Redefine unusual acronyms periodically throughout the report. They should be redefined when first needed in each section of the report and possibly every two to three pages.

(4) Some words are used incorrectly in audit reports. “Unsupport” and “unresolve,” used as verbs, are prime examples. “Unsupported” and “unresolved,” when used as adjectives, are perfectly acceptable.
Correct: The contractor's tooling costs are unsupported.
Incorrect:We unsupport the tooling cost.

(5) For “plain English” words inappropriately used, refer to The Elements of Style, which may be found in the FAO core library. Part IV is devoted to words and expressions commonly misused and includes numerous examples.

10-104.7 The Visual Impact of the Audit Report

a. Visual presentation is an important part of communicating. Use headings to set off main points and "bullets" to highlight several items where one item does not have priority over the other item. For example, a bullet list is effective for listing points because:

- each point is emphasized;
- the items are easier to see; and
- there is more space around each point.

Use a numbered list when the points must be taken in order or when some items are significantly more important than others.

b. Charts, graphs, and tables may be used to summarize voluminous amounts of data in a meaningful and concise manner. They add variety to the report and may easily be developed from available Agency software. Auditors are encouraged to use charts, graphs, and tables where they result in increased clarity and understanding of complex audit findings.

c. The effective use of white space (a term from printing meaning that part of the page that does not have any ink printed on it) can make a report more inviting to the reader. If a paragraph has more than 10 to 15 typed lines, consider dividing it into two paragraphs. Group like ideas together to form separate paragraphs. Highlight extracts from regulations or the contractor's policies by separating and indenting them as a block. If paragraphs or other items are numbered or lettered, ensure that there are at least two paragraphs or items, i.e., there should be a “2” for each “1” and a “b” for each “a.”

10-104.8 Active and Passive Voice

a. Using the active voice in writing can improve clarity. Knowing the difference between the active and passive voice requires understanding the grammatical structure of sentences. A

complete sentence has a subject and a verb. For example, "The auditor wrote the report" is a complete sentence in the active voice. A sentence is in the active voice when the grammatical subject (the auditor) is doing the action expressed in the verb (wrote). In this sentence, the active voice sounds more natural than passive voice and is easier to understand.

b. The same statement could be expressed in the passive voice: "The report was written by the auditor." In this case, the grammatical subject (the report) has the action of the verb performed on it (was written). A sentence is in the passive voice when the subject receives the action of the verb.

c. Sometimes voice is confused with tense. Voice indicates whether the subject is doing the action (active voice) or is receiving the action (passive voice). Tense indicates time or duration. A sentence in the active voice can be in forms of the past, present, or future tenses -- “The auditor wrote the report;" or "The auditor is writing (or writes) the report;” or “The auditor will write the report.” All of these examples are in the active voice but are in different tenses.

d. Bureaucratese, the language of the bureaucracy, often uses the passive voice because it is easier to avoid stating who is doing the action. In the sentence in the passive voice "The report was written," there is no mention of who did the writing. Writing in the active voice forces the writer to state who is doing the action: "The auditor wrote the report." In this sentence, use of the active voice makes the sentence stronger and easier to visualize and understand.

e. Good technical writing often requires use of the passive voice. There is nothing wrong with using the passive voice when the emphasis is on the effect of the action, not the actor. (“Bad debts are questioned,” not “The auditor questioned bad debts,” or “FAR 31.205-3 mandates the questioning of bad debts.”) The passive voice is appropriate when the doer of the action is understood and perhaps not important to what is being said. As a rule, use of the passive voice should be limited to situations in which the doer is:

- unknown;
- unimportant;
- deliberately de-emphasized; or
- obvious to the customer.

These situations are quite common in audit reports and other technical writing.

10-104.9 Misplaced Modifiers and Pronouns

a. A “modifier” is a word (usually an adjective or adverb), a phrase, or a clause that modifies the meaning of another word or phrase. Place modifiers in sentences so they are close to the words they define.

Misplaced: He only found two mistakes. (Because “only” can be either an adjective or an adverb, it can modify either nouns and pronouns (as an adjective) or verbs, other adverbs, and adjectives (as an adverb). As placed in this sentence, it can modify the pronoun “he” and the sentence appears to mean “He did nothing other than finding two mistakes.”)

Correct: He found only two mistakes. (Here “only” modifies “found;” we don't know what else he did, but he found no more than two mistakes.)

b. A modifier makes the meaning more specific. When a modifier is too far from the word it modifies, the reader may connect the modifier to some other word. The reader may also be confused when a modifier ambiguously appears to modify two words.

c. Too many modifiers weaken writing. Strings of words or phrases often bury the subject and confuse the reader. The following is an example of a string of words that together modify the last word: “nonrecurring cost recoupment charge internal controls.” The first five words say what kind of controls there are, but it is difficult to read. An improved version is “internal controls for recoupment of nonrecurring cost.” (This version suffers from "prepositional decay;" the prepositional phrase “for recoupment” is modified by the prepositional phrase “of nonrecurring cost.” In technical writing, style must sometimes be sacrificed to clarity.)

d. Similarly, pronouns are often misplaced. Pronouns, similarly to acronyms, are substituted for nouns for brevity and to reduce repetitiveness. A pronoun must agree with its ante-

cedent in person and number (third person singular pronouns must also agree in gender). The antecedent of a pronoun is usually the closest noun preceding the pronoun that agrees with it in person and number. The following sentence illustrates what can happen when too many other possible antecedents come between the intended antecedent and the pronoun: “You hold the hammer while I hold the nail, and when I nod my head, you hit it.”

10-104.10 The Requestor's Perspective

a. The tone of the report should be objective, professional, and courteous. Use conversational English, which is a relaxed, professional style. Report writing can be somewhat informal in tone yet remain professional and businesslike. Keep in mind that the goal is to get a favorable reaction. Avoid using accusatory, inflammatory language -- this is likely to cause defensiveness and opposition. In presenting problem areas, emphasize improvements needed.

b. Review the draft from the customer's perspective. Is the report thoroughly responsive to the customer's request? Remember that a report accomplishes nothing unless it is useful to the requestor.

10-104.11 Final Steps

a. Before submitting the report for supervisory approval or for peer review, check again to ensure the report complies with CAM guidance. The draft report should always be cross-referenced to the working papers. This ensures that the audit conclusions are supported and are easily found. A peer reviewer should not rewrite the report in his or her own personal style, but should provide a critical review for content and for good writing techniques, such as those outlined in this section. If a peer reviewer is not available, put the report aside for a day or two, if time allows, then reread the report. If it does not make sense when being reread, it will probably not make sense to the reader either. Another point of view during the review process can help develop a final draft needing little or no revision by the supervisor.

b. If the supervisor requires the report to be modified, ensure that the change is reflected throughout the entire report. If significant changes are made to exhibits and schedules, request the peer reviewer to check both the "carry" of numbers from schedules to text and the mathematical accuracy of the report.

10-200 Section 2 --- Audit Report Format and Contents (General)

10-201 Introduction (Reports-General)

a. This section discusses DCAA requirements governing audit report content; details the general administrative and format requirements of audit reports; lists and defines the elements of audit reports in their order of appearance in the report; summarizes DCAA policy regarding protection of report information; and provides guidance on audit report distribution. It also explains the circumstances under which supplemental audit reports should be issued and describes the recommended format for these reports.

b. The guidance included in this section is general in nature and applies regardless of the type of audit report being prepared. Specific report preparation requirements for various types of individual audit assignments are discussed in the remaining sections of this chapter. “Shell” reports, which include standard paragraphs applicable to specific reports, are available on the DCAA Intranet and the APPS.

10-202 Reporting of Audit Results (Reports-General)

To satisfy Government reporting standards (2-400 and 2-600), there must be a written record of the results of each engagement. Normally, this requirement is satisfied by issuing an audit report. Certain situations, however, may call for preparation of a “MEMORANDUM FOR RECORD” (refer to DCAAM 5020.1, Correspondence Manual) rather than an audit report. This may be appropriate, for example, upon completion of an individual overhead account audit, which represents only one portion of a final overhead audit report to be issued later. Other situations, such as completion of an incurred cost desk review or the evaluation of a final voucher, may call for preparation of a Memorandum for Administrative Contracting Officer. Typically, MFRs and other memorandums prepared as a written record of the results of an engagement contain contractor proprietary information. Therefore, such memorandums not containing classified information must be marked “FOR OFFICIAL USE ONLY.” Under no circumstances will reports be addressed “to the file” or “for the record” (See 10-206 for addressing requirements).

10-203 Report Administrative Requirements (Reports-General)

10-203.1 Paper

When reports are printed, use 8 1/2 by 11 inch paper. If wider sheets are needed for tabulations, reduce them to 8 1/2 by 11 inches and print in landscape mode if necessary. The paper should be white and of a grade, weight, and substance as available through normal supply channels for laser printers and for copiers.

10-203.2 Margins

Margins should be uniform; e.g., allow 1 inch for left and right margins and at least 1 inch at the bottom of the page. There should be at least two lines between the last line of typing and the page number.

10-203.3 Typing

Computer equipment and Agency designated word processing software should be used to the extent possible to prepare all portions of the report, including exhibits and schedules.

10-203.4 Paragraphing

a. Other than the "AUDIT REPORT AUTHORIZED BY" section title, which should be bold, placed at the left margin, and followed by a colon, section titles should be bold, upper case and centered in the narrative portion of the report. When a paragraph subtitle is appropriate, place it on a separate line. Paragraph subtitles should be regular type, upper case, and placed at the left margin (see Figure 10-2-2).

b. The first sentence of main paragraphs should be indented no more than one half of one inch (tab at .5") from the left margin. The subparagraphs within "SIGNIFICANT ISSUES," "QUALIFICATIONS," "EXPLANATORY NOTES," and "RESTRICTIONS" will be lettered or numbered if there are two or more; when there is an "a", there must be a "b", etc. The sequence for paragraph numbering is 1. a (1) (a).

c. Any subparagraphing after a lower case letter in parentheses [(a), (b)] is discouraged. Try to use paragraph captions wherever possible to avoid this.

10-203.5 Upper Case Lettering

The audit report cover sheet (10-205) should include the heading and captions in upper case letters, as shown in Figure 10-2-1. Paragraph titles and subtitles within the report should also be in upper case letters. The "FOR OFFICIAL USE ONLY" footer will also appear in bold upper case letters. Explanatory note captions may be written in upper and lower case letters and underlined.

10-203.6 Date

Express the month, day, and year of the audit report in the order named (for example, December 16, 20XX). The date can be either stamped or typed. The FAO should have a control in place to ensure that reports are dated only after they are signed.

10-203.7 Page Numbering

a. Do not number the cover sheet or place a number on the next (first) page of the report. Begin numbering pages on the second page of the report with the number "2." Consecutively number pages through the report distribution and release restrictions. Numbers should be placed at the bottom center of the page, above the "FOR OFFICIAL USE ONLY" footer. Do not offset page numbers with periods, dashes, or other punctuation. Examples of report numbering are contained in the audit report shells.

b. If DCAA assist audit reports, Government technical reports, or other documents that are individually numbered are included in a report as appendixes, it is necessary to number only the first page of the document. In cases where many appendixes are included in a report, it may be convenient to preface each appendix with a blank sheet indicating the title of the appendix and page number, rather than making any annotations on the particular document.

10-203.8 Numbering Audit Reports

a. The audit report number is the assignment number prefixed by the regional organization code (RORG) of the Branch Office or Resident Office. This is necessary as the Agency MIS reports are sorted at the Branch Office or Resident Office RORG level only. The Suboffice RORG does not appear on Agency MIS reports. The audit report number must be identical to the assignment number set up in the DMIS. No additional alphanumeric characters are to be added to the audit report number. The audit report number will be shown at the top left margin of each page of the report, after the audit report cover sheet. On the cover sheet, the audit report number will be centered under the Agency name at the top of the cover sheet, as shown in Figure 10-2-1.

b. The FAO, at its option, may include the Suboffice RORG and/or a chronological reference number known as a “Chron. No.”, as the last item in the “REFERENCES” section of the cover sheet. The Chron. No. should not appear anywhere else in the audit report.

10-203.9 Report Assembly and Reproduction

a. The “original” copy of the signature page of the report must be signed by an auditor with the authority to do so (10-211). See 4-407e(3) for guidance on scanning the signature page into the working paper file.

b. Fastening. Printed reports will be securely fastened at the left margin. Thus, any tabulations or graphs, for example, must be positioned with their headings either at the top or at the left side of the assembled report.

10-203.10 Electronic Distribution of Reports

a. To the maximum extent possible, all written correspondence and audit reports should be transmitted electronically to requestors and customers via e-mail. DCAA e-mail to DoD components will be sent only through Defense Information Systems Agency (DISA) supported communications channels to ".mil" addresses. NASA Headquarters Office of Procurement has also authorized its NASA Centers (generally ".nasa.gov" addresses) to request and receive DCAA audit reports electronically. Procedures for electronic communications with other non-DoD customers should be determined on a case-by-case basis after consultation with the customer and the regional information technology (IT) staff. Transmission of "For Official Use Only" material using private and commercial service providers, such as AOL or CompuServe, is prohibited.

b. It is critical to communicate with customers to determine the version and brand of software they are using. Based on customer requirements, choose the appropriate format and version that provides the best opportunity for the customer's efficient use of the audit report and any accompanying files or attachments. If the customer requires the use of compression technologies, specific arrangements should be made to ensure delivery. The possibility exists that the e-mail will not be delivered to the recipient as many networks strip compressed files from incoming e-mails because of virus concerns. The regional IT staff should be consulted if problems arise while preparing files for transmission or during the electronic transmission.

c. Cover e-mail messages for audit reports should only include administrative-type information. Cover message subjects will include contractor name, customer reference number (if any), and assignment subject (e.g. XYZ Company-DCMA Case No. 05E100005-CAS 410 Noncompliance). Cover messages will also provide information in the body of the e-mail, such as:

(1) name of document attached,
(2) audit assignment number for reference purposes (if not already in the filename),
(3) software used to prepare the report; e.g. Microsoft Word (version),
(4) comment that the audit report is marked "For Official Use Only,"
(5) comment regarding the use of password protection of the document to guard against modification,
(6) if applicable, instructions for opening the compressed file(s),
(7) if applicable, whether and why an electronic report is incomplete, and
(8) a cautionary note regarding the intended recipients and use of the e-mail (use the example provided below).

An example cover message follows:

> “Attached is subject audit report [*provide file name*] which is prepared in [*specify the specific version of Microsoft Word*]. The attached report is For Official Use Only. While it is password protected from accidental changes, it can be opened as

a "read only" document without using the password. However, information within the report can be copied to a new document for analysis purposes.

The report was compressed using [*specify the software used and whether the file was saved as a self-extracting file or not*]. To extract (decompress) the report [*provide specific steps to the user on how to extract the file*].

The report is incomplete [*provide reasons why (e.g., hard copy forthcoming) the report is incomplete to the customer*].

If you have difficulty opening the audit report document or have other questions, please contact [*provide points of contact to the customer, including telephone number and e-mail address*].

IMPORTANT: This e-mail, including all attachments, constitutes Federal Government records and property that is intended only for the use of the individual or entity to which it is addressed. It also may contain information that is privileged, confidential, or otherwise protected from disclosure under applicable law. If the reader of this e-mail transmission is not the intended recipient or the employee or agent responsible for delivering the transmission to the intended recipient, you are hereby notified that any dissemination, distribution, copying or use of this e-mail or its contents is strictly prohibited. If you have received this e-mail in error, please notify the sender by responding to the e-mail and then delete the e-mail immediately."

10-203.11 Citations of Legal Opinions

Audit guidance is based on generally accepted accounting principles, applicable Government regulations, and rulings of Boards of Contract Appeals and Federal courts. Often the authoritative source of the guidance (e.g., a board or court case) is cited in CAM and/or specific audit guidance provided by Headquarters in support of the recommended audit conclusion. The guidance stated in CAM and specific audit guidance, including relevant legal citations, should be employed in the audit and explained in the audit report to the extent necessary to support the audit conclusions. When the auditor believes it is necessary to include in the audit report a legal citation not discussed in CAM or Headquarters guidance, the citation must be formally coordinated, through the region, with Headquarters, Policy and Plans Directorate. The Headquarters division responsible for the audit issue will coordinate with our legal advisors and the FAO to ensure that the citation is relevant and properly applied.

10-203.12 Insignificant Amounts/ Elimination of Cents

a. When costs are not subject to penalties, as discussed in 6-609, only significant amounts of questioned costs should be displayed in audit reports. The CAS materiality criteria in 48 CFR 9903.305(a) to (f) should be considered in making this determination. These criteria are: absolute dollar amount; ratio of the amount of an item to an appropriate base figure; relationship between a cost item and cost objective; the impact on Government funding; the cumulative impact of individually immaterial items; and the cost of administrative processing of the audit exception. When unallowable costs are identified during the audits that are subject to penalties, they should be repeated regardless of the dollar amount (6-609.2b).

b. Cents should not be included in summary report paragraphs, exhibits and schedules. However, they can be used in certain explanatory notes and supporting schedules, such as those relating to direct labor rates or material unit prices.

10-203.13 Protection of Report Information

All DCAA audit reports not containing classified information are “FOR OFFICIAL USE ONLY” and will be marked “FOR OFFICIAL USE ONLY” centered at the bottom of each page of the report. When pages are numbered, (beginning with page number “2”) the number is positioned above the “FOR OFFICIAL USE ONLY” footer. MFRs and other memorandums not containing classified information that are prepared as a written record of the results of an engagement should also be appropriately marked (10-202). Reports containing classified information will be prepared, classified, marked, and protected in accordance with DCAAM 5205.1, “Information Security Program.” To the extent possible, limit classified material included in the report, because audit reports must be classified at the highest security classification contained therein. Also see 10-205.2 if the report pertains to a classified subject.

10.203.14 Report Terminology

a. The report terminology used in this chapter reflects Statement on Standards for Attestation Engagements (SSAE), issued January 2003. However, SSAEs never uses the term "audit" or "auditor." Instead it refers to three types of "evaluations" (examination, review, and application of agreed-upon procedures) and "practitioners." DCAA is covered by Generally Accepted Government Auditing Standards (GAGAS), which incorporates the SSAE for attestation audits (GAGAS chapter 6). However, GAGAS continues to refer to "auditors." For all of the work that DCAA performs, the related fieldwork, and the resulting reports, DCAA will use the term "audit" to generically describe the work. The specific types of audits DCAA auditors perform are examinations, reviews and applications of agreed-upon procedures, and when referring to a specific type of audit, DCAA will use this terminology. In addition, an examination (highest level of assurance) will continue to use the word "audit” in report captions. In general, the work that DCAA auditors perform has not changed; but the report terminology differs under GAGAS and SSAE. Operations audits are an exception because they are performance audits under GAGAS chapters 7 and 8, and are not subject to the SSAE. Refer to 10-403.

b. The difference between an examination, a review and an application of agreed-upon procedures, simply stated, is the level of assurance. For details, refer to Chapter 2. The preferred terms are contained in the Subject, Scope and Results paragraphs in each section in Chapter 10. If the audit is an examination, the report caption is “Subject of Audit,” but the related report narrative will state “we examined.” Similarly, if the audit is either a review or an application of agreed-upon procedures, the report captions are “Subject of Review” and “Subject of Application of Agreed-Upon Procedures,” respectively. The related report narratives will state “we reviewed” or “we applied agreed-upon procedures.”

c. Most of the audits DCAA auditors perform are examinations that require a high level of assurance. If the assignment is reduced to a moderate level of assurance, a review may be performed. Attestation standards provide that audits of internal control (10-400) and audits of compliance with laws and regulations (10-600 and 10-800) may not be performed as reviews. However, any assignment may be performed as an application of agreed-upon procedures when the procedures to be performed have been specified by the requestor. Refer to 10-1000 for requirements. Currently, specific guidance has been provided for only one type of review, an incurred cost desk review (10-506).

10-203.15 Spreadsheets

a. An assessment should be made in each case if the contents of an Excel spreadsheet would be useful to the report user. Generally Excel spreadsheets should not be

embedded in the audit report. If the contents of a spreadsheet are to be included in a report, the APPS Word Toolbar has a "Paste as Picture" tool which inserts a picture of a spreadsheet section rather than embedding a large spreadsheet. The "Excel Converter" tool is also available to change an already embedded spreadsheet to a picture. This method of providing information reduces the chance of accidental change, provides only the data the auditor intended to include in the report, and keeps the audit report file size at a minimum to facilitate electronic transmission.

b. In many instances, audit report recipients find the auditor's spreadsheets useful in performing negotiation scenarios, preparing business clearances, etc. Where reports contain tables generated from spreadsheets that may be useful to the recipient, an offer to provide the spreadsheets should be included in the Results of Audit. Where spreadsheet usage was significant, the auditor may also contact the requestor in advance to determine if the requestor would like the spreadsheets to be provided outside the audit report.

10-203.16 Hyperlinks

Auditors should use electronic linking to enhance report navigation between the Exhibit and explanatory notes. All links not intended for customer use (such as those to working papers) must be removed. "Delete Hyperlinks" can be used within APPS to prepare the final report. This tool can be used comprehensively or individually.

10-204 Report Format (Reports-General)

a. Major examination or review report components are listed below in the sequence in which they generally appear. They are discussed in detail in the referenced paragraphs (see 10-1000 for the components of a report on an application of agreed-upon procedures). Those components highlighted with an asterisk should appear in every DCAA audit report regardless of type to satisfy minimum professional standards. Other elements may or may not be included in a particular report depending on the type of audit performed or other circumstances. For example, "Qualifications" is not identified with an asterisk but becomes a mandatory report requirement if existing conditions require its use. Elements pertaining only to certain report types are indicated. Refer to the remaining sections of Chapter 10 for additional guidance on audit report preparation for specific types of audit assignments. Requirements for reports on applications of agreed-upon procedures are covered in 10-1000.

- [Audit] Report Cover Sheet (10-205)*
  - Addressee (10-206)*
  - Subject (10-207)*
  - Reference (10-208)
  - Contents (10-209)*
- Report Narrative (10-210)*
  - Subject of Audit (10-210.1)*
  - Executive Summary (10-210.2)
  - Scope of Audit (10-210.3)*
    - Qualifications (10-210.4)
  - Statement of Changes (CAS reports only - see 10-803b.)**
  - Results of Audit (10-210.5)*
    - Opinion
    - Exhibits and Schedules (10-210.5b.)
    - Unsatisfactory Conditions and/or Other Audit Recommendations (4-800)
    - Additional Remarks (10-210.5e.)
    - Statement of Condition and Recommendations (see 10-409 and 10-803b.)**
    - Cost Impact only - see 10-803b.)**
- Contractor Organization and Systems

(10-210.7)
Status of Corrective Action Taken on Prior Recommendations (e.g., System Reports)
DCAA Personnel and Report Authorization (10-211)*
Audit Report Distribution and Restrictions (10-212)*
Appendixes (10-213)
*Required in every report regardless of type. Note the modified report language for reviews (10-506) and application of agreed-upon procedures (10-1000).
**Replaces Exhibits and Schedules for operations, internal control, or CAS reports.

b. If an audit is stopped before it is completed, auditors should write a memorandum for the record that summarizes the results of the work and explains why the audit was terminated. The auditor should also communicate the reasons for termination to the requestor. The communication should preferably be in writing.

10-205 Cover Sheets

10-205.1 General

a. An Agency cover sheet bearing the DoD and DCAA seals is required for the original of every report, including reports transmitted electronically. The general format and narrative content are shown in Figure 10-2-1. The DoD and DCAA seals are provided in the audit report shells with each working paper package. Audit report restrictions relative to (1) Freedom of Information Act requests, (2) confidentiality of contractor information in the report, (3) restriction on release of the report outside the Department of Defense, and (4) release of subcontract audit reports to the higher-tier contractor, are referenced on the cover sheet ("REPORT RELEASE RESTRICTIONS" and "CONTENTS") and provided in detail immediately following the signature page of the report. See 10-212, Report Distribution and Restrictions.

b. Include the report heading (Agency name and report number), date, captions and descriptive information relative to the audit on the cover sheet as presented in Figure 10-2-1. The report date must be the date the report is signed and forwarded to the requestor or other addressee; it should not be incorporated as a field date, since a permanent record of the issue date is required. The FAO may also include its e-mail address in the "PREPARED BY" section as shown in Figure 10-2-1.

10-205.2 Cover Sheets for Reports on Classified Subjects

a. If the report contains a security classification (see 10-203.13), the classification marking must replace "For Official Use Only" on the report cover. This should be done by deleting "FOR OFFICIAL USE ONLY" and inserting the appropriate security classification on both the top and bottom of the audit report cover. If a stamp for the appropriate classification is not available, classification markings should be made in letters conspicuously larger than the size of the print of the report.

b. If an audit report pertains to a proposal or a contract that is classified or includes classified elements, and the auditor is unable to determine the appropriate security classification of the report, a special "warning" label (DCAA label 5) must be affixed (see DCAAM 5205.1, DCAA Information Security Program Manual, Section 1-400.b). The label is placed above, but not covering, the "FOR OFFICIAL USE ONLY" legend on the audit report cover, and the report must be sent via registered mail. Contact the regional security officer for instructions prior to release of the report. Regional offices should consult with the Headquarters security officer if they have questions on this procedure.

10-206 Addressees (Reports-General)

10-206.1 Prime Contract Report Addressees

a. It is DCAA policy that audit reports at the prime contract level be addressed to a contracting officer unless it is clear that another acquisition official will be responsible for resolving the audit findings and recommendations. For example, reports on price proposals (9-100) would be addressed to the procuring contracting officer (PCO) unless a plant representative/administrative contracting officer (ACO) has been delegated procurement authority to execute the particular contract action. This policy results in audit findings being directed to the individuals responsible for resolutions and facilitates timely contracting officer action.

b. Even if the audit report does not contain findings requiring resolution, the report addressee should normally be the cognizant contracting officer. Under no circumstances will reports be addressed “To the File” or “For the Record.”

c. A number of non-DoD agencies make requests for audits through their Office of Inspector General, which may be responsible for arranging audits for many procurement offices. The assigned number or other assignment identifier contained in the audit requests is their primary means of identifying these assignments. To help these offices control their assignments and expedite transmittal of reports to responsible officials, non-DoD agency assignment numbers, or other assignment identifiers contained in requests for audit will be included on the cover sheet reference line and within the first paragraph of the “Subject of Audit” section for reports issued to these agencies. Other non-DoD reporting requirements appear in 15-100.

d. Audit reports in support of team system evaluations led by contract administration organizations, such as the Contractor Purchasing System Review (5-1302) or the Contractor Insurance/Pension Review (5-1303), should be addressed to the designated team captain. Reports on should-cost team reviews (9-1300) will be addressed to the PCO. Audit reports on Earned Value Management System (EVMS) initial compliance audits (11-202.8) will be addressed to the review team chief; and reports on EVMS surveillance audits (11-203.5) will be addressed to the principal cognizant ACO. Reports required to support an investigation will be addressed to the requestor.

10-206.2 Subcontract and Intracompany Report Addressees

Most FAO audit reports on intracompany and subcontract matters will also be addressed in accordance with 10-206.1. In certain audit areas, however, such as postaward audits of cost or pricing data (10-600), procurement needs may be better served if the auditor's report from the other company segment or subcontractor level is addressed to the contract auditor at the prime contract level. The recipient auditor will then incorporate the findings and recommendations into a single audit report for action by the responsible contracting officer. Appropriate variations in addressing and distribution of intracompany and subcontract reports will be covered in later sections of this chapter (see 10-303.2, 10-605.2, and 10-708b.).

10-206.3 Form of Address

As a matter of form, audit reports are not normally addressed to an individual by name but to the title of the position. However, if the report is for an office with several contracting officers, the address block should identify the individual in some appropriate manner. This may be done by placing the ACO/PCO's room number, “desk code,” “mail stop,” or name in parentheses following the contracting officer designation. For example, report addresses may begin: “Procuring Contracting Officer (Code 03D-1)” or “Administrative Contracting Officer (Ms. Mary Z. Brown).”

10-206.4 "THRU" Addressing

When required to route the original report through an intermediate action office other than the addressee's office, use "THRU" addressing. For example, if a report on an audit of a price proposal is addressed to a PCO (other than the plant representative/ACO acting as a PCO) but is to be routed thru the ACO, the "PREPARED FOR" element will be followed by a "THRU" element, as illustrated in Figure 10-2-1. This is generally the case when the ACO is also participating in the field pricing audit of a contractor's submission by providing a price analysis or technical evaluation.

10-206.5 Attention Lines

It is acceptable to use a separate "Attention" line, which may be placed either under the addressee's name or under the office name of the "PREPARED FOR" and/or "THRU" address block when the addressee has requested the FAO to route the report directly to a particular organizational section or individual within the addressee's office. Do not use an "Attention" line to identify the contracting officer to whom the report is addressed (see 10-206.3).

10-207 Subject Line (Reports-General)

The "SUBJECT" line shown on the report cover sheet should provide a brief description of the audit performed (e.g., Report on Audit of Proposal for Initial Pricing, Report on Audit of Labor Costs, Report on Postaward Audit of Cost or Pricing Data, etc.). Refer to Figure 10-2-1 for an example of the "SUBJECT" line.

10-208 References Section (Reports-General)

a. A "REFERENCES" section should be included immediately after the "SUBJECT" line on the cover sheet. This "REFERENCES" line will identify the audit request, if applicable, including specific reference to any case numbers or assignment identifiers contained in the audit request. This reference line should also be used in subcontract assist audit reports to assist the prime contract auditor in identifying the contract to which the assist audit relates. If a Suboffice RORG or Chron. No. is referenced, it should be the last item which appears in "REFERENCES." If this is a self initiated assignment, the "REFERENCES" section is not mandatory.

b. The auditor should include both the PCO and the ACO case numbers or identifiers if known. In many instances, especially when non-DoD inspector general offices arrange audits for their agencies, the assignment identifier included in the request is the primary means of tracking these assignments. In addition, include a line for "Relevant Dates." This line will indicate what page number the reader should refer to for the requested due dates and extensions. This information should be described in the "DCAA Personnel and Report Authorization" section of the report.

10-209 Table of Contents (Reports-General)

a. The table of contents will be located on the cover sheet for all audit reports. The "CONTENTS" section should be simple and uncluttered, as illustrated in Figure 10-2-1. Exhibits and schedules should not be listed individually in the "CONTENTS." Instead, the reader will be able to find references to exhibits and schedules by reading listed sections of the report, such as "Results of Audit."

b. Appendixes. If there is only one appendix to the report, show the title and page number in the "CONTENTS." If there are multiple appendixes, use the term "Appendixes" in the "CONTENTS" and show the page number for the first appendix in lieu of listing each appendix.

c. Internal Hyperlinks. The DCAA APPS provides links from the table of contents (TOC) to the applicable sections of the report to allow the recipient to quickly navigate to specific areas of interest. These links are dynamic and should be maintained in the final version of the signed report. Immediately prior to transmission of the signed report to the recipient, the TOC hyperlinks should be updated to ensure the page numbers are correct.

10-210 Report Narrative (Reports-General)

All reports must have a narrative body that includes comments on the subject and scope of the audit, any limitations on the scope of audit performed (if applicable), and a detailed description of the audit results. The contents of each of the report paragraphs are discussed below. The remaining sections of this chapter expand on the content of each of the narrative paragraphs as they apply to particular types of reports, such as price proposals, cost accounting standards, postawards, etc.

10-210.1 Subject of Audit

a. If the audit is an attestation, begin this section by identifying the contractor assertion or the subject matter on which the report expresses a conclusion and the nature of the engagement (examination, review, application of agreed-upon procedures). Ordinarily the audit expresses an opinion on the assertion (e.g., a contractor submission, disclosure statement); however, an internal control audit expresses an opinion on a subject matter (see 10-400). The purpose and objectives of an attestation audit always includes expressing a conclusion on the reliability of the contractor's assertion or a contractor's compliance with specific criteria relating to a subject matter. If the evaluation is a systems audit, identify the subject matter (i.e., the system being audited) and fully describe the purpose of the audit.

b. Depending on the nature of the audit, information should be included regarding the time period covered by the audit. This information is mandatory for audits of CAS compliance or internal controls, and may be included on other audits, along with such data as date, dollar value, and type of contractor submission, period of performance of the proposed effort, and contract data such as contract type and incentive provisions. Audit reports on price proposals should also include statements about additional cost or pricing data submissions.

(1) An example of a statement that could be included in a report on a price proposal examination follows:

> "As requested by [*insert requestor's name*] on [*insert date of request*], we examined [*insert contractor's name*]'s [*insert date of proposal*] proposal submitted in response to [*insert RFP or solicitation number*] to determine if the proposed costs are acceptable as a basis to negotiate a fair and reasonable contract price. The [*insert total price proposed including profit or fee, if any*] proposal is for [*insert description of service or product to be provided*]. The contractor proposed a performance period of [*insert inclusive dates of contract performance*].
>
> The proposal and related cost or pricing data are the responsibility of the contractor. Our responsibility is to express an opinion on the proposal based on our examination."

(2) If the auditor is disclaiming an opinion in an examination report due to an inability to obtain sufficient competent evidential matter because of a scope limitation, the Subject of Audit section's standard paragraph should be changed. The first sentence should state "we were requested to examine" (if a request was received) or "we attempted to examine" (if self-initiated) rather than "we examined" since, because of the scope limitation, the

auditor was not able to perform an examination in accordance with generally accepted government auditing standards. In addition, the last sentence "Our responsibility is to express an opinion on the proposal based on our examination" should be deleted due to the scope limitation. The following is an example of a Subject of Audit paragraph for a price proposal examination to be used in a report with a disclaimer of opinion for which an audit request was received:

> "We were requested by [*insert requestor's name*] on [*insert date of request*], to examine [*insert contractor's name*]'s [*insert type of proposal*] proposal submitted in response to [*insert RFP or solicitation number*] to determine if the proposed costs are acceptable as a basis to negotiate a fair and reasonable contract price. The [*insert total price including profit or fee, if any*] proposal is for [*insert description of service or product to be provided*]. The contractor proposed a performance period of [*insert inclusive dates of contract performance*]. The proposal and related cost or pricing data are the responsibility of the contractor."

(3) The SSAE treats the word "opinion" as reserved to examinations. AT 101.68 states, "When attestation risk has been restricted only to a moderate level (*a review*), the conclusion should be expressed in the form of negative assurance." The pro forma review reports appearing at AT Section 101, Appendix B, exclude the "responsibility" sentence. Since DCAA retains responsibility for the content of its reports, a statement that might be included in a report on a review (see 2-103c(2)), such as a desk review of a low-risk indirect cost submission (see 6-104.5), could read as follows:

> "We reviewed the [*insert contractor's name*]'s [*insert date of proposal*] certified final indirect cost proposal for reimbursement of FY 20*XX* incurred costs. The purpose of the review was to establish indirect cost rates for the period. The proposed rates apply primarily to the flexibly-priced contracts listed in Exhibit __, page __. A copy of [*insert contractor's name*]'s Certificate of Final Indirect Costs, dated [*insert date of certificate*], is included as Appendix 1 to the report (see page __).
>
> The proposal is the responsibility of the contractor. Our responsibility is to report our conclusions on the proposal based on our review."

(4) If the evaluation is an attestation engagement and was limited to specific functions or activities, if particular work was or was not performed, or if special aspects were considered in performing the evaluation, perhaps at the request of the contracting officer, the Subject paragraph should also include appropriate special comments. For example:

> (a) "At your request, we limited our evaluation to the application of direct labor and indirect expense rates."
>
> (b) "At your request, we limited our evaluation to a determination that the contractor's proposed labor rates comply with wage board determined prevailing rates for the locality."

(5) An example of a statement that might be included in a report on an operations audit follows:

> "As part of our comprehensive audit of the [*insert contractor's name*], we evaluated the contractor's plant maintenance function, which is responsible for the maintenance and repair of equipment and buildings at the Boston facility. We performed the audit to evaluate the effectiveness of the contractor's policies and practices in assuring that maintenance tasks are carried out in a timely, efficient, and

economical manner. The audit was conducted from [*start date, month, year*] through [*field work complete date, month, year*] and covered contractor operations for the fiscal year ended [*date*]."

Note that, unlike examples (1) and (4), an operations audit is not an attestation. It is a performance audit subject to the requirements of GAGAS chapters 7 and 8.

10-210.2 Executive Summary

This section is intended to give the reader a brief overview of the audit findings. It should briefly describe the audit recommendations and the significant issues supporting the opinion. The Executive Summary should rarely exceed one page for any audit. This section can be omitted in reports where the Results of Audit sufficiently summarizes the audit findings. Examples where the Executive Summary may be omitted include contract audit closing statements and reports with no audit findings. An example of an Executive Summary is shown in Figure 10-2-2.

10-210.3 Scope of Audit

a. Introduce the scope of audit section with a statement, which should be modified to fit the evaluation being performed. The italicized portion(s) of the example scope statement provide(s) either guidance or alternative language. Additional guidance is provided in chapter 10 subsections, tailor the scope statement as appropriate, e. g., use the guidance in 10-400 when reporting on an internal control examination or an operations audit.

An example of the initial scope paragraph to be used in an examination follows:

"*Except for the qualifications discussed below,* [*omit if the report is not rendering a qualified opinion and there is no "Qualifications" section within the "Scope" paragraph*], we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the data and records examined are free of material misstatement. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the amounts and disclosures in the data and records evaluated;
- assessing the accounting principles used and significant estimates made by the contractor;
- evaluating the overall data and records presentation; and
- determining the need for technical specialist assistance [*and quantifying the results of a Government technical evaluation*]."

b. If the auditor is disclaiming an opinion in a report due to an inability to obtain sufficient competent evidential matter because of a scope limitation, the title of the Scope of Audit section should be changed to Scope Restrictions. In addition, the section must omit the statement "we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that…" Instead, the auditor should briefly state all the substantive reasons for the disclaimer in the Scope Restrictions section. If necessary, details regarding the reasons for the disclaimer may be included in an appendix. In this case, the Scope Restrictions section should properly reference the appendix. The auditor should not state here that the scope of the examination was not sufficient to warrant the expression of an opinion. That statement is more properly included in the actual disclaimer paragraph. The auditor should not identify the procedures that were performed nor include the paragraph describing the characteristics of an exami-

nation; to do so may tend to overshadow the disclaimer. The auditor should also disclose any other reservations he or she has regarding presentation in accordance with Government regulations. The following is an example of a Scope Restrictions paragraph with a scope limitation imposed by the requestor resulting in a report with a disclaimer of opinion:

> "Due to procurement-imposed time constraints, we were not able to obtain sufficient competent evidential matter on which to base an opinion on the (*subject matter, e.g., proposal as a whole or the parts of a proposal to be evaluated*). The time that was provided for performance of the audit did not allow us to apply auditing procedures to satisfy ourselves as to the acceptability of the contractor's (*subject matter*)."

The following is an example of a "Scope Restrictions" paragraph with scope limitations due to uncertainties resulting in a financial capability report with a disclaimer of opinion:

> "There are significant uncertainties related to the contractor's July 15, 20XX filing of a voluntary petition for reorganization under Chapter 11 of the United States Bankruptcy Code. These uncertainties include, but are not limited to, the future actions of the Official Committee of Unsecured Creditors, the outcome of potential bidders for the contractor's assets, the resolution of ongoing investigations and the Bankruptcy Court's own actions relating to its approval of the disclosure statement and confirmation of the plan of reorganization. The significance of the uncertainties precludes us from expressing an opinion on whether the contractor has adequate financial resources to perform Government contracts in the current and near-term (up to a year)."

c. The scope paragraph of a review should include the following statements, modified or expanded as appropriate:

> "Based on an initial assessment of low risk, we performed a limited review sufficient to confirm that there is no readily available information that would warrant a comprehensive examination. We conducted our review in accordance with generally accepted government auditing standards. A review is substantially less in scope than an examination, the objective of which is the expression of an opinion on [*subject matter*]. Accordingly, we do not express an opinion."

(See 10-506.2b. for an example of the scope paragraph of an incurred cost desk review; see 10-1007 for the format of the scope paragraph of an application of agreed-upon procedures report.)

d. The next scope paragraph should identify the established or stated criteria used to evaluate the proposal, submission, or system. For example, reports on audits of revised disclosure statements will state that the requirements of FAR and the applicable cost accounting standards were used as criteria in ascertaining the adequacy and compliance of the contractor's revision. Reports on postaward audits may indicate that the criteria used to evaluate the cost or pricing data were DoD's implementation of the law contained in FAR Subpart 15.4 and pertinent provisions of the contract. In a system report, summarize the areas that were evaluated. The following statement may be used, modified for DFARS and CAS applicability, as appropriate:

> "We evaluated the [*indicate proposed costs, type of submission, or system reviewed*] using the applicable requirements contained in the:
> - Federal Acquisition Regulation (FAR);
> - Defense FAR Supplement (DFARS) [*for non-DoD agencies, identify specific agency supplement - see 9-102.2 and 15-102.3*]; and

- Cost Accounting Standards (CAS)."

e. The scope statement should be modified depending on contractor CAS coverage. The following type statement should be included when the small business exemption applies:

> "The contractor claims exemption under 48 CFR 9903.201-1(b)(3) from the practices required by the Cost Accounting Standards Board rules and regulations because it considers itself a small business concern."

f. The last paragraph of the scope statement should provide information on how the contractor's significant internal control system(s) affected the scope of audit. However, see 10-400 when reporting on system audits. In addition, provide a statement, which informs the reader that the audit provides a reasonable basis for the audit opinion, e.g., "We believe that our examination provides a reasonable basis for our opinion."

(1) Summarize those accounting and management (business) systems that provide for compliance with laws and regulations for the audit area being evaluated. Generally, a reference to the status of the accounting and/or estimating systems (when applicable) would be sufficient. However, the status of other internal control systems should be reported if audits have disclosed deficiencies that directly impact the scope of the current audit. Include information such as:

- Opinion on the system (e.g., adequate or inadequate).
- Summary of outstanding deficiencies affecting the audit scope.
- Impact of the assessment of control risk on the audit scope.

As appropriate, refer to the Contractor Organization and Systems section for additional information on the systems. An example of this paragraph when the accounting system and related internal controls have been reviewed and are adequate and the estimating system is inadequate follows:

> "We consider [*Contractor name*]'s overall accounting system to be adequate. We currently consider the estimating system to be inadequate (*refer to the Contractor Organization and System section*). The contractor does not provide cost or price analysis on subcontractor price proposals to the Government prior to agreement on contract price. Our audit scope reflects our assessment of control risk and includes expanded testing of proposed subcontract costs to provide a reasonable basis for our opinion."

(2) At smaller contractors that do not have independent checks of compliance with policies and procedures (i.e., internal control) or where it is not beneficial to evaluate the internal controls to serve as a basis for reducing control risk (and related audit scope), the scope of audit should summarize this information. This would generally include cases where a post award accounting system audit under Activity Code 17740 has been performed since it is not a full-scope audit of internal controls. An example of this type of paragraph follows:

> "[*If a post award accounting system audit under Activity Code 17740 has been performed include the following sentence:* We consider [*Contractor name*]'s accounting system to be adequate (*or inadequate*) for accumulating and billing costs on Government contracts.] We have not specifically examined [*Contractor name*]'s internal controls. [*If the contractor is a small business add the following sentence.* The contractor is a small business with limited resources to be applied to compliance procedures and testing.] The scope of our examination reflects our assessment of control risk and includes those tests of compliance with applicable laws and regulations that we believe provide a reasonable basis for our opinion."

g. See 10-305.3 for example scope paragraphs for reports on parts of a proposal. See 10-1007 for scope paragraphs for application of agreed-upon procedures reports.

h. If a Government technical evaluation was performed in conjunction with the audit, the auditor will normally incorporate the technical report recommendations into the audit conclusions.

10-210.4 Qualifications

a. The purpose of this subheading within the scope of audit section is to disclose any circumstances which necessitate a qualified opinion. Circumstances having a significant effect on the conduct, scope, or results of the audit should be clearly identified if the conditions result in a qualified opinion in relation to the stated purpose and scope of the audit. In such case, both the "scope" and "results" paragraphs should specifically refer to this paragraph.

b. A qualified opinion states that, *except for* the effects of the matter to which the qualification relates, the subject matter of the assertion is in compliance with the established criteria (e.g., FAR/DFARS). A qualified opinion is expressed when:

(1) there is a lack of sufficient competent evidential matter or there are restrictions in the scope of the examination that have led the auditor to conclude that he or she cannot express an unqualified opinion and the auditor has concluded not to disclaim an opinion; and/or

(2) the auditor believes, on the basis of the audit, that the subject matter under audit contains a departure from the established criteria, the effect of which is material, and the auditor has concluded not to express an adverse opinion.

c. Restrictions on the scope of audit whether imposed by the requestor, the contractor, or by circumstances may require the auditor to qualify or disclaim an opinion. The decision to qualify or disclaim an opinion because of a scope limitation depends on an assessment of the importance of the omitted procedure(s) to the auditor's ability to form an opinion on the subject matter under audit. This assessment will be affected by the nature and magnitude of the potential effects of the procedures being considered and by their significance to the subject matter under audit. When restrictions that significantly limit the scope of the audit are imposed by the contractor or the requestor, ordinarily the auditor should disclaim an opinion (see 10-210.5d). However, scope limitations due to contractors' failure to make all pertinent records available to the auditor when the records pertain to the representations, claims, or proposals under audit would lead to reports that contain qualified or adverse opinions (see 1-504.1c. and 1-504.6).

d. The Qualifications paragraph should include only circumstances that result in a qualified opinion (see also 10-304.4). Examples of items that may be presented in this paragraph include, but are not limited to qualifications which arise from:

- contractor deficiencies, such as lack of access to or inadequate contractor records and systems;
- external impediments such as time limitations on the scope of audit, or nonreceipt of a required Government report of technical evaluation or assist audit report; or
- contractor failure to comply with formal regulatory requirements, such as FAR and CAS noncompliances where cost impacts could not be reasonably determined.

e. The nature and potential impact of each circumstance and any steps taken by the auditor to overcome or mitigate the problem should be briefly stated. Also explain further action the auditor plans to take after report issuance, if applicable. Keep this paragraph brief and include a reference to the report section and page number that contains a detailed discussion of the item involved.

f. If a required Government technical report was requested and is not received, indicate the reason for nonreceipt and a brief comment on the follow-up action taken to obtain the report from the organization involved. State the specific areas in which technical review is required to conclude the audit. Also recommend that the auditor be given an opportunity to review the results of the technical evaluation, determine its impact on the scope of audit

and its overall conclusions, and provide a supplemental report incorporating such evaluation.

g. If the auditor receives a technical report but does not agree with its recommendations, he or she will attempt to reconcile any disagreements with the specialist who prepared the report and/or with the specialist's supervisor. If necessary, assistance to resolve the differences will be solicited from the contracting officer. If the auditor is unable to resolve the differences, he or she should not utilize the technical report in developing the audit opinion or in determining the amount of the questioned costs. In such cases, however, the technical report will be attached to the audit report as an appendix, and the report will include an explanation of the reason the auditor did not rely on the recommendations included in the technical report. The circumstances should be adequately described and the related audit conclusion appropriately qualified.

h. Auditors should be aware that FAR 15.404-2(d) requires that contracting officers be notified in writing when cost or pricing data provided are so deficient as to preclude a satisfactory evaluation or when we encounter denial of access to data or records essential to performance of a satisfactory evaluation. Written confirmation should be accomplished early on in the evaluation and include a description of the deficient or denied data or records; explanation why the denied data or records are needed; explanation of documentation or contractor action needed to correct deficient cost or pricing data; the amount of proposed cost considered unsupported because of the deficient data or the questioned costs resulting from denial of access to records; and the action taken by DCAA to obtain adequate cost or pricing data.

i. If the auditor encounters scope limitations and FAR/CAS deficiencies resulting in the subject matter of an assertion not being presented in all material respects in accordance with the established criteria (adverse opinion), the limitations should be discussed in the Scope of Audit section (see 10-210.3 and 2-102.2); however, they should not be referred to as “qualifications.” The “except for” language should not be used when an adverse or disclaimer of opinion is rendered.

j. Where the auditor has assessed control risk at maximum; does not perform work sufficient to reduce audit risk to an acceptable level; and the data relied on during an audit is highly dependent on computerized information systems (see 5-111.1d), qualify the report, as exemplified below:

> “To achieve the planned audit objectives [*or, planned objectives for the ___ audit*], we relied extensively on information processed through the contractor's computerized systems [*or, name specific system(s)*]. We did not perform sufficient audit procedures to determine with reasonable assurance the reliability of the computer-processed information. Therefore, our audit results [*pertaining to ___*] are qualified to the extent that they could be significantly impacted by the performance of such procedures.”

10-210.5 Results of Audit

a. Depending upon the type of the evaluation, this section should provide the complete details regarding the auditor's opinion (refer to 10-210.4 for a qualified opinion), results of audit, or findings of procedures, conclusions, recommendations, and additional comments including the contractor's reaction to the report findings.

b. The Results section should begin with the phrase, "In our opinion. . ." if an examination was performed. If external factors restrict or limit the scope resulting in a scope qualification, modify the phrase as follows. “In our opinion, except for the (*describe the qualification and the potential impact on the results,). . .*” Do not use the term "opinion" in referring to the results of a review; instead, begin this section with the phrase, "Based on our review. . ." This section should contain exhibits and supporting schedules necessary for a clear and complete presentation of the evaluation results and recommendations. The words “exhibit” and “schedule” should be written entirely in

upper case letters when they are used as titles. See 10-210.6 for a discussion of explanatory notes.

c. In audits of proposed or historical cost, the Results of Audit section should begin with a single tabulation that quantifies the audit findings. If additional supporting tabulations are needed to provide further quantification, designate principal tabulations "exhibits" and identify them by capital letters in consecutive order; e.g., EXHIBIT A, EXHIBIT B, etc. (except a single exhibit should be designated simply as "EXHIBIT." Additional tabulations needed to explain any of the items in the principal exhibits will be designated "schedules." The content of the exhibits and schedules will vary depending on the type of audit report being prepared. Where there are findings in audits dealing with historical cost, the auditor makes a "recommendation." For findings in audits dealing with prospective costs (e.g., forward pricing proposals), the auditor does not "recommend" but may provide a "Difference" column which is intended for the use of the contracting officer in preparing a negotiation position (see 10-304.9). Review the appropriate section of this chapter to identify any specific requirements for the type of audit report you are preparing.

d. Disclaimer of Opinion. A disclaimer of opinion states that the auditor does not express an opinion on the subject matter under audit. A disclaimer is appropriate when the auditor has not performed an audit sufficient in scope to enable him or her to form an opinion on whether the subject matter is in accordance with the stated criteria. See 10-210.4 for factors to consider in deciding whether to qualify or disclaim the audit report opinion. When the auditor is disclaiming an opinion in an examination report, the first paragraph of the standard Results of Audit section should be modified as follows:

> "Due to *(state limitations in scope)* discussed in the Scope Restrictions' section, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on whether the [*identify the subject matter*] is in all material respects, based on [*identify criteria*] as discussed with [*the contracting officer or representative*] by [*auditor*] of our office on [*date*] and as confirmed in our [*memorandum/letter*] to you dated [*date*]."

An example of a disclaimer of opinion on a pricing proposal is as follows:

> "Due to the procurement-imposed time constraints discussed in the Scope Restrictions section, the scope of our work was not sufficient to enable us to express, and we do not express an opinion on whether the contractor's proposal is in all material respects, based on [*identify criteria, such as FAR, DFARS, other Agency supplement regulations, and CAS*] and, therefore, acceptable as a basis for negotiation of a fair and reasonable price as discussed with [*the contracting officer or representative*] by [*auditor*] of our office on [*date*] and as confirmed in our memorandum to you dated [*date*]."

e. Additional Remarks. Conclude the Results section of the report narrative with the following comments, as appropriate:

(1) Exit Conference

(a) In reports on all evaluations, state the date held and the name and title of the contractor's designated representative with whom the exit conference was held (see 4-304). If an exit conference was not held, the report should explain the circumstances.

(b) Summarize in this section the contractor's reaction to factual differences, the major areas of difference likely to be pursued at negotiations, and any other comments relevant to resolution of the findings. Detailed comments on the contractor's reaction to the report findings will be included in the explanatory notes. However, pursuant to FAR 15.404-2(c)(1)(i), do not disclose to the contractor the audit conclusions and rec-

ommendations on projected costs or rates that are subject to contracting officer negotiation, except as specifically requested by the negotiating contracting officer (4-304.2b).

(c) If the engagement is an evaluation other than those listed in 10-212.2c, include the following statement:

> "We provided a draft copy of [*the Report*] *or* [*the Results of Audit*] *or* [*the Statement of Condition and Recommendation*] *and/or* [*Other (describe)*] to the contractor's representative at the exit conference."

(d) When a contractor provides a formal, written response, it should be referenced within the Results of Audit section and included as an appendix to the audit report. Include the following statement:

> "The complete text of the contractor's response appears as Appendix [*X*]."

(2) Other Additional Remarks

(a) If information in the report was provided to the contracting officer in advance by telephone, make a confirming statement here identifying the information.

(b) Mention any subsequent or supplemental reports to be issued pertaining to unresolved costs or qualified opinion, if applicable. In most cases, inclusion of an opinion qualification that arises from an external impediment (see 10-210.4d) should be followed up with a comment regarding the intent to supplement the report (see 10-214.1 for a listing of circumstances when a supplemental report should be issued).

(c) In system audits, express appreciation for the contractor's support and cooperation extended during the audit, if appropriate.

(d) If audit effort was performed more efficiently because of self-governance activities (including coordinated audits), express appreciation for the contractor's cooperation and support. Following is an example of such a paragraph:

> "We wish to express our appreciation for the cooperation extended by [*insert contractor's name*]'s internal audit department during our audit. The coordination of our audit effort with that of the internal auditors enabled us to complete our audit of relocation costs more efficiently."

(e) If a Government technical evaluation was performed in conjunction with the audit, the auditor will normally incorporate the technical report recommendations into the audit conclusions (note the exception discussed under 10-210.4). In such cases the audit report should include an additional statement, such as the following:

> "The audit conclusions incorporate the dollar effect of the recommendations in the related Government report of technical evaluation performed by [*insert name of activity providing the review*]. The technical report is enclosed as Appendix [*X*]."

(f) The availability of the auditor to furnish additional services including attendance at negotiations will be presumed in routine audits. If an offer of special assistance or where auditor attendance at the negotiation conference is considered critical, insert a note to this effect. Since this is likely to be related to significant issues, the note would also be included at the conclusion of the Executive Summary. An illustration of the note is shown below:

> "Because the contractor contested certain significant issues raised in our recommendations (see Appendix [*X*]), we recommend that you invite a DCAA representative to attend the negotiation conference."

10-210.6 Explanatory Notes

a. Explanatory notes may be omitted in audit reports where there are no findings and the requestor has indicated that the information describing the basis of the cost and the audit evaluation would not be useful at negotiations. See 10-210.5b and c for a discussion on exhibits and schedules in the results of audit.

b. In reports that question contractor proposed costs, explanatory notes should contain detailed information such that the contracting officer is able to understand clearly the basis for each element of cost, how the cost was evaluated, and the conclusions made on the basis of that evaluation. Explanatory notes should be prepared for each significant cost element. When the contractor agrees with the audit findings, the explanatory note(s) may be abbreviated. When explanatory notes are redundant, a common note may be used, if the results can be presented more efficiently. For explanatory notes that deal with proposed costs, i.e., forward pricing, terminations, claims, incurred cost, etc., the general minimum criteria for the explanatory notes will include:

(1) Summary of Conclusions. Provide a brief summary of the audit exception. Provide the basis for any questioned or unsupported costs including a description of the costs and a specific reference to the regulatory support such as the cost principle, cost accounting standards, or contract terms.

(2) Basis of Contractor's Cost. Describe the basis of the contractor's submitted costs. As appropriate, provide references to the specific parts of the contract submission that provides more detail on the basis.

(3) Audit Evaluation. Provide a description of the audit procedures used to evaluate the cost element. Describe the procedures even if they did not result in questioned, unsupported or unresolved costs. Include details on the calculation of the audit exception. When quantitative methods are used as a basis for the audit conclusions, these methods should be described in the explanation. Include references to any “Qualifications” and fully describe the effect these circumstances have on the submitted costs.

(4) Contractor's Reaction. Provide a statement that the contractor either agreed or disagreed with the auditor's conclusions and the basis for any disagreement. For price proposal audits, discuss factual differences, and do not disclose to the contractor the audit conclusions and recommendations on projected costs or rates that are subject to contracting officer negotiation (4-304.2b)

(5) Auditor's Response. Provide any appropriate comments if the contractor disagrees with the auditor's conclusions.

c. For reports that do not deal with proposed costs, i.e., internal control examinations, and operations audits, if there are findings, the explanatory note should follow 10-409, Statement of Condition and Recommendation which addresses the six-element outline used to present a logical audit position. For CAS audits, which also use the Statement of Condition and Recommendations for explanatory notes, refer to the appropriate Results of Audit section in 10-800.

10-210.7 Contractor Organization and Systems

This section is designed to give the reader relevant information which impacts the scope and the results of the audit. Tailor it to the contractor's size and circumstances. When the contractor’s systems information was provided to recipients in a previous report and there have been no changes, the prior audit report can be referenced in lieu of repeating the information.

a. The “Organization” paragraph should provide relevant background information such as annual sales, percentage of Government sales, number of employees, facilities, intercompany relationships, and major services and products provided by the company.

b. The “Systems” paragraphs in internal control audit reports on accounting and management internal control systems should provide pertinent information on the system (see 5-102). For example, this paragraph could refer to the contractor's written policies and

procedures describing the system and briefly summarize the major areas covered by the policies and procedures. See 10-410 for an example of this paragraph. [The results of our internal control audits impact the scope of our attestation audits discussed below (see 3-305.4)].

c. The "Systems" paragraphs in attestation audits other than internal control audits should provide background information on each relevant internal control accounting and management system that impacts the evaluation (see 5-100). Include the following information for each relevant system:

(1) a brief description of the system or reference the previous internal control audit report or other reports that contain a description of the system. (If the addressee has not been provided a copy of the referenced report, attach a copy).

(2) our opinion on the overall system [adequate or inadequate].

(3) our assessment of control risk. The designation of low, moderate or high is not required but may be used for emphasis if desired. (See 3-300).

(4) a list of outstanding internal control deficiencies --- briefly describe each deficiency and the status of contractor corrective actions.

d. The assessment of control risk and the deficiencies listed in the "Contractor Organization and Systems" section that impact the area being audited should be discussed in the "Scope of Audit" (see 10-210.3).

e. The cost impact of any deficiencies affecting the audit should be described in the structured notes in the "Results of Audit" section.

f. During the audit, the auditor should ask about contractor's efforts to correct deficiencies and reflect the current status in the "Contractor Organization and Systems" section.

g. The "Contractor Organization and Systems" section should also be updated for new deficiencies observed during the audit (see 10-413).

10-211 DCAA Personnel and Report Authorization (Reports-General)

a. DCAA Personnel. For all reports, identify the primary point of contact for questions regarding the audit and provide telephone, e-mail and fax numbers where he or she can be reached. Include the telephone and fax numbers for the FAO as well as the onsite financial

The name of an auditor who has documented an unreconciled difference of opinion on audit findings may be excluded from the DCAA Personnel section of the applicable audit report if the auditor so chooses (see 4-403f(2)).

b. Signature.

(1) The report will be signed by the auditor authorized to do so in accordance with the provisions of DCAAR 5600.1, "Delegation of Signature Authority for Audit Reports and Other Related Documents," in most cases, the branch manager or resident auditor. No "command" or authority line is used on audit reports. As shown in Figure 10-2-3, "AUDIT REPORT AUTHORIZED BY:" is typed at the left margin below the last line of the narrative. The first line of the signature block is typed on the fifth line below this line.

(2) The signature on reports sent electronically should comply with the DCAA Correspondence Manual, C2.10.2.

/Signed/
ROBERT T. BROWN
Branch Manager
DCAA Arizona Branch Office

If someone other than the FAO manager signs the report use the following electronic signature format.

/s/ S. W. Jones
/for/ John W. Brown
Branch Manager
DCAA Arizona Branch Office

c. Relevant Dates. Use this section in customer requested assignments, primarily price proposal evaluations. These should include, at a minimum, the dates of ACO and PCO requests and the dates of any extensions (see Fig. 10-2-3).

10-212 Report Distribution and Restrictions (Reports-General)

10-212.1 Report Distribution

a. A separate page should be provided, after the signature page, to advise the report recipient of report distribution and restrictions. If e-mail addresses are available, include them for each recipient who is willing to receive the report electronically. The distribution list should properly identify each organization, with the exception of DCAA Field Detachment, which receives a blind copy of audit reports.

b. The report distribution is placed above the report restrictions as illustrated in Figure 10-2-4. Place long distribution lists on a separate sheet or sheets following the signature page; however, the location of such long distributions will be referenced on this page (e.g., see Appendix *X*, page *XX*).

c. For OMB Circular A-133 requirements refer to 13-706.7 and Figure 13-7-1.

d. Other special distribution requirements pertaining to certain types of reports will be stated in the following sections of this chapter. Provide copies of reports on lower tier subcontractors to FAOs cognizant of the upper tier contractor. Provide the name of the upper tier contractor and relevant contract numbers for ease in routing the report.

e. See 10-2S1 for e-mail distribution requirements for U.S. Army Tank-Automotive & Armaments Command (TACOM) – Code DAAE07.

f. A copy of all audit reports for non-DoD customers resulting from forward pricing, terminations, equitable adjustment claims, systems and incurred cost audits should be e-mailed to DCAA-FLA-NONDOD. Also see 15-100 for distribution requirements pertaining to non-DoD agencies.

g. See Figure 10-2-4 for restriction statements that should be included in reports. Restrictions 1, 2, and 4 in Figure 10-2-4 are mandatory for inclusion in all reports. The language in the figure should be used as shown except that the language in restriction 4 must be modified for the application of agreed-upon procedures reports (10-1011). Restriction 3 should be tailored for release applications as discussed in 10-212.2 and 10-212.3. Restrictions for release of the proposal report to an FMS customer are set forth in 10-307.3. In addition, if the report contains classified information, refer to 10-205.2 for guidance on classification markings. Restrictions used in applications of agreed-upon procedures are set forth in 10-1011.

10-212.2 Release of Audit Reports to the Contractor

a. As provided for in the Government Auditing Standards, DCAA routinely provides copies of draft reports for all audits, except those dealing with negotiation of forecasted costs or those dealing with costs potentially under litigation, to the contractor being audited for review and comment. (See also 4-303 and 4-304 regarding information to be discussed at interim and exit conferences.)

b. Except for the reports described in paragraphs c and d, either a copy of the report, or the Results of Audit section, or the Statement of Condition and Recommendation, and/or

other relevant section(s), as appropriate, will be provided to the contractor at the exit conference in draft form for written comment. As discussed in 4-303, the details of significant audit findings are provided to the contractor for comment at the time they are discovered. This allows for quick turnaround once the complete draft report is provided, since all findings will have already been fully discussed with the contractor. The contractor should be provided a reasonable amount of time to analyze the audit results and to submit its response for incorporation into the final report. However, this time should be minimal since the audit issues were discussed on a real-time basis during the evaluation. If the contractor's response is not provided in a timely manner, the final report should be issued stating that the report was provided for comments to the contractor but the comments were not received in time to incorporate them into the final report. If written comments are received after the report was issued, prepare a supplemental report if it will serve a useful purpose.

c. In order to avoid disclosing the Government's negotiating position, draft reports that include forecasted costs to be used in negotiations are not provided to the contractor unless specifically authorized by the contracting officer (FAR 15.404-2(c)(1)(i). The contracting officer may restrict the discussion of source selection information with an offeror (FAR 15.3). However, the auditor should fully discuss with the contractor any factual differences, unsupported items, cost or pricing data inadequacies, and CAS/FAR noncompliances and obtain the contractor's response for inclusion in the final audit report. Draft and final audit reports on the areas listed below are not provided to the contractor unless the contracting officer directs such release in writing.

- Individual Price Proposals
- Should Cost Reviews
- Forward Pricing Rate Proposals
- Evaluations of Part of a Proposal, including audits of specified cost elements and agreed-upon procedures
- FPR/FPI Price Redetermination Proposals, containing forecasted costs
- Equitable Adjustment and Termination Submissions, containing forecasted costs (refer to 12-507 for general guidance concerning equitable adjustment submissions)
- Other evaluations where the PCO restricts release to the contractor

The following contingent release statement shown on Figure 10-2-4 will be included as the third paragraph under "RESTRICTIONS" for these reports:

> "The Defense Contract Audit Agency has no objection to release of this report, at the discretion of the contracting agency, to authorized representatives of [*insert name of contractor or subcontractor to which the report pertains*]."

d. Draft and final reports that are of a privileged and sensitive nature (such as those reporting on unsatisfactory conditions (4-803.2) or which make reference to suspected irregular conduct or referral for investigation (4-700)) will not be provided to the contractor. These types of reports are not usually discussed with contractor representatives, and any inquiries concerning disclosure of the report information will be resolved in accordance with DoD 5400.7-R and the DCAA Freedom of Information Act Program.

e. The statement regarding release of the audit report solely at the discretion of the cognizant contracting agency pertains to the complete report including all appendixes. Frequently, a Government technical evaluation report may be included as an appendix to the DCAA audit report. If, for any reason, the Government activity supplying a technical evaluation has any objection to release of its report to contractor representatives, this must be highlighted under the "Audit Report Distribution and Restrictions" section of the report. For example:

> "The Defense Contract Audit Agency has no objection to release of this report. However, do not release the Government technical evaluation report included as Appendix *XX* of our report to [*contractor or subcontractor name*] without approval of [*name of Government agency supplying technical report*]."

f. Except for those reports described above which are not releasable, the distribution list provided in the final report will show the contractor as a recipient of the report (through the contracting officer). Final reports provided to the contractor through the contracting officer should omit the third paragraph shown in Figure 10-2-4 "RESTRICTIONS" related to DCAA having no objection to the release of the audit report. If the contractor requests a copy of any of these types of final reports after the report has been issued, coordinate with the contracting officer to determine if the contracting officer has any objection to DCAA providing a copy of the report directly to the contractor.

10-212.3 Release of Subcontract Audit Report to the Higher-Tier Contractor --- Proposals or Other Cost Submissions

a. When the report is on a subcontractor's proposal or other cost submission to a higher-tier contractor, the audit report "RESTRICTIONS" must contain a statement regarding the subcontractor's agreement or objection to release of the report or information to the higher-tier contractor. The release statement applies to all subcontract audit reports or summary information. The audit procedures on this matter are discussed in 9-106 for price proposals and 6-802.6 for incurred costs. The auditor should determine at the start of the audit whether the subcontractor would have any restrictions on release of the report to the higher-tier contractor. If so, the auditor should also discuss with the requestor if the audit should proceed, and if so, how the audit results could best be presented to provide for release to the higher tier contractor and maximize their usefulness to the recipient. (See 10-212.3d. below.)

b. The comment regarding subcontractor release restrictions will be included under the audit report "RESTRICTIONS." If a report is issued, the comment will appear either as a stand-alone comment or as a follow-on comment to the sentence provided in 10-212.2e., if required. If a cumulative allowable cost worksheet (CACWS) is issued, the comment may be included as a note in the CACWS.

c. If the subcontractor does not object to release of the report, use the following statements:

(1) If the sentence in 10-212.2c. is required, add the following as the second sentence in this paragraph:

> "Nor does this Agency or [*subcontractor name*] object to release of this report to authorized representatives of [*name of higher-tier contractor*]. See Appendix *XX* for a copy of the subcontractor's release statement."

(2) If the sentence in 10-212.2c. is not required, the following comment should be used on subcontractor release restrictions:

> "[*Name of subcontractor*] does not object to release . . ."

d. If the subcontractor objects to release of all or any part of the report information and the contingent release restriction (10-212.2c) is required, use a statement similar to the following:

> "The Defense Contract Audit Agency has no objection to release this report, at the discretion of the contracting agency, to the authorized representatives of [*name of contractor or subcontractor to which the report pertains*]. However, please note that [*subcontractor name*] objects to release of this report [*in its entirety*] to the higher-tier contractor, [*higher-tier contractor name*], because [*briefly summarize the reason(s) for the subcontractor's objection.] [If applicable, identify the specific information the subcontractor does not want released, delete 'in its entirety' above and add 'except to*

the extent that the subcontractor grants permission for its release.'] See Appendix *XX* for a copy of the subcontractor's statement of objection to release."

If the contingent release restriction (10-212.2c) is not required, use a statement similar to the following:

[*Subcontractor name*] objects to release of this report [*in its entirety*] to the higher-tier contractor, [*higher-tier contractor name*], because [*briefly summarize the reason(s) for the subcontractor's objection.*] [*If applicable, identify the specific information the subcontractor does not want released, delete 'in its entirety' above and add 'except to the extent that the subcontractor grants permission for its release*.'] See Appendix *XX* for a copy of the subcontractor's statement of objection to release."

e. If the subcontractor restricts release of only a portion of the report information (for example, historical labor hours), try to contain the restricted data in a schedule or appendix that can be conveniently removed from the report. In such a situation, the report "RESTRICTIONS" would include a statement describing what information cannot be released and advise that the report could be released if the restricted data were first removed. For example:

"The Defense Contract Audit Agency has no objection to release of this report, at the discretion of the contracting agency, to authorized representatives of [*insert name of contractor or subcontractor to which the report pertains*]. However, please note that [*subcontractor name*] objects to release of this report to the higher-tier contractor, [*higher-tier contractor name*], unless Schedule/Appendix *XX* is first removed, because it contains [*identify the data and briefly state the reason(s) for the subcontractor's objection*]. See Appendix *XX* for a copy of the subcontractor's statement of objection to release."

10-213 Appendixes (Reports-General)

a. Appendixes may be used when additional background information is needed to help the reader obtain a full understanding of circumstances or events. Types of appendixes include:

(1) Other Matters to be Reported;

(2) Subcontracts Requiring Contractor Cost/Price Analyses (see 10-308.2); and

(3) Chronology of Significant Events for postaward audits, equitable adjustment proposals and claims (see 10-607.1 and 10-1107.1).

The appendix entitled "Other Matters to be Reported" (10-308.1) is used to provide information, which cannot be conveniently shown in the exhibits and schedules and to present any financial management matters. Audit reports on annual indirect costs, may include an appendix on billing rates. When material is sufficiently important to an understanding of the audit as to require incorporation into an appendix, the text must specifically identify the appendix and briefly state its relationship to the point being made.

b. Appendixes may also be used when attaching stand alone documents that contain information which is pertinent to the audit. Examples of this type of appendix include such documents as assist audit reports, technical analysis reports, subcontractor release letters, contractor written responses, and indirect rate agreements.

c. When another report is referenced, (for example, when an estimating systems examination has disclosed a deficiency discussed in a price proposal evaluation) and the auditor does not know that the user has access to a copy, the referenced report should be furnished as an appendix.

d. Appendixes should be placed immediately after the Report Distribution and Restrictions section of the report. Refer to the appropriate section in this chapter dealing with the specific type of report being prepared for further guidance on the use of appendixes.

e. Identify appendixes by numbers in consecutive order; e.g., APPENDIX 1, APPENDIX 2, etc.

10-214 Supplemental Reports

10-214.1 Criteria for Use

a. Auditing standards provide for issuance of supplemental audit reports when the auditor subsequently becomes aware of information which, had it been known at the time the report was issued, would have affected the report conclusions.

b. A new report (with a different report number) rather than a supplemental report should be issued when the purpose of the report differs from the purpose of the original report. This is the case when a special report is issued to summarize results of audit in previously issued reports or when a follow-up report is issued on a system audit to determine if the contractor took adequate corrective action on reported findings.

c. A supplemental report has the same purpose as the original report, but generally revises the original report's conclusions or significantly modifies some of the report details. Before preparing a supplemental audit report, contact the contracting officer to determine if the supplemental report would serve a useful purpose. If not, do not prepare the supplemental report and document your discussion in the working papers.

d. Supplemental DCAA audit reports should be issued when:

(1) Events occurring after report issuance have a material effect on Government contract costs. Subsequent to the date of the audit report, the auditor concludes that one or more procedures considered necessary at the time of the audit, in the circumstances then existing, were omitted, if performance of such procedures results in significant findings.

(2) Subsequent to the date of the audit report the auditor became aware that additional facts regarding the subject of audit existed at the report date, and such facts affect the report.

(3) Additional time is needed to perform a complete audit (especially on major proposals, sensitive areas, or where there is potential for significant audit findings), however, circumstances do not permit a due date extension. In this case, a qualified report should be issued advising that a supplemental report will be forthcoming if negotiations have not been concluded and the report will serve a useful purpose.

(4) Relevant and material developments or events occurred after the date of the auditor's report that had a material effect on Government contract costs (such as, final determinations or resolutions of contingencies or other matters disclosed in the audit report or that had resulted in a departure from the auditor's standard report), for example:

- Required technical information is received after the audit report is issued and the results have a significant impact on the audit findings [10-304.4f.(1)].
- Additional information is received which is necessary to reflect resolution of unresolved costs contained in the audit report [10-304.4f.(2)].
- Additional supporting information is provided by a contractor during the negotiation conference that would affect the report conclusions. In some cases a memorandum for record/file may substitute for a supplemental audit report (See 9-107).

FAR 15.404-2(c)(3) requires that contracting officers should provide updated information that will significantly affect the audit to the auditor. Auditors should assure that any subsequent audits comply with generally accepted government auditing standards, including adequate testing of evidential matter and appropriate supervisory review. If this cannot be accomplished, there should be no appearance of concurrence with the updated information or implied amendment of the audit report recommendations.

e. If a report is not being supplemented as described in d. above, but must be issued with minor changes (e.g., to correct minor math errors), it should be marked as "revised" in accordance with 10-214.6 below.

10-214.2 General Requirements for Supplemental Reports

a. A supplemental report need not supersede the original audit report in its entirety. It can be limited to the affected item(s) of cost or other portions of the prior report and need not restate previous information or recommendations. However, when a report has been furnished in electronic format, it may be easier to replace the original report in its entirety. Because electronic reports are furnished to the user in "read-only" format; incorporating replacement pages may present difficulties. The auditor should contact the report user to determine his/her preference regarding receiving a replacement report or receiving one or more replacement pages.

b. If replacement pages are selected, make the task of incorporating revisions as easy as possible for the report recipient(s). Rather than instructing the addressee to make numerous pen and ink changes and page substitutions, it is often easier to replace a complete exhibit or schedule in the original report with a revised exhibit or schedule.

c. If inserting a revised narrative, exhibit, etc. of more or fewer pages than the original would require the renumbering of the complete report, and it is not prudent to replace the original report in its entirety, it is acceptable to leave some pages blank or use decimals after the page numbers to keep the pages in sequence. For example, assume that the original report exhibit covered pages 5 through 10 and schedule A started on page 11:

(1) If the new exhibit is 8 pages long rather than the original 6, number the last two pages 10.1 and 10.2. No other changes to the original report need be made and schedule A can still begin on page 11.

(2) If the revised exhibit was only 4 pages long rather than the original 6, the last two pages of the revision could include the following statement: "This page intentionally left blank." As in the example above, schedule A would still start on page 11.

d. Dollars examined, questioned costs, unsupported costs, etc. initially reported will frequently require revision as a result of issuance of a supplemental audit report. As a result, performance data previously reported in the DCAA management information system should be revised as appropriate.

10-214.3 Supplemental Report Format

Major components of a supplemental report are listed below. Discussion of the particular elements is contained in the referenced paragraphs. Except where noted, the format and contents of the supplemental report must comply with the basic audit report requirements in 10-204. For example, requirements for an audit report cover would not change, distribution requirements remain the same, etc.

Audit Report Cover Sheet (10-214.4)
Report Narrative (10-214.5)
- Subject of Supplemental Audit
- Executive Summary of Supplemental Audit
- Scope of Supplemental Audit
- Qualifications Affecting the Supplemental Audit
- Results of Supplemental Audit

10-214.4 Audit Report Cover Sheet

a. The report cover sheet and all supplemented pages should contain the original audit report number followed by the supplement number (e.g., S1, S2, etc.). If the original exhibit is to be replaced by a revised exhibit, all pages of the revised exhibit should show the supplement number.

b. The audit report cover sheet and subject line should identify the audit report as a supplement; for example, "Supplement to Report on Audit of Proposal . . ." Otherwise, the

cover sheet, subject, and addressee elements should be identical to the original report. The supplemental report should be dated to reflect the date the supplemental report is issued.

10-214.5 Report Narrative

The supplemental report can usually be limited to a narrative section setting forth the "Subject" and "Scope of Supplemental Audit," and "Results of Supplemental Audit" together with the attached supplemental exhibits, schedules, or individual pages. Comments on these areas follow:

a. Subject and Scope of Supplemental Audit. State the reason why the supplemental report is being issued. If applicable, mention whether the supplemental audit was limited to specific areas or items of cost. For example:

"This supplemental report incorporates the results of the Government report of technical evaluation, which was not received in time to be included in our original audit report dated . . ."

If there are any changes in the scope of audit statement as contained in the original report, make note of it in this paragraph. For example, a comment may be included that the scope of audit qualifications in the original report no longer apply.

b. Results of Supplemental Audit

(1) This paragraph will state the net effect of the supplemental report and the primary reason(s) for the change. For example:

"As a result of the technical review, total questioned costs of $ in our original report are revised to $, primarily because of recommended reductions to proposed material quantities and manufacturing labor hours."

(2) If applicable, state the name and title of the contractor's designated representative with whom the supplemental results were discussed (10-210.5e).

(3) Provide precise instructions to enable the report recipient to incorporate the new pages, exhibits, etc. into a complete (revised) report. In the example in a. above, extensive changes would be required as a result of incorporating the results of technical review. The original "Scope of Audit" paragraph would probably require revision and the "Qualifications" paragraph in the original report would have to be revised or eliminated in its entirety to delete the technical qualification; the "Results of Audit" paragraph would change to reflect the additional questioned costs and a change in the opinion; the comment on the intention to supplement the report would be eliminated; and the exhibit(s) and or schedule(s) in the original report would change. In this situation, this instruction paragraph would probably state the following:

"This supplemental report replaces our original report in its entirety."

If the original report is not being entirely superseded, instruct the recipient to make pen-and-ink changes or page substitutions. For example:

"Remove pages 2, 4, 6, and 7 from our original report and replace with the attached revised pages. Also, renumber page(s) . . ."

In this case, add the following additional comment:

"Except as noted above, all other comments contained in the original report remain unchanged."

10-214.6 Revised Report Format

If an electronically furnished report is not being supplemented as described in 10-214.1d. above, but is being reissued in its entirety with minor changes (e.g., to correct minor math errors), the word "Revised," in parentheses, should follow the audit report number on the cover sheet and in the header. Since no additional fieldwork was performed, the revised report should not carry a revised date. Do not identify the superseded audit report as a supplement (see 10-214.4). If subsequent revisions become necessary, they are to be identified as "Revision 2," "Revision 3," etc. The transmittal should identify the minor change(s) unambiguously.

10-215 Transmittal Memorandums and Routing

Report transmittals should not be used to convey information or comments that should be included in the report itself. For this reason, a transmittal memorandum or letter is not normally used for initial distribution of reports. However, it is acceptable to attach a transmittal letter to a report if it is helpful in highlighting an area for the contracting officer's consideration. A transmittal letter could also be used to explain special distribution to officials who seldom receive reports from the FAO. For example, if a report discloses a condition which we have been requested to identify by an entity outside the procurement community, the transmittal memorandum might say:

> "In accordance with your standing request to DCAA Headquarters, the attached report is distributed to your office because [*state the condition to be reported.*]"

Figure 10-2-1
Defense Contract Audit Agency Audit Report

DEFENSE CONTRACT AUDIT AGENCY

AUDIT REPORT NO. XXXX-XXXXX21000XXX

June 20, 20XX

PREPARED FOR: Procuring Contracting Officer
ATTN: AIR 2.2.1
Naval Air Systems Command Headquarters
Bldg. 2272
47123 Buse Road
Patuxent, MD 20670-1547

THRU: Administrative Contracting Officer
ATTN: DCMA-GXAF (J. Doe)
Defense Contract Management Agency, Phoenix
Phoenix, AZ 85034-1012

PREPARED BY: DCAA Arizona Branch Office
2741 W Southern Avenue Suite 14
Tempe, AZ 85034-3440
Telephone No. (602) 438-1854
FAX No. (602) 431-9745
E-mail Address dcaa-faoxxxx@dcaa.mil

SUBJECT: Report on Audit of Firm-Fixed-Price Proposal for Torque Inverters for Orville I

REFERENCES: PCO: RFP No. N00019-XX-P1-XXXXX
ACO: Case No. XXX-3A(02)-XX
Prime Contract No.: F33600-91-C-0045
Relevant Dates: See Page 17

CONTRACTOR: High Tech, Inc.
29 Scout Drive
Glendale, AZ 85300

REPORT RELEASE RESTRICTIONS: See Page 18

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Subject of Audit	1
Executive Summary	1
Scope of Audit	3
Results of Audit	4
Contractor Organization and Systems	16
DCAA Personnel and Report Authorization	17
Audit Report Distribution and Restrictions	18
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FOR OFFICIAL USE ONLY

Figure 10-2-2
Subject of Audit

Audit Report No. XXXX-XXXXX21000XXX

SUBJECT OF AUDIT

As requested by DCMA-Phoenix on May 14, 20XX, we examined the May 13, 20XX firm-fixed-price proposal submitted by High Tech, Inc. (HTI) to determine if the proposed costs are acceptable as a basis to negotiate a fair and reasonable contract price. The $1,141,268 proposal is for 28 Torque Inverters for the Orville I aircraft. This is a product made by this contractor on a sole source basis for the past five years, delivering the last order in December 20XX. The proposed performance period is August through November 20XX.

The proposal and related cost or pricing data are the responsibility of HTI. Our responsibility is to express an opinion on the proposal based on our examination.

EXECUTIVE SUMMARY

Our examination of the $1.1 million proposal disclosed $169,000 of questioned costs, including the following significant items:

Material	$86,000
Labor	9,000
Indirect expenses	66,000

The proposal is acceptable for negotiation of a fair and reasonable price. However, the significant issues described below should be considered in the negotiation process.

SIGNIFICANT ISSUES

1. The results are qualified because (i) we have not yet received a response to our request for technical assistance regarding purchased parts as discussed on page 4 and engineering labor as discussed on page 7 and (ii) HTI's noncompliance with CAS 401.

2. Costs proposed are overstated as follows:
   a. Material costs by 24 percent because of numerous pricing errors as a result of an outstanding estimating deficiency.
   b. Manufacturing labor costs by 12 percent because it did not use the appropriate historical accounting data in the improvement curve application.

3. Indirect expenses associated with questioned base amounts are also questioned.

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Figure 10-2-3
DCAA Personnel

Audit Report No. XXXX-XXXXX21000XXX

DCAA PERSONNEL

	Telephone No.
Primary contact(s) regarding this audit:	
Mary E. Green, Senior Auditor	(602) 561-3112
Kay J. Jones, Supervisory Auditor	(602) 561-3112
Other contact(s) regarding this audit report:	
John W. Brown, Branch Manager	(602) 379-4102
John A. Smith, Financial Liaison Advisor	(301) 757-7852
	FAX No.
[Office Name] (*Optional*)	(602) 379-4601
[FLA Name], Financial Liaison Advisor (*Optional*)	(301) 757-7866 (FLA)
	E-mail Address
[Office Name] (*Optional*)	dcaa-fao*xxxx*@dcaa.mil

General information on audit matters is available at http://www.dcaa.mil.

RELEVANT DATES

Request for Audit: PCO -- dated May 13, 20XX; received May 14, 20XX
ACO -- dated May 14, 20XX; received May 14, 20XX

AUDIT REPORT AUTHORIZED BY:

John W. Brown
Branch Manager
DCAA Arizona Branch Office

Figure 10-2-4
Audit Report Distribution and Restrictions

Audit Report No. XXXX-XXXXX21000XXX

AUDIT REPORT DISTRIBUTION AND RESTRICTIONS

DISTRIBUTION

	E-mail Address
Procuring Contracting Officer ATTN: AIR 2.2.1 Naval Air Systems Command Headquarters Bldg. 2272 47123 Buse Road Patuxent, MD 20670-1547	grayjs.jfk@navair.navy.mil
Administrative Contracting Officer ATTN: DCMA-GXAF (J. Doe) Defense Contract Management Agency Phoenix, AZ 85034-1012	jdoe@dcma.mil
Naval Air Systems Command ATTN: DCAA FLA (J. A. Smith) Bldg. 2272 AIR 2.0 47123 Buse Road Patuxent, MD 20670-1547	dcaa-fla-navair@dcaa.mil Telephone No. (301) 757-7852

RESTRICTIONS

1. Information contained in this audit report may be proprietary. It is not practical to identify during the conduct of the audit those elements of the data which are proprietary. Make proprietary determinations in the event of an external request for access. Consider the restrictions of 18 U.S.C. 1905 before releasing this information to the public.

2. Under the provisions of Title 32, Code of Federal Regulations, Part 290.7(b), DCAA will refer any Freedom of Information Act requests for audit reports received to the cognizant contracting agency for determination as to releasability and a direct response to the requestor.

3. The Defense Contract Audit Agency has no objection to release of this report, at the discretion of the contracting agency, to authorized representatives of HTI.

4. Do not use the information contained in this audit report for purposes other than action on the subject of this audit without first discussing its applicability with the auditor.

10-2S1 Supplement -- E-mail Distribution of Reports

In cases where DCAA offices provide information copies of DCAA self-initiated audits or DCMA requested reports to the U.S. Army Tank-Automotive & Armaments Command (TACOM) – Warren procurement offices (identified by Army Activity Address Number DAAE07), the reports should be e-mailed to DAMI_DCAAAuditReports@conus.army.mil. See 10-6S1 for distribution of defective pricing reports on any TACOM contract.

10-300 Section 3 --- Audit Reports on Price Proposals

10-301 Introduction (Proposal Reports)

a. This section presents guidance for preparing and distributing audit reports on:

- audit requests on pricing proposals for all types of negotiated contracts and modifications, (10-304) and
- audits of parts of a proposal, (10-305).

b. Guidance on reporting applications of agreed-upon procedures may be found in section 10-1000.

c. Audits of incurred costs under repricing proposals for incentive and price redeterminable fixed-price contracts are similar to other contract closeout audits. See 10-900 for reporting guidance on these types of audits.

d. Guidance on audit reports related to contract claims is in 10-1100.

10-302 Report Format and Contents (Proposal Reports)

a. General report requirements are set forth in 10-200. “Shell” reports containing the new report format are provided on the APPS and the DCAA Intranet. The audit report should contain the necessary and pertinent information disclosed by the audit, which will assist the contracting officer in negotiating with the contractor.

b. The auditor should coordinate with the customer while planning the audit. Reports should comment on areas emphasized in the request. For example, customers may want historical rate information, current proposed and recommended rates, or details on specific proposed costs.

c. Major audit report components are listed below in the sequence in which they generally appear. They are discussed in detail in the referenced paragraphs. Those components highlighted with an asterisk should appear in every DCAA forward pricing audit report.

Audit Report Cover Sheet (10-205)*
Report Narrative (10-304)*
  Subject of Audit (10-304.1)*
  Executive Summary (10-304.2)
  Scope of Audit (10-304.3)*
    Qualifications (10-304.4)
  Results of Audit (10-304.5)*
    Opinion (10-304.6)*
    Exhibits and Schedules (10-304.7)
    Additional Remarks (10-304.10)
Contractor Organization and Systems (10-306)*
DCAA Personnel and Report Authorization (10-211)*
Report Distribution and Restrictions (10-212)*
Appendixes (10-308)

10-303 Addressing and Distributing Reports (Proposal Reports)

10-303.1 Reports on Prime Contract Proposals

a. Reports on price proposal audits will usually be addressed to the individual who has responsibility for negotiating the proposal. This is either the PCO or the plant representative/ACO (if the PCO has delegated negotiation authority). (See 10-206 for general policy on addressing reports.) If there is doubt about the correct addressee, ask the plant representative/ACO if she or he has been delegated procurement authority to execute the contract pricing action involved.

b. If the report is addressed to the PCO (other than the plant representative/ACO acting as a PCO), and DoD field pricing support procedures apply (9-100), provide the original copy of the report to the plant representative/ACO for transmittal to the PCO. "Thru" addressing may be used for this purpose (see 10-206.4).

c. If "thru" addressing is used, provide an advance copy of the report to the PCO. This will allow the PCO to begin advance preparation for negotiations. A routing slip may be used for this purpose. In such cases, the audit report distribution list (10-212) should identify this advance distribution to the PCO.

d. Provide a copy of the report to the appropriate FLA (see the FLA Locator on the DCAA Intranet site). Also provide a copy of each prime contract price proposal audit report to the NASA OIG Center Director (see 15-1S1) if NASA so requests.

10-303.2 Reports on Intracompany and Subcontract Proposals

a. If this is a DoD procurement (9-100 and FAR 15.404-2 /DFARS 215.404-2), an audit report of an intracompany or subcontractor proposal will be addressed to the plant representative/ACO responsible for the segment or subcontractor submitting the proposal. Copies of the audit report will be distributed to the plant representative/ACO and auditor cognizant of the upper tier contractor. Note that the assist audit report should still be addressed and distributed in the above manner even if the assist audit was requested by DCAA (see 9-104.2 and 9-104.4).

b. If the procurement is not for DoD or is a foreign direct sale, and the PCO requests audit assistance directly from the prime contractor auditor, address the reports on audits of subcontractor and intercompany proposals to the requesting PCO. Provide a copy to the plant representative/ACO responsible for the audited segment or subcontractor, unless he or she expressly prefers not to receive copies of such reports.

10-304 Report Narrative (Proposal Reports)

10-304.1 Subject of Audit

a. This section refers to the audit request and identifies the contractor's assertion by stating the nature and amount of the pricing action (See 10-210.1). The opening statement could read as follows:

> "As requested by [*insert requestor's organization*] on [*insert date*], we examined the [*insert contractor's name*]'s [*insert date of proposal and type of proposal*] proposal submitted in response to RFP number [*insert RFP No.*] to determine if the proposed costs are acceptable as a basis to negotiate a fair and reasonable contract price. The $[*insert price*] proposal is for [*describe product*]. The contractor proposed a performance period of [*date*] through [*date*]."

> "The proposal and related cost or pricing data [*or information other than cost and pricing data*] are the responsibility of the contractor. Our responsibility is to express an opinion on the proposal based on our examination."

b. Modify the opening for any additional cost or pricing data or information other than cost and pricing data submissions that were audited (e.g., a revised submission or supplemental data). If the effort performed was limited to agreed-upon procedures, reference to an examination should not be used. The last sentence should be modified to something like: "*The purpose of our engagement was to [*insert purpose of engagement*]*."

10-304.2 Executive Summary

a. The Executive Summary highlights the audit results and the significant issues, findings, recommendations and/or qualifications (see 10-210.2). Details are provided in the "Results of Audit" section, along with the explanatory notes, exhibits and schedules. Examples of results, which may trigger the need for an Executive Summary are:

- Adverse or Disclaimer of opinion (see 10-304.2c)
- Significant questioned, unsupported or unresolved costs
- Significant estimating system deficiencies
- Recommendation to delay contract negotiation
- Significant qualifications
- Significant instances of CAS or FAR noncompliance

b. Begin this paragraph with a summary of the amounts questioned, unsupported, or unresolved in relation to the amount proposed. Wherever possible, describe the major components of the questioned costs and state whether the proposal is [or is not] acceptable as a basis for negotiation. For example, a summary statement might read:

"Our examination of the $1.1 million proposal disclosed $169,000 of questioned costs, including the following significant items:

Material	$86,000
Labor	9,000
Indirect expenses	66,000

The proposal is acceptable for negotiation of a fair and reasonable price; however, the significant issues described below should be considered in the negotiation process.

SIGNIFICANT ISSUES:

1. The results are qualified because (i) we have not received our requested technical analysis of purchased parts (see page 5) and engineering labor (see page 7) and (ii) the contractor is in noncompliance with CAS 401 (see page 6).
2. The contractor overstated:
   a. Material costs by 24 percent because of numerous pricing errors as a result of an outstanding estimating deficiency.
   b. Manufacturing and labor costs by 12 percent because it did not use the appropriate historical accounting data in the improvement curve application.
3. Indirect expenses associated with questioned base costs are also questioned."

c. Do not include questioned dollar amounts in the Executive Summary when an adverse opinion is issued in an audit report. Including dollar amounts for exceptions found might give the negotiator the impression that audit exceptions may be used for negotiating a contract price.

10-304.3 Scope of Audit

a. Every audit report requires a description of the work performed (see 10-210.3). The scope paragraph for proposal audits addresses the following:

- Generally accepted government auditing standards
- Evaluation criteria (FAR, DFARS, other Agency supplement regulations, and CAS)
- Internal control structure (assessed control risk)
- Qualifications (10-304.4)

b. Following is the mandatory scope paragraph. Auditors should adjust the criteria (i.e. applicable regulations and/or law) to fit the situation.

"Except for the qualifications discussed below (*omit if there is no "Qualifications" section within the "Scope" paragraph*), we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance that the proposal is free of material misstatement. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the amounts and disclosures in the proposal;
- assessing the accounting principles used and significant estimates made by the contractor;
- evaluating the overall proposal presentation; and
- determining the need for technical specialist assistance [*and quantifying the results of a Government technical evaluation report*].

We evaluated the proposed costs using the applicable requirements contained in the:

- Federal Acquisition Regulation (FAR);
- Defense FAR Supplement (DFARS) [*for non-DoD agencies, identify specific agency supplement - see 15-102.3*]; and
- Cost Accounting Standards (CAS) [*only if the potential contract will be CAS covered*]."

c. The next paragraph in the Scope of Audit section should comment on the results of audits of the contractor's accounting and estimating systems and the impact of the control risk assessments on the scope of the proposal audit. Ensure the comments are consistent with the information in the "Contractor Organization and Systems" section (see 10-306). Outstanding system deficiencies that impact the scope of audit should be disclosed until those deficiencies are corrected (see 5-1217).

For a contractor where internal control audits of the contractor's overall accounting and estimating systems have been performed, these comments might read as follows:

"We consider ABC's overall accounting and estimating systems to be adequate [*or inadequate*] (see Contractor Organization and System section). [*If inadequate, briefly describe the impact of any outstanding deficiencies on the audit scope*.] The scope of our examination reflects our assessment of control risk and includes audit tests designed to provide a reasonable basis for our opinion."

For a nonmajor contractor where a post award accounting system audit under Activity Code 17740 has been performed and an estimating system audit has not been performed, the following comments may be appropriate:

"We consider ABC's accounting system to be adequate (*or inadequate*) for accumulating and billing costs on Government contracts. We have not specifically examined ABC's accounting system internal controls, nor have we examined its estimating system and related internal controls (see Contractor Organization and Systems section). The scope of our examination reflects our assessment of control risk and includes tests of compliance with applicable laws and regulations that we believe provide a reasonable basis for our opinion."

10-304.4 Qualifications

a. The scope of audit section will (see 9-211.2) disclose any circumstances that necessitate a qualified opinion. Only include circumstances with a significant impact on the

conduct or scope of the audit and its results. Briefly describe each qualification and its impact on the scope and results of audit, referring to the report page number, exhibit, schedule, or appendix paragraph containing details. The negative impact of each qualification, including an estimated monetary impact, when possible, should be provided. If an estimated impact can not be provided, recommend that the contracting officer take action(s) to protect the Government's interest. Although Agency guidance specifically permits reference to an appendix, report qualifications usually affect an element of proposed costs. The results of audit paragraph is the preferred location for this information. If the potential impact of an issue is not significant, the report should not be qualified. When an adverse opinion is expressed, scope limitations should not be referred to as qualifications. The "except for" language should not be used in an adverse opinion (see 9-211.3).

b. The FLAs have been asked to bring any audit reports which appear to have inappropriate qualifications to the attention of the Auditing Standards Division (PAS) in Headquarters. Such reports will be forwarded to the cognizant Regional Director, who will be asked to furnish his personal assessment to Headquarters.

c. Examples of items to be noted in the qualifications paragraph include:

(1) lack of access to contractor records, including budgetary data (see 1-504)

(2) time limitations on the scope of audit

(3) failure to obtain the results of a requested assist audit or technical analysis

(4) estimating system deficiencies that result in either significant unsupported costs or an estimate which is not current, accurate, and complete

(5) instances of CAS or FAR noncompliance when the impact of these deficiencies could not be determined on the proposal being audited; however, these deficiencies are not considered significant enough to warrant an adverse opinion

(6) deficiencies which render the accounting system inadequate for the contract type proposed

(7) incomplete historical cost audits for prior years when the forecasted rates or recommended rates are based on those prior years

(8) major contractor acquisitions, mergers and internal reorganizations that are so significant that the effect on the price proposal cannot be reasonably determined but is expected to be material

(9) indirect flow-down costs from foreign companies located in countries covered by reciprocal audit agreements (see 4-1007).

The following subparagraphs provide sample paragraphs under various circumstances.

d. If the contractor has denied access to records or other pertinent data having a significant effect on the examination, identify the records or data and describe the resulting restrictions or limitations on the scope of the audit. (See FAR 15.404-2(d).) Costs that the auditor is not able to evaluate due to denial of access to records/data should be questioned in the audit report. Depending on the significance and pervasiveness of the costs, the auditor should issue either a qualified or an adverse opinion (CAM 10-210.4). An example of a qualification statement describing an access to records problem follows:

> "We were denied access to labor cost estimating worksheets that are required to adequately evaluate the direct labor costs included in the proposal. We discussed this condition with Mr. R. Smith, ABC's Controller, on October 1, 20XX and notified Mr. J. Jones, ACO, of the denial of access by telephone and memorandum on October 2, 20XX. See Page 6, Note 4 for further discussion. We were unable to evaluate these costs by other audit procedures. Therefore, our opinion regarding these costs is qualified, and we have questioned the costs in their entirety."

e. When the scope of audit is limited because of insufficient time, clearly indicate those areas in which an audit was not accomplished (9-211.4). State if additional time was re-

quested but not granted, or granted only in part. An example of a statement to be included in this situation follows:

> "We were unable to complete our examination of labor cost because of time limitations. [*Briefly explain the reasons why time was insufficient*.] We requested an extension of the audit report due date from [*name*] on [*date*]. The requested extension was not granted because [*briefly explain reason*]. Therefore, the results of our examination are qualified to the extent that a supplemental examination of labor cost may disclose additional questioned costs. See page *XX*, Note *X*, for further discussion."

f. If a requested technical or assist audit report is not received in time to be incorporated into the audit report, state that fact and, if known, the reasons for nonreceipt.

(1) Nonreceipt of technical input. The report should be qualified stating the adverse impact on the scope and results of audit based on not receiving the technical report for incorporation in the audit. Also provide a brief comment on the follow-up action taken to obtain the required technical information or report. State whether the technical evaluation will be performed and identify the organization responsible for performing it. Also provide a brief comment on the status of the technical evaluation, if known, and on any future reporting action contemplated after receipt of the report. If the required technical information is received after the audit report has been issued, prepare a supplemental report if it would serve a useful purpose at negotiations. (Further guidance on reporting the use of technical specialist assistance is provided in D-300. Detailed examples of report qualification statements are also presented in D-300.)

(2) Nonreceipt of Assist Audit Report. An example of a statement that could be used when waiting for an assist audit report follows:

> "Analysis of available documentation in the contractor's files applicable to proposed subcontract costs showed that an evaluation by another DCAA office is needed to reach a definitive conclusion regarding the acceptability of the proposed subcontract costs. We requested an assist audit from our DCAA Resident Office at ABC Corporation. However, we did not receive the results in time for incorporation into this report. We anticipate receipt of the assist audit report on or about [*date*]. The results of the assist audit are considered essential to the conclusion of this examination. Therefore, the audit results are qualified to the extent that additional costs may be questioned based on the results of the assist audit of proposed subcontract costs. See page *XX*, Note *X*, for further discussion. Upon receipt of the assist audit report, we will provide a supplemental report if contract negotiations have not been concluded and the supplemental report would serve a useful purpose."

This example assumes that the results of the assist audit are considered essential and that the "Results of Audit" will recommend that negotiations not be held until the assist audit results are considered. The qualification should not be included if the assist audit results are not considered essential to the conclusion of the audit and negotiations.

g. If estimating deficiencies discovered during the proposal audit result in either significant unsupported costs or an estimate which is not current, accurate, and complete, provide a brief explanation of the deficient condition and the specific action required to correct it. (See 5-1217, 9-205, 9-310, and 10-413 for specific actions required.)

(1) An example of a qualification statement (scope limitation if adverse opinion) addressing unsupported costs resulting from estimating system deficiencies might read:

> "We discovered proposed costs that were not supported by data sufficient to reach a definitive conclusion regarding their acceptability. The contractor has not updated its indirect rates to reflect an accounting change that took effect on January 1, 20XX. In addition, the contractor's price/cost analysis of $1.8 million of subcontract costs

proposed by ABC, Inc. was inadequate to form the basis to reach a reasonable price. We sought the assistance of both the ACO and PCO and advised them on [*date*] of the items and the types of documentation necessary to support the costs (see Page *X*, Note *X*). If the contractor furnishes adequate supporting documentation prior to negotiations, we will provide a supplemental report to dispose of the unsupported costs if such a report would serve a useful purpose."

(2) Example qualification statements covering an estimating deficiency discovered during the audit of a price proposal follow:

"We consider the procedure by which the contractor estimated the proposed direct labor cost to be unacceptable because the proposed hourly rates include unreasonable and unsupported increases for wage escalations. To correct the deficiency cited the contractor must develop new labor rates commensurate with the most recent union contract. A detailed discussion of the circumstances is presented on page *X*, Note *X*, of the Results of Audit."

"The contractor has not prepared budgetary forecasts for the entire proposed period of contract performance. [*Briefly explain what cost elements and period are not covered.*] In our opinion, comprehensive budgetary data are required to facilitate the preparation of reliable cost estimates and as a basis for financial control over costs during contract performance. We were unable to determine by other audit procedures the possible impact that budgetary data would have on the proposed direct costs, indirect expense rates, and related allocation bases. See Page X, Note X for further discussion. Therefore, our opinion regarding these costs is qualified. We discussed this deficiency with Mr. R. Smith, ABC's Controller on October 10, 20XX. Mr. Smith stated that ABC will prepare the budgetary forecasts and submit a revised proposal by October 20, 20XX. Upon receipt of a revised proposal, we will provide a supplemental report if contract negotiations have not been completed and the supplemental report will serve a useful purpose."

(3) As noted in the above qualification statement, a detailed discussion of the deficient condition should be included in the explanatory notes within the "Results of Audit" section.

(4) DFARS 215.407-5-70(g) requires that once a significant estimating system deficiency is cited, subsequent field pricing reports will mention the outstanding deficiency until it is resolved. Accordingly, the discovered deficiency should be added to the list of outstanding estimating deficiencies in the "Contractor Organization and Systems" section of the report (see 10-306). This listing should include a brief description of the deficiency and the status of contractor actions.

h. If instances of CAS and FAR noncompliance have a significant effect on the evaluation or the audit results, state this and define the specific corrective action the contractor needs to take. A detailed discussion of the deficient condition should be provided in the Contractor Organization and Systems section.

i. If the contractor's accounting system is inadequate to determine the costs under the contract type proposed, state this and identify the contractor action required to make the accounting system adequate. A detailed discussion should be provided in the Contractor Organization and Systems section of the report narrative.

j. If the only effective method available to the auditor for evaluating proposed indirect forward pricing rates requires reliance on the results of historical overhead audits for prior years, and such historical audits are not reasonably current, the circumstances should be described and the potential effect on the audit conclusions defined (see 9-702.2).

k. If the contractor is involved in a major acquisition, merger, or internal reorganization that is estimated to have a material impact on direct costs and indirect rates, state

this and recommend a savings clause if appropriate. A detailed discussion should be provided in the Contract Organization and Systems section of the report.

l. If the proposal/submission includes indirect flow-down costs audited by foreign auditors under a reciprocal agreement clearly identify the costs that the FAO did not audit (see 4-1007). An example of a qualification statement to be included in this situation follows:

"The contractor's [*submission/proposal*] includes [*describe type of costs*] costs from a foreign contractor, [*foreign contractor's name*]. A reciprocal agreement with [*foreign country*] provides for those costs to be audited by [*foreign country*]. We have not performed the procedures required by applicable auditing standards to incorporate the foreign auditor's results into our audit report. Therefore, our opinion is qualified accordingly. The [*foreign country*] auditors will forward their audit report directly to your office. [*OR alternately, if applicable*] We forwarded the [*foreign country*] audit report to your office on [*date*]."

10-304.5 Results of Audit

The Results of Audit section for forward pricing proposals consists of the following subsections which are discussed in greater detail below:

Audit Opinion (10-304.6)
Contractor's Submission and Audit Evaluation (10-304.7)
Questioned, Unsupported and Unresolved Cost (10-304.8)
Difference (10-304.9)
Additional Remarks (10-304.10)

10-304.6 Audit Opinion - Pricings

Begin this section with the opinion paragraph. Reporting standards (see Chapter 2) require that the auditor express an opinion on the adequacy of submitted cost or pricing data or information other than cost and pricing data, compliance of the proposal with applicable regulations, such as FAR, Part 31 and CAS, and the acceptability of the overall proposal for negotiation of a fair and reasonable price. 9-211 provides additional information about the types of audit opinion.

a. The auditor's opinion on the assertion and submitted cost or pricing data or information other than cost and pricing data generally can be categorized in one of the following three areas:

- completely acceptable (adequate),
- generally acceptable except for some minor deficiency (inadequate in part), or
- unacceptable (not adequate).

FAR, Part 15 is often used in determining if the assertion is adequate (see 9-200). Additionally, the proposal may be in various degrees of compliance with promulgated Cost Accounting Standards or FAR, Part 31. For reporting purposes, these include:

- no instances,
- insignificant instances, or
- significant instances of noncompliance.

b. The auditor's opinion serves as the basis for the overall opinion on the acceptability of the proposal for negotiation of a fair and reasonable price. For example, an opinion that the assertion is not adequate or that significant FAR and CAS noncompliances exist will likely result in an overall opinion that the proposal is not acceptable as a basis for negotiation of a fair and reasonable price.

c. The following table, along with the subsequent paragraphs, can help to prepare an appropriate opinion paragraph. To use the table, read down and across under the appropriate categories for adequacy and compliance. The numbers where the lines intersect

represent the corresponding numbers of the sentences found in Section d, Opinion Statements. Combine these sentences in the order shown to present a complete opinion statement for the report. Minor changes in wording, such as references to proper exhibits, pages and notes should be made to fit each specific report.

	Adequacy of Cost or Pricing Data or Information Other Than Cost or Pricing Data			
FAR/CAS Noncompliance	Adequate (9-211.1)	Inadequate In Part (9-211.2)	Not Adequate Contractor's Fault (9-211.3)	Not Adequate and Access to Data Denied (9-211.3)
No Instances (9-211.1)	1,5,8 (1,5,15)*	2,5,13 (2,5,15)*	5,3,10	5,4,10
Instances with Limited Impact (9-211.2)	1,6,12 (1,6,15)*	2,6,14 (2,6,15)*	6,3,10	6,4,10
Instances with Significant Impact (9-211.3)	1,7,9	2,7,9	3,7,11	4,7,11

*Use these paragraphs when recommending that price negotiations not be concluded for a reason not resulting from the contractor's action or inaction (e.g., nonreceipt of a technical or assist audit report) (see 9-211; also see Appendix D-303 for examples of opinion statements qualified for nonreceipt of a Government technical evaluation). If noncompliances having a significant impact on the proposal taken as a whole or inadequate cost or pricing data or information other than cost or pricing data are encountered, an appropriate combination ending with paragraph 9, 10, or 11 should be selected.

d. Opinion Statements. The following sentences (referenced in the above matrix) comment on the adequacy of the cost or pricing data or information other than cost or pricing data and the degree of compliance of the proposal with CAS and FAR and, when combined, provide a summary opinion statement on these issues. The comments on compliance with appropriate provisions of FAR generally relate to FAR, Part 31 on the cost principles. The contractor's degree of compliance with FAR, Part 15 serves as the basis for the opinion on the adequacy of cost or pricing data. If the report includes a qualification paragraph within the scope of audit, the audit opinion must be qualified. The audit opinion should be referenced to the qualification statement that resulted in the qualified opinion. For example, the report will state "In our opinion, except for the (*describe the qualification and the potential impact on the results*)."

Every audit opinion should start with the words "In our opinion." Add "In our opinion" to the beginning of the first sentence selected in the matrix.

Adequacy of Cost or Pricing Data/Info Other than Cost or Pricing Data:

(1) "The offeror has submitted adequate cost or pricing data [*or information other than cost or pricing data*]."

(2) "The cost or pricing data [*or information other than cost or pricing data*] submitted by the offeror are inadequate in part (see comments on page _, Exhibit _, Note _). However, the inadequacies described are considered to have limited impact on the subject proposal."

(3) "The cost or pricing data [*or information other than cost or pricing data*] submitted by the offeror are not adequate (see comments on page _, Exhibit _, Note _)."

(4) "The cost or pricing data [*or information other than cost or pricing data*] submitted by the offeror are not adequate (see comments on page _, Exhibit _, Note _). In addition, the offeror denied access to data needed to evaluate the proposal, as described in the Scope of Audit section of the report." [*Before this paragraph is used in the report, (a) it should be cleared with the regional office, (b) the ACO and PCO should be advised and (c) the contractor should be informed of its content. Identify the specific data denied and explain why it is needed (see 9-205d and 10-210.4h and i).*]

FAR/CAS Compliance/Noncompliance:

(5) "The proposal was prepared in accordance with [*if CAS covered, add* "applicable Cost Accounting Standards and"] appropriate provisions of FAR Part 31" [*if an agency supplement to FAR applies (9-102.2 and 15-102.3), add* "and the (*name the agency*) Supplement"].

(6) "The proposal was not prepared in all respects in accordance *with [if CAS covered, add* "applicable Cost Accounting Standards and"] appropriate provisions of FAR Part 31" [*if an agency supplement to FAR applies (9-102.2 and 15-102.3), add* "and the (*name the agency*) Supplement"] (see comments on page _, Exhibit _, Note _). However, the noncompliances are considered to have a limited impact on the proposal taken as a whole."

(7) "The proposal was not prepared in all respects in accordance with [*if CAS covered, add* "applicable Cost Accounting Standards and"] appropriate provisions of FAR Part 31 [*if an agency supplement to FAR applies (9-102.2 and 15-102.3), add* "and the (*name the agency*) Supplement"] (see comments on page _, Exhibit _, Note _)."

Acceptability of Proposal for Negotiation of a Price:

(8) "Therefore, we consider the proposal to be acceptable as a basis for negotiation of a fair and reasonable price."

(9) "Because the [*FAR and/or CAS*] noncompliances are considered to have a significant impact on the proposal taken as a whole, we do not believe the proposal is an acceptable basis for negotiation of a fair and reasonable price, as discussed with [contracting officer or representative] by [auditor] of our office on [*date*] and as confirmed in our [*memorandum/letter*] to you dated [*date*]. At your request, we have, nevertheless, evaluated the proposal to the extent possible in the circumstances."

(10) "Because the cost or pricing data [*or information other than cost or pricing data*] inadequacies are considered to have a significant impact on the proposal taken as a whole, we do not believe the proposal is an acceptable basis for negotiation of a fair and reasonable price, as discussed with [*contracting officer or representative*] by [*auditor*] of our office on [*date*] and as confirmed in our [*memorandum/letter*] to you dated [*date*]. To make the cost or pricing data [*or information other than cost or pricing data*] adequate, the offeror must [*insert offeror actions needed to resolve the noted inadequacies/deficiencies*]. At your request, we have, nevertheless, evaluated the proposal to the extent possible in the circumstances."

(11) "Because the noncompliances and inadequacies are considered to have a significant impact on the proposal taken as a whole, we do not believe the proposal is an acceptable basis for negotiation of a fair and reasonable price, as discussed with [*contracting officer or representative*] by [*auditor*] of our office on [*date*] and as confirmed in our [*memorandum/letter*] to you dated [*date*]. To make the cost or pricing data adequate, the offeror must [*insert offeror actions needed to resolve the noted inadequacies and/or deficiencies*]. At your request, we have, nevertheless, evaluated the proposal to the extent possible in the circumstances."

(12) "Because the [*FAR and/or CAS*] noncompliances are considered to have a limited impact, we believe that the proposal is an acceptable basis for negotiation of a fair and reasonable price."

(13) "Because the cost or pricing data [*or information other than cost or pricing data*] inadequacies are considered to have a limited impact, we believe that the proposal is an acceptable basis for negotiation of a fair and reasonable price."

(14) "Because the noncompliances and inadequacies are considered to have a limited impact, we believe that the proposal is an acceptable basis for negotiation of a fair and reasonable price."

(15) "Nevertheless, in our opinion, the [*name the item(s) considered essential*] discussed in the Qualifications section of the report [*is/are*] significant enough to materially impact the results of the audit. Therefore, as discussed with [*contracting officer or representative name and title*] by [*auditor*] of our office on [*date*], we recommend that contract price negotiations not be concluded until the results of [*item(s) needed*] are considered by the contracting officer."

e. Disclaimer of Opinion. In rare instances constraints may be placed upon the auditor by the requestor (see 9-211.4a.) which necessitates a disclaimer of opinion. In these instances follow the specific guidance in 10-200 in issuing a disclaimer of opinion.

10-304.7 Contractor's Submission and Audit Evaluation

The second part of the "Results of Audit" section should present the contractor's submission and audit results by cost element in an exhibit type format with appropriate explanatory notes.

a. Exhibits and schedules included in the report will state the results of audit using columns labeled "Questioned Costs," "Unsupported Costs," and "Unresolved Costs" (see 10-304.8). These columns should be used only if costs are to be reported in them; otherwise, they should be omitted from the format. The exhibits and schedules should be supported by explanatory notes, and where appropriate, cross-referenced to the narrative body of the report.

b. A "Differences" column (proposed cost less questioned, unsupported and unresolved costs by element) may be included at the right of the exhibit, if this would be of value to the requestor.

c. Explanatory Notes. The auditor should use a structured format to give the reader a clear and complete presentation of the audit results and recommendations on all items in the contractor's proposal (see 10-210.6). Use the following subheadings, as appropriate, to structure your notes for each significant cost element in the contractor's proposal.

- Summary of Conclusions
- Basis of Contractor's Cost
- Audit Evaluation
- Contractor's Reaction (see 4-304.2b)
- Auditor's Response

d. Quantitative Methods.

(1) When quantitative methods are used as a basis for the audit conclusions; this should be disclosed in the explanatory note for the individual cost elements examined. The explanatory note must disclose whether the auditor used either a nonstatistical or statistical sample as a basis for the audit conclusions. The note should adequately explain the computations and rationale supporting the audit conclusion, and it must also include details concerning the sample universe, the sampling method, and sampling unit. The note will state whether the statistical sampling results were projected to the sampling universe. If the sample results were projected to the sample universe, the note will also include the confidence level and confidence interval boundary amounts. If the results were not projected, the note should explain the reasons why the results could not be projected.

(a) An example of an explanatory note where the sample results were projected follows:

"Summary of Conclusions. We performed a physical unit statistical sample (PUS) of ABC's proposed bill of material (BOM) and questioned $[*amount*]. All [*amount*] proposed parts were included in the universe of items. We reviewed a total of [*amount*] parts, with [*amount*] parts in the high dollar stratum for 100 percent review,

and an additional [*amount*] parts randomly selected from the contractor's proposed BOM. We projected the results of the statistical sample to the sampling universe using the Agency's EZ-Quant statistical analysis software. The summary results of our sample are presented in the schedule below:

(table providing summary proposed and questioned amounts by stratum)

Audit Evaluation. We calculated the point estimate (projected questioned costs) of the sample universe to be $[*amount*]. At the 90 percent confidence level, the subject confidence interval for the sampling strata is $[*amount*] to $[*amount*]. Total questioned costs for both the high dollar items and the sample universe are scheduled below:

100 percent reviewed items	$[*amount*]
Projection of statistical sample items	[*amount*]
Total Questioned Cost	$[*amount*]"

(b) An example of an explanatory note where the sample results were not projected follows:

"Summary of Conclusions. We performed a dollar unit statistical sample to evaluate the contractor's proposed unit pricing and material requirements using the Dollar Unit Sampling (DUS) methodology with a random start. We selected a total of [*amount*] parts, with [*amount*] parts in the high dollar stratum for 100 percent review, and an additional [*amount*] parts randomly selected from the proposed bill of material's (BOM's) universe of dollars. The total BOM is valued at $[*amount*] and includes [*amount*] material line items. The summary results of our audit are presented in the schedule below:

(table providing summary proposed and questioned amounts by stratum)

Audit Evaluation. We statistically evaluated the sample items selected using Agency EZ-Quant statistical analysis software and the results it produced. We determined the level of sampling error was too high to accurately project questioned costs. Therefore, the audit conclusions are based solely on examination of the cost questioned of only the [*amount*] high dollar items and the [*amount*] sample items without the projection of these items to the sample universe".

(2) When costs are questioned based on a regression analysis or an improvement curve, the auditor's explanatory note should identify data used in the analysis and explain any differences between these data and amounts appearing in the contractor's cost representations. Graphic presentations of regression lines and improvement curves, whenever practical, should be included in the audit report. The report may also include computer printouts when there are indications that negotiators will find this information valuable during negotiations.

e. When a contractor's price proposal for a fixed-price contract includes projected pension costs, and the contractor's pension plan is at or near full funding status, provide sufficient information for the contracting officer to understand the risk associated with such circumstances. If the results of a DCMA CIPR Center technical evaluation are incorporated in the results of audit, the basis of the technical evaluation findings regarding the rate of return on assets should be explained. This information should generally be included in the audit evaluation portion of the explanatory notes. Generally, this information will be included in audit reports on individual price proposals only if (i) the anticipated contract is fixed-price; (ii) a

forward pricing rate agreement has not been executed; and (iii) the proposed pension costs are significant enough to impact the indirect rates if the pension costs are not incurred. An example of language that could be included in audit reports on individual price proposals follows and should be tailored to the specific circumstances. Similar language should also be included in audit reports on forward pricing rates.

> "This audit report incorporates the results of the DCMA CIPR Center technical evaluation. The technical evaluation took no exception to the proposed pension costs. That evaluation assumes that pension plan assets will earn returns at a rate of return equal to the plan's assumed long-term valuation interest rate. The contractor's pension plan is currently at or near full funding status (i.e., current pension plan liabilities and the actuarial value of plan assets are nearly equal). Based on the pension plan's long-term valuation interest rate, the plan is projected to be underfunded for the entire forecasted period [*or some of the forecasted accounting periods*]. However, given the volatility in the stock market, the possibility exists that the actual rate of return on plan assets could exceed the assumed long-term valuation interest rate, in which case the pension plan may be fully funded during the forecasted period. If the pension plan is fully funded in any given year, the pension costs projected for that year will not materialize, resulting in a windfall profit to the contractor on the anticipated fixed-price contract [*or for a report on forward pricing rates "on fixed-price contracts"*]. We recommend that the contracting officer consider these facts during negotiations."

For audit reports on individual price proposals, the paragraph should be expanded to include information regarding the impact on the contractor's proposal if the pension costs are not incurred. For example, a comparison may be included of the proposed indirect rates, adjusted for any audit exceptions, to what those rates would be if the projected pension costs are not incurred. (Only rates that would be materially impacted by pension costs should be included.) The auditor should consider the circumstances unique to each individual price proposal and the contractor's rate structure in determining how much information to provide and in what format. Audit reports should provide the contracting officer with sufficient information to clearly understand the potential impact on the negotiated price should the proposed pension costs not be incurred.

f. If the auditor has comments on profit, they should be provided in the explanatory notes and prepared in accordance with 9-900. Normally comments are limited to items that might affect quantifying weighted guideline factors. Do not show percentage computations under the weighted guideline method or application of an incentive profit formula either here or in an exhibit or schedule of the report. Examples of comments on the profit factor, "Contractor's Performance Risk -- Cost Considerations," are shown below (see 9-900 for other factors to be covered):

> "The contractor does not consistently base its proposed unit prices on the latest production labor hours and material prices incurred for the same or similar units. Details on this estimating deficiency are presented in our Report [*insert report title, number and date.*] Specific reference to the deficiency and discussion of its impact on this pricing action are included on page *X*, Notes *X* and *X*, and Appendix *X*."
>
> "The contractor has three engineering departments which differ greatly in the proportion of journeyman engineers and notable or scarce engineering talent employed in each department. This proposal is based on engineering performance by the department having the least amount of notable engineering specialties and the lowest level of engineering experience."

g. If specific elements of the explanatory notes are redundant (e.g., Basis of Contractor's Cost or Contractor's Reaction) they may be efficiently presented as a common note.

h. If there are a number of exhibits and schedules, that are best presented on separate pages, move them and the explanatory notes to the end of the Results of Audit section (after

"Additional Remarks") and begin each exhibit and schedule on a separate page. A sample statement describing this realignment might read:

> "We included appropriate exhibits and schedules detailing the contractor's submissions and our audit evaluation beginning with Exhibit A, page _."

i. Where we have no findings and the requestor has indicated that the information describing the basis of the cost and the audit evaluation would not be useful at negotiations; the auditor may include a brief statement, after the audit opinion, that the audit found no questioned, unsupported, or unresolved items. The usual exhibits, schedules and explanatory notes may be omitted.

10-304.8 Questioned, Unsupported and Unresolved Cost

a. CAM should not be cited as the reason for treating costs as questioned, unsupported, or unresolved (see Introduction to Manual, 0-002). When Government regulations are specifically mentioned or incorporated by reference in the contract or in the terms governing submission and negotiation of the price proposal, and costs are questioned based on such regulations, the specific reference should be cited in the explanatory note describing the circumstances underlying the questioned cost. The citation should be accompanied by an appropriate explanation of the audit conclusion in terms of the reasonableness, allocability, or other factors affecting the acceptability of the cost.

b. Questioned Costs. Those amounts on which audit action has been completed and which are not considered acceptable as a contract cost will be shown as questioned costs. This category includes amounts for:

- Those items specifically identified as unallowable under the contract terms, statute, public policy, applicable Government regulations, or legal advice.
- Those items which, although not specifically unallowable, are determined to be unreasonable in amount, contrary to generally accepted government accounting principles, or not properly allocable to the contract considering the relative benefit received or other equitable relationship.
- The impact on proposed costs of cost avoidance recommendations based on implementation of the cost reduction programs listed in 9-317.
- Proposed costs for which the contractor denied the auditor access to supporting records/data.
- Those items questioned for other reasons, usually based on Government engineering or technical advice.

(1) If part of a cost element or account is not acceptable, only that part should be questioned.

(2) If a cost element in the contractor's proposal has been significantly understated, the understated amount should be shown in the Questioned Costs column in parentheses to denote an increase for that element. If a portion of the cost element is also questioned, the net amount should be reflected. An adequate explanation should be given in all cases.

(3) Explanations regarding questioned costs should be sufficiently informative to allow the reader to fully understand the basis for the audit conclusions. The explanations should normally be shown as footnotes to exhibits and supporting schedules.

c. Unsupported Costs. Costs should be classified as unsupported when the contractor does not furnish sufficient documentation to enable a definitive conclusion and the insufficiency is not caused by contractor denial of records. Classification of costs as unsupported may significantly impact the contracting officer's development of a negotiation position. Therefore, the auditor should vigorously pursue action to obtain the needed cost or pricing data (see 9-205a.). These actions must be taken promptly to avoid delays in completing the audit. Also classify as unsupported any proposed

subcontract regardless of whether or not an assist audit has been requested, if the contractor has not completed an adequate price/cost analysis (see 9-104.2d.).

(1) Prompt requests for assistance to both the ACO and PCO are critical and should be confirmed in writing. The auditor should clearly identify the data needed and state how its absence would affect the overall audit opinion.

(2) When all attempts fail (including ACO and PCO assistance) to obtain the necessary supporting data, the auditor should include comments in the audit report on the action taken and classify the costs as unsupported. This should also be shown in the scope of audit.

(3) The report should state that the contractor was advised of the unsupported costs (see 4-304.2d.). The explanatory notes for items classified as unsupported costs will state the types of documentation considered necessary to adequately support the items and describe the auditor's efforts to obtain such documentation.

(4) Overhead and G&A expense applicable to unsupported costs should not be quantified in the Unsupported Costs column. The rates applicable to unsupported costs should be stated in the explanatory notes so that the rates can be applied to any portion of the unsupported base costs not accepted by the contracting officer to develop the corresponding amount of additional unaccepted overhead and G&A costs. However, questioned indirect rates should be applied to the unsupported base amount and shown in the questioned column.

d. Unresolved Costs. Failure to receive requested DCAA assist audit reports will necessitate classifying the applicable proposed amounts as unresolved, unless the prime contractor has not completed its price/cost analysis in which case the subcontract will be classified as unsupported (see 9-104.2d.). The unresolved classification is also used when there are significant incomplete subcontract pricing actions applicable to repricing proposals for incentive and fixed price redeterminable contracts. Costs should not be classified as unresolved in any circumstances other than those cited in this paragraph.

(1) The guidance in 10-304.7c. on the presentation of explanatory comments on questioned costs also applies to unresolved costs. Overhead and G&A expense applicable to unresolved costs will not be quantified in the Unresolved Costs column; however, the rates applicable to the unresolved costs will be provided as described in 10-304.8c.(4). . However, questioned indirect rates should be applied to the unresolved base amount and shown in the questioned column.

(2) The additional information or action required before a definitive conclusion can be reached on unresolved items will be stated in the footnotes or in the narrative portion of the report, together with a statement of the auditor's intentions with respect to issuance of a supplemental audit report. This statement should be based on the criteria in (3) below and on the latest information available prior to release of the initial audit report.

(3) A supplemental report should be issued when costs in this category are resolved provided the contract negotiation has not been concluded and the report will serve a useful purpose. For example, subcontract/IWA costs may have been classified as unresolved in the audit report on the repricing of an incentive-type prime contract, pending negotiation by the contractor and subcontractor/IWA of a firm final subcontract/IWA price. In these cases, the prime contract price will usually not be finalized until a final price for the subcontract/IWA has been established. If this procedure is being followed, a supplemental report should be issued after a firm subcontract/IWA price has been established and the auditor responsible for the prime contractor has reviewed the data supporting the settlement. Any questions at that time regarding the current status of prime contract negotiations should be discussed with the contracting officer.

(4) The supplemental report need not restate the information or recommendations included in the prior report. It should be limited to unresolved items, unless their reso-

lution affects other cost elements or a complete restatement would be more useful to the contracting officer.

10-304.9 Difference

a. A "Difference" column may be included in reports on price proposal audits. The "Difference" column is placed to the right of the last column in the "Results of Audit" group and is not a part of that group.

b. The "Difference" column is intended for the use of the contracting officer in preparing the Government's negotiation objective. It should show for each cost element the arithmetic difference between the amount proposed and the sum of the related questioned, unsupported, and unresolved amounts. The amounts in this column should not be regarded or referred to as "audit approved" or "recommended" amounts. When used, the "Difference" column should be supported by an explanatory note. For example, the explanatory note might state:

> "The amounts in this column are presented solely for the convenience of the procurement activity in developing its negotiation objective. They represent only the arithmetic difference between the amounts proposed and the related questioned costs. You should not consider the amounts to be audit approved or recommended amounts. DCAA does not approve or recommend prospective costs because the amounts depend partly on factors outside the realm of accounting expertise, such as opinions on technical and production matters."

10-304.10 Additional Remarks

a. The last part in the "Results of Audit" section is reserved for additional remarks. This is an untitled section, it does not have a separate heading. In addition to the requirements related to the Results of Audit section in 10-210.5, consider the following as appropriate.

(1) If the technical evaluation discloses no exceptions to the quantitative or qualifications aspects of the proposal, include the following:

> "A Government technical evaluation was performed by [*agency*]. The technical report took no exceptions to the proposal. See Appendix _ for a copy of the technical report."

(2) If we rely on exceptions reported in the technical evaluation, the auditor should incorporate the recommendations into the audit conclusions. In such cases, include the following statement in the audit report:

> "The audit conclusions incorporate the dollar effect of the recommendations contained in the [*activity*] technical report. See Appendix _ for a copy of the technical report."

(3) If significant estimating deficiency(ies) had been previously identified and reported, but not yet resolved, a statement such as the following may be inserted into the proposal audit report:

> "We reported estimating deficiencies at [*insert contractor's name*] in Audit Report No. [*insert number and date*] (Appendix *X*). Some of these deficiencies remain uncorrected (see the Contractor Organization and Systems section of the report on page *XX*). The deficiencies affecting the subject proposal, and their impact, are described in the Scope of Audit paragraphs on page *XX* and on page *XX*, Notes *X* and *X*, of the Results of Audit."

b. On proposals expected to result in contracts covered by DFARS clause 252.234-7002, Earned Value Management System (EVMS), provide comments on whether the contractor's

system is meeting the EVMS criteria on other contracts and include the impact of deficiencies being reported in surveillance reports (9-316b.).

c. Additional Remarks. Conclude the Results of Audit section of the report narrative as discussed in 10-210.5e. Hold an exit conference with the offeror (See 10-210.5e.(1) and (2)). In the report state the date and the name and title of the offeror's designated representative with whom the factual matters were discussed. Pursuant to FAR 15.404-2(c)(1)(i), do not disclose to the contractor the audit conclusions, recommendations on projected costs or rates, or the dollar impact of the findings (4-304.2b). If the report does not include an adverse opinion, include the offeror's reaction to the factual differences and the major areas of difference likely to be pursued at negotiations. An illustration of the report paragraph is shown below:

> "We discussed factual matters concerning our findings with [*name and title of offeror representative*] in an exit conference held on [*date*]. We did not provide the dollar impact of our findings. [*Include a summary of the offeror's reaction and major areas likely to be pursued at negotiations.*]"

If the report includes an adverse opinion that indicates that the proposal is not acceptable as a basis for negotiation, it would be inappropriate to include the additional remarks appearing in 10-210.5e.(1)(b) and (2)(f), regarding items to be addressed and auditor attendance at negotiations. If the proposal was evaluated at the request of the customer even though it was inadequate, tailor comments to fit the situation. For example:

> "Significant findings that are contested by the contractor are discussed [insert reference]. We are available to provide you with assistance in resolving the reported findings. We discussed factual matters concerning our findings with [*name and title of offeror representative*] in an exit conference held on [*date*]."

d. If the report has a number of exhibits and schedules that are best presented on separate pages, it is appropriate to present your concluding remarks within the report narrative before beginning the exhibits and schedules. (See 10-304.7g.).

10-305 Report Narrative (Parts of a Proposal)

a. The guidance for a part of a proposal report applies when the auditor is asked to audit less than the complete proposal. Performance of audits by DCAA is discussed in 2-103. A part of a proposal could represent declarations regarding one or more entire cost elements (e.g., direct material, direct subcontracts and other direct costs) or portions of a cost element (e.g., direct labor rates or indirect rates). (See 9-108) The report narrative includes the same sections as discussed in 10-304. However, because we are auditing only parts of a proposal, section headings are revised to include the words "of Parts of a Proposal".

b. In general, the wording in the individual report sections, as shown below, should be adapted to limit our report to the parts of the proposal that we were requested to audit.

c. The report on the audit of parts of a proposal includes:

- the auditor's opinion on the parts of a proposal that were audited, and
- a disclaimer of opinion on those parts that were not audited.

10-305.1 Subject of Audit of Parts of a Proposal

The subject of audit paragraph might read as follows if the audit was limited to direct material costs.

"As requested by [*insert requestor's name*], on [*insert date of request*], we examined the direct material cost portion [*amount*] of [*insert contractor's name*]'s [*insert proposal amount and type of proposal*], dated [*insert date of proposal*] to determine if the part of the proposal examined is acceptable as a basis to negotiate a fair and reasonable contract price. [*Insert contractor's name*] submitted the proposal for [*item proposed*] in response to RFP No. [*insert RFP No.*]. The company proposed a performance period of [*date*] through [*date*].

The proposed direct material cost and related cost or pricing data [*or information other than cost or pricing data*] are the responsibility of the contractor. Our responsibility is to express an opinion on the direct material cost based on our examination."

10-305.2 Executive Summary of Parts of a Proposal

Because of the limited nature of audits of parts of a proposal, an Executive Summary paragraph is generally not needed. If an Executive Summary is appropriate, see 10-304.2.

10-305.3 Scope of Audit of Parts of a Proposal

a. Scope statements such as the following will be used for audits of parts of a proposal.

"As requested, we limited our audit to an examination of the proposed direct material costs. Except for the qualifications discussed below, [*omit if no Qualifications are included in the report or if the circumstances described do not have an adverse bearing on the auditor's conformance with auditing standards*], we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the parts of the proposal examined are free of material misstatement. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the amounts and disclosures for the parts of the proposal examined;
- assessing the accounting principles used and significant estimates made by the contractor in developing the proposed amounts for the parts of the proposal examined;
- evaluating the overall presentation for those parts; and
- determining the need for technical specialist assistance for the parts of the proposal examined [*and quantifying the results of a Government technical evaluation*].

We evaluated the proposed direct material costs using the applicable requirements contained in the:

- Federal Acquisition Regulation (FAR);
- Defense FAR Supplement (DFARS); [*for non-DoD agencies, identify specific agency supplement - see 15-102.3*] and
- Cost Accounting Standards (CAS) [*omit if the potential contract will not be CAS-covered*]."

b. The next paragraph in the Scope section should comment on the results of audits of the contractor's accounting and estimating system internal controls that impact the parts of the proposal being examined and the impact of the control risk assessment on the scope of audit. (see 10-304.3)

c. See 10-210.3 for additional statements pertaining to technical reports and contractor CAS status that should be attached to the end of the scope statements when appropriate. Also see 10-210.4 and 10-304 for a discussion of report qualifications.

10-305.4 Results of Audit of Parts of a Proposal

a. Tailor the opinion matrix at 10-304.6c for the parts of a proposal examined. It is important for you to remember to read the entire subparagraph to ensure that it is fully modified to address only the parts of a proposal examined. For example, subparagraph 10-304.6c (2), (5) and (13) limited to the audit of direct material costs could be modified to read:

> "In our opinion, the cost or pricing data submitted by the offeror in support of direct material costs are inadequate in part (see Note *X* on page *X*)."

> "The amount proposed for direct material cost was prepared in accordance with applicable Cost Accounting Standards and appropriate provisions of FAR."

> "Because the cost or pricing inadequacies are considered insignificant, we believe that the proposed amount is an acceptable basis for negotiation of a fair and reasonable price for direct material costs."

b. Because we have audited only parts of a proposal, we should disclaim an opinion on the proposal as a whole. This disclaimer may read:

> "This report is limited to [*insert the names of the parts of a proposal examined*]. Accordingly, we express no opinion on the contractor's proposal taken as a whole."

c. The next part of the Results of Audit section provides the details on the parts of a proposal examined and the audit results. An example follows:

> "We have questioned [*amount questioned*] of the [*total amount*] proposed for the direct material costs examined."

This summary statement may be followed with schedules showing the basis for the proposed material costs and the audit evaluation using the structured note format. Schedules and notes should address only the parts of a proposal examined.

d. Additional Remarks. See 10-304.10 for other requirements, such as documentation of the exit conference, which should be included in the report. Wording should be adjusted to reflect only the parts of the proposal examined.

e. Also see 10-210.5 and 10-210.6 for other requirements related to the Results of Audit section of the report narrative. In each case, wording should be adjusted to reflect only the specific cost elements audited.

10-306 Contractor Organization and Systems (Proposal Reports)

This section should give the reader background organization and systems information, which impacts the scope and the results of the audit. Tailor this information to the contractor's size and reference any other reports issued on the relevant systems. (See 10-210.7)

a. The "Organization" paragraph should include background information (e.g., sales information, major products and services, intercompany relationships, percentage of Government business, etc.) considered pertinent to the audit and the negotiation.

b. The "Systems" paragraphs for proposal audits would usually describe the contractor's accounting and estimating internal control systems -- both of which impact the scope of pricing audits. These paragraphs would provide the following information for each system:

(1) a brief description of the system or reference to a prior audit report that provides a current description. (Provide a copy of the referenced report if it has not been previously distributed to the addressee. It can be attached as an appendix.)

(2) an opinion on the overall system [adequate or inadequate] or a statement that we have not specifically audited the contractor's system.

(3) our assessment of control risk [the designation of low, moderate or high is not required but may be used for emphasis if desired] and the impact of this risk on the area being audited.

(4) a list of outstanding internal control deficiencies including a brief description of each deficiency and the status of contractor corrective actions.

The impact of the control risk assessment and any outstanding deficiencies on the proposal audit would be described in the "Scope of Audit" section of the report (see 3-305.4 and 10-304.3).

c. Accounting System Internal Controls. Examples of accounting system deficiencies that might impact the pricing audit include:

(1) The contractor's accounting system is not adequate to determine the costs under the type of contract awarded or anticipated to be issued.

(2) The contractor's accounting system does not provide for costing by lots, batches, or runs. As a result, learning or improvement curve techniques cannot be used to evaluate the contractor's initial pricing proposals for production contracts.

d. Estimating System Internal Controls. The sample systems section paragraphs for a contractor's estimating system (providing the information described above) might read:

"ESTIMATING SYSTEM"

"We examined [*insert contractor's name*] estimating system and issued Audit Report No. [*insert report number, and date*], previously provided to your office. Our report found [*insert contractor's name*]'s estimating system and the related internal control policies and procedures inadequate to ensure that proposals and final certified contract prices are based on accurate, complete, and current cost or pricing data. As a result of these deficiencies, the ACO disapproved the material portion of the estimating system on [*date*]."

"Based on our understanding of the estimating system internal control structure policies and procedures, we determined that certain estimating methods are deficient. As a result of the following listed outstanding estimating deficiency, we assess the risk for overestimating material costs as high and have adjusted our audit scope accordingly."

"Outstanding Estimating Deficiencies"

"Deficiency: [*insert contractor's name*] does not have effective internal controls to ensure that proposed material costs are based on current vendor quotes, recent historical prices, or reflect vendor prompt payment or quantity discounts. As a result, proposed material costs are often overstated."

"Status: [*insert contractor's name*] agrees and is currently revising its estimating policies and procedures to correct this deficiency. After the policies and procedures have been revised, training will be provided to all [*insert contractor's name*] estimators. [*Insert contractor's name*] expects to complete these actions by [*date*]."

10-307 Report Distribution and Restrictions (Proposal Reports)

This section of the report will advise the recipient of report distribution and restrictions. See 10-212.1 for general information on this area.

10-307.1 Release of Audit Report to the Contractor

Reports on price proposals are not provided to the contractor unless the contracting officer directs such release in writing. See 10-212.2 for information and restrictions on releasing the report to the contractor.

10-307.2 Release of Subcontract Audit Report to the Higher-Tier Contractor

When the report is on a subcontractor's proposal to a higher-tier contractor, the report "RESTRICTIONS" must contain a statement regarding the subcontractor's agreement or objection to release of the report or information to the higher-tier contractor. See 10-212.3 for information and restrictions on releasing the subcontract audit report to the higher-tier contractor.

10-307.3 Release of Audit Report to FMS Customers

a. When the contracting officer or DoDCCP identifies that the price proposal is for an FMS/DCC customer, the auditor should determine at the start of the audit whether the contractor objects to the release of the report to the FMS/DCC customer. The audit procedures on this matter are discussed in 9-110. The audit report "RESTRICTIONS" must contain a statement regarding the contractor's agreement or objection to release of the report or information to the FMS/DCC customer. The contractor's letter should be included as an appendix to the audit report.

b. If the contractor objects to release of the report to the FMS or DCC customer, use a statement similar to the following:

> "The Defense Contract Audit Agency has no objection to release of this report, at the discretion of the [*contracting agency*] or [DoDCCP], to authorized representatives of [*name of contractor*] or [*FMS customer*] or [*DCC customer*]. However, please note that [*name of contractor*] objects to the release of the propriety data contained in this report to [*FMS customer*] or [*DCC customer*]. See Appendix *XX* for a copy of the contractor's statement objecting to release of the report."

c. If the contractor does not object, the following comment should be used in the release restrictions:

> "The Defense Contract Audit Agency has no objection to release of this report, at the discretion of the [*contracting agency*] or [*DoDCCP*], to authorized representatives of [*name of contractor*]. Nor does this Agency or [*name of contractor*] object to release of this report to authorized representatives of [*FMS customer*] or [*DCC customer*]. See Appendix *XX* for a copy of the contractor's release statement."

d. If the contractor does not respond to the auditor inquiry, use a statement similar to the following:

> "The Defense Contract Audit Agency has no objection to release of this report, at the discretion of the contracting agency, to authorized representatives of [*name of contractor*] or [*FMS customer*] or [*DCC customer*]. We asked [*name of contractor representative and title*] on [*date*] if [*name of contractor*] objected to the release of the propriety data contained in this report to [*FMS customer*] or [*DCC customer*]. As of the date of this report, we have not received a response to our inquiry."

10-308 Appendixes (Proposal Reports)

As described in the following subparagraphs, appendixes may be used to provide other information when needed. However, when you issue recurring reports to the same addressee concerning the same contractor, consider reducing the appendix material. Wherever feasible, include information in the narrative body of the report, exhibits, and/or schedules rather than in a separate appendix. For example, deficiencies in the contractor's accounting system or internal controls which are directly related to questioned cost for an element of the proposal should be explained in the applicable note rather than referring to an appendix.

10-308.1 Appendix --- Other Matters To Be Reported

a. Use this appendix, if needed, to furnish information which cannot be conveniently shown in the exhibits and schedules and to present any other financial management matters related to the proposal which should be brought to the attention of the contracting officer.

b. If the contracting officer requests specific information on the status of the contractor's systems such as purchasing system, compensation system, or automated data processing system, this information may be provided in this Appendix.

10-308.2 Appendix --- Subcontracts Requiring Contractor Cost/Price Analyses

Use this appendix to identify subcontracts for which the contractor has not completed cost or price analyses required by FAR 15.404-3 (see 9-104.1). Provide this information even if assist audits have been performed or the auditor has reached a definitive conclusion by other means (e.g., applying a decrement factor or rate check). In the appendix, include the names of the subcontractors, proposed amounts, and the following explanatory note:

> "FAR 15.408, Table 15-2 requires prime contractors and higher-tier subcontractors to conduct price analysis of all subcontractor proposals and a cost analysis of each subcontract proposal for which cost or pricing data are required. In coordinating the need for assist audits, we informed [*insert name(s) of ACO/PCO or representatives*] on [*insert date*] of the contractor's planned schedule for completing the analyses. As of [*insert date field work completed*], [*insert contractor's name*] had not completed the required analyses for the subcontractors listed above. The contractor's scheduled date for completing the analyses is [*insert revised date(s*)]. These analyses should be submitted to the contracting officer prior to completion of prime contract negotiations."

10-308.3 Appendix --- Incorporation of Government Technical Reports

a. See 9-103, 9-307, and Appendix D-300 for specific procedures on obtaining technical assistance/reports and for guidance on incorporating technical information/opinions into the audit conclusions and information to include in this appendix if that information cannot be effectively presented in the body of the audit report. The audit report should include an electronic or scanned version of all technical analyses received by the auditor and a quantification of the dollar effect of the technical analysis findings.

b. The report prepared by the Government engineering specialist shall be used unless the findings are, in the auditor's opinion, unrealistic. The auditor shall attempt to reconcile any disagreements concerning the findings with the engineering specialist and/or the responsible supervisory personnel. Assistance to resolve the differences shall be solicited from the contracting officer, if necessary. If the auditor is unable to resolve the differences, the technical report shall not influence formation of the audit opinion or the devel-

opment of the questioned cost. However, the audit report shall include the technical report as an appendix and explain why it was not used.

10-400 Section 4 --- Audit Reports on Operations and Internal Control (System Audits)

10-401 Introduction (System Reports)

a. This section provides guidance for preparing and distributing reports on

(1) audits of the economy and efficiency of contractors' operations; and

(2) internal control audits of contractor accounting and management (business) systems (see Chapter 5). Generally accepted government auditing standards (see chapter 2), provide differing reporting standards for attestation and performance audits. GAGAS identifies most DCAA audits as attestations; economy and efficiency (operations) audits as performance audits; and provides listings of the types of evaluations that fit these categories. For reporting on attestations, GAGAS incorporates reporting standards from the AICPA's Statements on Standards for Attestation Engagements; for reporting on performance audits, GAGAS provides less detailed guidance in chapter 8 of the Yellow Book. GAGAS identifies most audits of internal controls as attestations.

(3) System audits (both operations audits and audits of internal control) address the system's adequacy to provide specific capabilities needed for contract or business purposes.

b. Reports on the results of audit of economy and efficiency of contractors' operations, and internal control audits of contractor business systems, are referred to as system reports.

c. Supplemental guidance for performing estimating system surveys is presented in 5-1213, supplemental reporting guidance for compensation audits is presented in 5-812, and supplemental reporting guidance for all internal control audits is presented in 5-110 and 5-111.

d. These audits and surveys may be initiated (1) upon request of the contracting officer, or (2) as part of the field office's responsibility for evaluating contractor systems and day-to-day operations.

e. A requestor may ask DCAA to evaluate limited portions of contractor systems by means of agreed-upon procedures. Agreed-upon procedures are appropriate when objective evaluation criteria exist and the auditor and requestor reach mutual agreement on the procedures to be applied. Guidance in 10-1000 should be followed, modified as necessary to conform to the requirements of system reports. The auditor should ensure that:

- the acknowledgment indicates the parties have reached a clear understanding regarding the terms of the engagement (see 4-103.d.);
- the report does not refer to the engagement as an "examination" or a "review";
- the report disclaims an opinion; and
- the restrictions are appropriate for agreed-upon procedures (see 10-1008).

10-402 Nature of Reports (System Reports)

These audit reports are designed to provide an independent assessment of performance (i.e., operations audits, sometimes referred to as economy and efficiency audits) or compliance with internal control policies and procedures. The report provides an audit opinion on whether the contractor is fulfilling its responsibilities in a specific area and gives the contractor and contract administration officials information and recommendations to facilitate corrective actions and improvements.

10-403 Report Format and Contents (System Reports)

a. Consistent with the guidance in 10-200, reports will typically include the following sections:

Cover Sheet

Subject of Audit*

Executive Summary
Scope of Audit*
Qualifications (if applicable)
Results of Audit*
Opinion
Statement of Condition and Recommendations
Additional Remarks
Contractor Organization and Systems
DCAA Personnel and Report Authorization
Audit Report Distribution and Restrictions*
Appendixes
*Section headings for real time (flash) reports differ (10-413).

b. GAGAS incorporates the AICPA's Attestation Standards (AT) chapter 5, which prohibits negative assurance on internal controls. These evaluations may be reported on only as examinations or as applications of agreed upon procedures (see 10-1000).

c. Operations audits are not subject to Attestation Standards (AT), therefore do not use the terms “examination” or “review” in the report narrative to describe the subject or purpose of audit.

d. “Shell” reports for most assignments can be found on the DCAA Intranet and the APPS.

10-404 Cover Sheet (System Reports)

a. Follow the general guidance in 10-205 and 10-206 when preparing the cover sheet. All system reports, regardless of reported conditions, internal control weaknesses, or system deficiencies, will be addressed to the principal cognizant ACO (10-206). For reports involving more than one segment of a company, this will usually be the CACO, unless the segments involved are in the same location and assigned to the same contract administration office. In such cases, the auditor should consider wider report distribution to include segment ACOs and the CACO.

b. For audits on economy and efficiency (operations audits), report distribution should also be made to those buying activities that will be materially impacted by report recommendations (both direct and indirect cost).

10-405 Subject of Audit (System Reports)

a. For reports on economy and efficiency (operations audits), this section will clearly identify the area evaluated and the objective. For example, the subject of audit paragraph may read:

> “As part of our comprehensive audit of the [*insert contractor’s name*], we evaluated the contractor's plant maintenance function, which is responsible for the maintenance and repair of equipment and buildings at the Boston facility. We performed the audit to evaluate the effectiveness of the contractor's policies and practices in assuring that maintenance tasks are carried out in a timely, efficient, and economical manner. The audit was conducted from [*start date, month, year*] through [*field work complete date, month, year*] and covered contractor operations for the fiscal year ended [*date*].”

b. For audits of contractor business systems (internal controls; Chapter 5), the subject of audit paragraph may read:

> “We have examined the [*insert contractor’s name*]’s [*insert system examined*] as of [*insert date audit field work was completed*] to assure [*insert contractor’s name*]'s [*insert system examined*] and related internal controls:

- comply with applicable laws and regulations,
- are effective over compliance with applicable laws and regulations, and
- are adequate and operating effectively."

c. This section of system reports should also include a responsibility statement. For internal control audits this may read:

"[*Insert contractor's name*] is responsible for establishing and maintaining an adequate [*insert system name*]. Our responsibility is to express an opinion on the adequacy of the [*insert system name*] based on our examination."

10-406 Executive Summary (System Reports)

This section is intended to give the reader a brief overview of the audit findings. It should briefly describe the audit recommendations and the significant issues supporting the opinion. This section of an internal control audit of the contractor's estimating system may read:

"The contractor's estimating system is inadequate. Our examination disclosed two significant deficiencies that are considered to be material weaknesses in [*insert contractor's name*] estimating system that result in overstated and unsupported material and subcontract costs. As a result, we recommend disapproval of these portions of [*insert contractor's name*] estimating system and that you pursue reduction or suspension of progress payments in accordance with the procedures in DFARS PGI 215.407-5-70.

SIGNIFICANT ISSUES

- [*Insert contractor's name*] does not prepare a consolidated bill of material to support proposed material costs. This deficiency results in overstated material costs since vendor quantity discounts are often not considered when pricing material quantities.
- [*Insert contractor's name*] does not analyze subcontractor proposals prior to negotiating the prime contract price. This deficiency results in substantial overstated proposed subcontract costs since [*insert contractor's name*] achieves reductions in the subcontractor's proposals after the analysis have been performed.
- [*Insert contractor's name*] agrees and is taking aggressive action to correct these deficiencies."

10-407 Scope of Audit (System Reports)

a. Develop an appropriate scope of audit statement. The scope elements will differ based on the type of system audit performed. For example:

(1) For operations audits (section 14-500), the scope of audit may read:

"We limited our audit to the evaluation of (*identify system*). Except for the qualifications discussed below (*omit if there is no "Qualifications" section within the "Scope" paragraph*), we conducted our audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to:

- obtain an understanding of the area to be audited;
- consider legal and regulatory requirements;
- identify and review management controls applicable to the area;
- identify criteria needed to evaluate matters subject to audit;
- identify and examine relevant sources of data to satisfy the audit objectives;

- determine the need for technical specialist assistance; and
- identify significant findings and recommendations from previous audits that could affect the audit objectives, and determine if the contractor has corrected the conditions leading to those recommendations."

(2) For internal control audits of contractor business systems (Chapter 5), the scope of audit may read:

"Except for the qualifications discussed below (*omit if there is no "Qualifications" section within the "Scope" paragraph*) we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain sufficient understanding of internal controls to determine the nature, timing and extent of tests to be performed. An examination of internal controls includes:

- identifying relevant system control objectives and associated control activities;
- obtaining an understanding of all applicable components of internal control for the identified control objectives and activities;
- determining if the internal controls are adequate and in operation; and
- assessing control risk to use as a basis for planning the nature, timing and extent of substantive testing in other attestation audits."

(3) If an audit combines an evaluation of the economy and efficiency (operations) aspects of a system with the applicable internal controls, the scope of audit should cover both the operations and the internal control aspects. The auditor should draft an appropriate scope paragraph combining relevant aspects of the guidance in 10-407a.(1) and (2) above.

b. The next scope paragraph, regardless of the type of system audit performed, should identify the established or stated criteria used to evaluate the area:

"We evaluated the [*insert data, records, representations or system name*] using the applicable requirements contained in the:[*list only applicable references*]

- Federal Acquisition Regulation (FAR);
- Defense FAR Supplement (DFARS);
- Cost Accounting Standards (CAS); and
- Industry or Technical Guides." [*Identify*]

c. The types of contractor records and documents examined should be briefly identified along with a description of unique audit steps or techniques used and the period of performance for the audit fieldwork. Internal control audits should describe the scope of the auditor's work in obtaining an understanding and testing relevant internal control objectives. For example, this paragraph may read:

"Our examination specifically tested the [*insert system name*] system's internal control procedures associated with the following control objectives: [*List the system's control objectives from Chapter 5.*] Test procedures were applied from ***field work starting date*** to ***field work completion date.***"

d. Provide a statement which informs the reader that the audit provides a reasonable basis for the audit opinion, e.g., "We believe that our examination provides a reasonable basis for our opinion."

e. Any external factors that restricted or limited the scope of the audit should be clearly described within the scope of audit section under a separate heading entitled "Qualifications" (See 10-210.4). All Compensation system Review reports will contain the qualifications relating to fringe benefits (see 5-812.3). Internal decisions to limit the audit scope are not

"qualifications." When necessary to avoid user misunderstanding, scope limitations should be briefly described within the scope of audit section.

f. Conclude the Scope section of an internal control audit with the Inherent Limitations paragraph:

> "Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control over [*subject area*] to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate."

10-408 Results of Audit (System Reports)

The Results of Audit section should summarize the conditions and recommendations found during the system audit. The opening paragraphs will vary according to the nature of the report.

10-408.1 Economy and Efficiency Audits (System Audits)

a. Audits that identify opportunities for improved practices resulting in potential cost avoidance should include in the audit opinion a summary description of the recommendation, acknowledgment of the contractor's initiatives (if applicable), and the estimate of potential cost avoidance in the opening paragraph. For example, the statement might read:

> "In our opinion, [*except for the* (*describe the qualification and the potential impact on the results*)], cost savings could be realized through the implementation of interactive computer graphic techniques (ICGT). The contractor has taken the initiative to assure employees have a high level of computer capability. However, the audit disclosed that the use of ICGT can greatly reduce processing time and associated labor costs related to current manual methods used for preparing layouts, schematics, and drawings. It is estimated that annual cost avoidance of $1.1 million can be realized through the implementation of ICGT. Approximately $0.6 million of the total $1.1 million is allocable to Government contracts."

b. Follow this statement by briefly describing the conditions that create the opportunity for the estimated cost avoidance, including the amount applicable to each condition, and a concise explanation of how adopting the recommendation will result in savings. Acknowledge contractor actions that have achieved savings in the area under evaluation. These conditions should be detailed as "Statements of Condition and Recommendations" (see 10-409) and may be contained in the Results of Audit section of the report. If sufficiently complex as to warrant separate pages, a reference may be included here and the details contained in the report as a "STATEMENT" (see APPS "shell" reports for details).

c. A paragraph concerning the incorporation of the audit's cost avoidance recommendations into price proposals, with respect to the appropriate time periods, should be included in this section. An explanation of the impact of the audit's recommendations in the incurred cost rates may also be included to provide added information to the reader. For example, the statement might read:

> "The audit results pertain to the reasonableness of the contractor's future costs. Therefore, we recommend that the contracting officer instruct the contractor to incorporate the effects of the recommendations into its estimating methods, forward pricing rate schedules, and applicable contract price proposals. In our opinion, the audit recommendations can be implemented as early as [*specify quarter and year*] and impact the [*specify cost area(s), such as general and administrative expense rate, direct engineering design labor cost, and manufacturing overhead rate*]. As the audit recommendations are imple-

mented, the incurred cost rates should reflect their impact. Consequently, forward pricing estimates based on historical cost will also reflect cost savings. Accordingly, swift action to implement the audit recommendations can assure timely cost savings. In the event that cost-saving actions are not initiated within a reasonable time period, we will question the costs as being unreasonable in accordance with FAR 31.201-3. We may also recommend that the contracting officer adjust future pricing proposals to reflect the effects of identified inefficient or uneconomical practices."

d. If significant internal control deficiencies are noted during an operations audit, the scope of audit section should identify the deficiencies and state the potential cost impact or the general effect and risk to the Government associated with these deficiencies. State that we will initiate a separate internal control audit of the applicable system and issue a separate report. Refer to 10-408.2 below.

e. Conclude the Results of Audit section of the report narrative with the following additional remarks, as appropriate:

(1) Exit Conference

(a) In all evaluations, state the date held and the name and title of the contractor's designated representative with whom factual matters were discussed (see 4-304). The summary might read as follows:

"We discussed the results of audit with [*Name and Title of contractor representative*] in an exit conference held on [*date*]."

(b) If there are findings, such as noncompliances, system deficiencies, cost avoidances, or cost impacts, in addition to the requirement of step 10-408.1e.(1)(a) above, summarize the contractor 's reaction to factual differences, the major areas of difference likely to be pursued at negotiations, and any other comments relevant to resolution of the findings.

(c) If the engagement is an evaluation which requires that a Statement of Conditions and Recommendations be furnished to the contractor, include the following statement:

"We provided a draft copy of [*the "Results of Audit" and "Statement of Condition(s) and Recommendation(s)"*] to the contractor's representative at the exit conference."

(d) When the contractor provides a formal, written response, it should be referenced within the Results of Audit section and included as an appendix to the report. Put any rebuttals in the "Auditor's Response" portion of the explanatory notes. Include the following statement:

"The complete text of the contractor's response appears as Appendix [*x*]."

(2) Use the guidelines provided in 10-210.5e.(2) to prepare other additional remarks.

f. This section should also report the status of contractor efforts to correct previously reported conditions in the same area and should state whether the auditor considers the corrective action adequate. If corrective action has not been taken or is inadequate, the recommendation should be restated and the updated discussion of the matter should be referenced in the present report.

g. In operations audits, usually parts of the contractor's operating systems are audited rather than the entire system. As a result, the Results of Audit section should generally include the following paragraph:

"We evaluated only the [*identify the operating system audited*]. Accordingly, we express no opinion on the contractor's operating systems taken as a whole."

h. In those cases where an operations audit report recommendation will materially impact either existing program cost, or any prospective pricing of related programs,

that audit report should, at a minimum, provide a listing of those programs and a copy distributed to the buying activity (see 10-404b).

10-408.2 Internal Control Audits (System Audits)

a. General. Reports on contractor internal controls express an overall opinion on the adequacy [i.e., adequate or inadequate] of those aspects of the accounting and management (business) system and related internal controls that were examined. For example, the Results of Audit paragraph may read:

> "In our opinion, [*except for the (describe the qualification and the potential impact on the results*)], the [*indicate the system audited*] system and related internal control policies and procedures of [*insert contractor's name*] are adequate [*or inadequate*]."

(1) If no deficiencies are found, the system should be reported as adequate. If significant deficiencies/material weaknesses are identified, even if they impact only part of the system, the system should be reported as inadequate.

(2) When significant deficiencies/material weaknesses are found and the contractor has proposed or is in the process of taking appropriate corrective actions, the actions should be described in this report section. However, the existence of a corrective action plan will not make an inadequate system reliable. Therefore, the auditor should not report a contractor's system as "adequate" based on the contractor's corrective action plan. The auditor must first verify that the contractor has effectively implemented the action plan correcting the deficiencies.

(3) If the contractor corrects identified significant deficiencies/material weaknesses during the course of the audit, the system should not be reported as adequate until sufficient tests of transactions have been performed to verify that the deficiencies have been corrected. The testing should include transactions over several cycles to ensure that the corrected controls are implemented and working effectively. As a result, in most circumstances, there will not be sufficient time between when the significant deficiencies/material weaknesses are identified and the field work is completed to allow for the contractor to implement corrective actions and for the auditor to perform sufficient testing and issue a timely audit report.

(4) All significant deficiencies/material weaknesses identified during the audit must be included in the report, including those that were corrected, tested and found effective during the course of the audit (i.e., in the limited circumstance where time allows).

(5) A follow-up audit should be performed to verify the contractor's correction of reported significant deficiencies/material weaknesses. That audit should be initiated when the FAO is notified by the contractor (either directly or through the ACO) that it has implemented the appropriate corrective actions and sufficient transactions are available to adequately test the effectiveness of the contractor's corrective actions.

b. If our audit disclosed significant deficiencies/material weaknesses, the results of audit should identify the deficiencies and the affected costs. This paragraph should also provide the estimate of costs affected by the deficiency (i.e., direct cost and related indirect expense). For example, if the deficiencies result in unallowable costs being charged to the Government, the estimated amount of unallowables would be disclosed. If the unallowable amount is indeterminable, the costs generated by the deficient system (or portion of the system) would be disclosed (e.g., if labor transfer documentation was deficient, the cost related to the labor transfers would be disclosed). The deficiencies and the related cost impacts should be summarized here and detailed in the "Statement of

Condition and Recommendations" section below or may be separately identified in the "STATEMENT" portion of the report (see 10-409). For example, this paragraph may read:

> "Our examination noted certain significant deficiencies in the design or operation of the internal control structure. In our judgment, these deficiencies could adversely affect the organization's ability to initiate, authorize, record, process, and/or report [*indicate the nature of costs associated with the system(s) audited, e.g., labor incurred costs*] in a manner that is consistent with applicable Government contract laws and regulations. As a result, we recommend you pursue a suspension of a percentage of progress payments or reimbursement of costs in accordance with DFARS 242.7502. These conditions are detailed in the "Statement of Condition and Recommendations" on page [*xx*] and summarized below:"

c. Report the impact that control risk assessments will have on the nature and extent of audit effort on other attestation audits. For example, this paragraph may read:

"Based on the results of our audit of the contractor's [insert system audited] system and our control risk assessments, we will perform [minimum/increased] substantive testing (i.e., analytical procedures and/or transactions tests) in the following audit areas:

[*List the audit areas affected*]."

d. If significant deficiencies/material weaknesses are reported for systems where FAR/DFARS provides for approval/disapproval (i.e., estimating and purchasing) and the deficiencies have not been corrected, recommend disapproval of the identified part or the entire system. For all systems, recommend that the contracting officer pursue suspension of a percentage of progress payments or reimbursements of costs in accordance with DFARS 242.7502.

e. Many major Government contracts contain clauses requiring an approved Earned Value Management System (EVMS) meeting guidelines set forth in DoDI 5000.2 for performance measurement on selected acquisitions (11-200). If the contractor has contracts requiring an approved EVMS, provide an assessment of whether the deficiencies disclosed in the report are likely to materially affect the reliability of the contractor's EVMS. Discuss findings and recommendations relating to the EVMS with the Contract Administration Office EVMS monitor and the audit supervisor prior to issuance of the report. Immediately after issuing the report, the auditor should evaluate the impact of these deficiencies on specific contracts requiring an approved EVMS and where significant provide the details in EVMS surveillance reports (11-203.5.). For example, the systems report might say:

> "We believe the deficiencies noted in this report will have a material impact on the reliability of the contractor's Earned Value Management System (EVMS) and on the accuracy of the system's data. Immediately after issuing this report, we will evaluate these deficiencies to determine the impact on specific contracts requiring an approved EVMS and will provide the details in EVMS surveillance reports."

f. Conclude the Results of Audit section of the report narrative with the following additional remarks, as appropriate:

(1) Exit Conference

(a) In all evaluations, state the date held and the name and title of the contractor's designated representative with whom factual matters were discussed (see 4-304). The summary might read as follows:

> "We discussed the results of [*audit, procedures, etc.*] with [*name and title of contractor representative*] in an exit conference held on [*date*]."

(b) If there are findings, such as noncompliances, system deficiencies, or cost impacts, in addition to the requirement of step g. (1) (a) above, summarize the contractor 's reaction to factual differences, the major areas of difference likely to be pursued at negotiations, and any other comments relevant to resolution of the findings.

(c) If the engagement is an evaluation which requires that a Statement of Conditions and Recommendations be furnished to the contractor, include the following statement:

"We provided a draft copy of [*the "Results of Audit" and "Statement of Condition and Recommendation"*] to the contractor's representative at the exit conference."

(d) When the contractor provides a formal, written response, it should be referenced within the Results of Audit section and included as an appendix to the report. Put any rebuttals in the "Auditor's Response" portion of the explanatory notes. Include the following statement:

"The complete text of the contractor's response appears as Appendix [*x*]."

(2) Use the guidelines provided in 10-210.5e.(2) to prepare other additional remarks.

h. This section should also report the status of contractor efforts to correct previously reported conditions in the same area and it should state whether the auditor considers the corrective action adequate. If corrective action has not been taken or is inadequate, the recommendation should be restated and the updated discussion of the matter should be referenced in the present report.

i. Business systems audits usually audit parts of the contractor's system of internal controls rather than the entire system. As a result, the results of audit section should generally include the following paragraph:

"We examined only the [*insert the business system audited*]. Accordingly, we express no opinion on the contractor's system of internal controls taken as a whole."

10-409 Statement of Condition and Recommendations (System Reports)

a. The statements of condition and recommendations are an integral part of the results of audit and should follow the narrative described in 10-408. Alternatively, they may be included in attached appendixes. The presentation should follow the six-element outline as noted below to present a logical statement of conditions and recommendations. The two main subheadings should be "Condition" and "Recommendation". Although the six elements of an audit finding should not be addressed under separate subheadings, they must be included as part of the statement of condition to present a logical, convincing case.

(1) Condition - This attribute identifies the nature of the deficiency, finding, or unsatisfactory condition by disclosing how things are.

(2) Criterion - This attribute establishes the legitimacy of the finding disclosing how things should be.

(3) Cause - This attribute gets to the root of the problem by answering the question, "Why did it happen?"

(4) Fact - Examples should be included to demonstrate to the contracting officials and contractor that the reported conditions do exist.

(5) Effect - This attribute convinces the reader that the condition is significant by answering the question, "What happened as a result of this condition? How was the Government harmed?"

(6) Recommendation - This attribute suggests remedial action answering the question, "What must be done to eliminate the cause of the condition?" If the relationship between the cause and the condition is clear and logical, the recommended action(s) will most likely be feasible and appropriately directed.

b. Present a comprehensive condition statement for each significant deficiency or area susceptible to improvements in economy or efficiency. In operations audit reports quantify the estimated annual savings to be realized by implementing the audit recommendation(s) to eliminate the deficiency. If estimated annual savings is not relevant, provide an estimate of the costs affected by the deficiency.

c. The auditor's constructive, specific recommendation(s) should be stated immediately after each reported condition. Use a separate section labeled "Contractor's Reaction" to summarize the contractor's response to the condition and recommendation(s). Include the complete written response as an "appendix." If the contractor's comments warrant a rebuttal or rejoinder, include DCAA's argument in a section labeled "Auditor's Response."

10-410 Contractor Organization and Systems (System Reports)

This section should furnish pertinent information necessary for the reader to understand the area audited. This information should be classified under separate subheadings for the organization and individual system(s) (e.g., accounting system, estimating system, labor system, etc.) If this information has previously been provided to the report recipient, it should be referenced here.

a. The "Organization" paragraph might include a description of contractor's organization, intercompany relationships, facilities, product lines and current operations, staffing levels, percentage of Government participation and so forth.

b. The "Systems" paragraphs for individual audits of business internal control systems should provide background on the system being audited. For example, background on the estimating system may read:

"ESTIMATING SYSTEM"

"[*Insert contractor's name*] has about 30 employees who work in the Estimating Department. The Estimating Department is responsible for preparing cost estimates used in individual price proposals, indirect expense rate forecasts, indirect departmental cost budgets, progress payment requests, and contract financial reports. [*insert contractor's name*] detailed estimating policies and procedures are described in its "Consolidated Estimating Manual." The last revision made to this manual was dated [*insert date*].

During the last FY 20*XX*, [*insert contractor's name*] submitted about [*insert amount*] in price proposals to the Government. Based on these proposals, [*insert contractor's name*] expects to obtain contract awards of about [*insert amount*]."

c. The information in our internal control audits (and related ICAPS -- see 3-300) provides the basis for planning the scope of other attestation audits (e.g., proposal, incurred cost, progress payment, etc. see 10-210.7). The "Systems" paragraphs in other attestation audits would provide the following information:

(1) a brief description of the system or a reference to the internal control audit report for the system.

(2) an opinion on the overall system [adequate or inadequate].

(3) our assessment of control risk for outstanding deficiencies.

(4) a list of outstanding internal control deficiencies including a brief description of each deficiency and the status of contractor corrective actions.

d. The impact of individual control risk assessments and any outstanding deficiencies on other financial audits would be described in the "Scope of Audit" section of the report (see 3-305.4 and 10-304.3).

e. The cost impact of these deficiencies would be shown in the "Results of Audit", and the "Contractor Organization and Systems" section would be updated to reflect:

- the current status of corrective action (see 10-210.7 and 10-306), and
- new deficiencies observed during this audit (see 10-413).

10-411 DCAA Personnel (System Reports)

a. Identify the contacts (e.g., the auditor, supervisory auditor and FAO manager) for further information regarding the audit. See Figure 10-2-3 for an example of the information that should be provided in this section.

b. "Audit Report Authorized By" is the signature block for the audit report. Show the signature authentication prescribed in 10-211.

10-412 Distribution and Restrictions (System Reports)

a. All recipients of the audit report will be identified in this section of the report. Section 10-212 delineates the basic policy and instructions on distributing audit reports. In addition, report copies should be distributed as specified below to provide information that other officials may use in performing their respective duties. Audit report distribution requirements for non-DoD contractors are shown in CAM 15-100 and Supplements 15-1S1 through 15-1S6. Refer back to 10-404b. for other considerations.

b. Audit report distribution restrictions should be listed in this section of the report. Follow the general guidance in 10-212 and figure 10-2-4.

10-412.1 Distribution to Contractor

a. The ACO is responsible for formally notifying the contractor of the reported results of audit by forwarding the report to the contractor.

b. Show the contractor on the report distribution list (10-212), using the parenthetical phrase "(thru the ACO)."

10-412.2 Distribution to Other In-Plant Government Representatives

Other Government procurement activities have resident offices at some contractor facilities. They may include technical staff from the program office, requirements analysts from the logistics support office, and procuring contracting officers' representatives. Provide each such office a copy of any report, which affects its area of the contractor's operation unless the office prefers not to receive such reports.

10-412.3 Distribution to Procurement Offices

a. Information copies of reports with significant findings should be sent to each procurement office doing substantial business with the contractor, unless an office's contracts would not be affected by the reported conditions. A report with significant findings is one that discloses one or more major deficiencies or recommends significant cost avoidance or contractor corrective action(s). A follow-up report should be distributed as a significant report if the prior report on the same subject contained significant findings.

b. Upon written request to the FAO, a procurement office may be added to or deleted from report distribution lists for a particular contractor without regard to the above criteria.

c. For distribution procedures related to team reports see 10-206.1.

10-412.4 Additional Distribution of Reports on Subcontractors

a. Some companies perform significant subcontracts under major procurement programs. In such cases report distribution should consider the information needs of the procurement office(s) involved. Apply the same criteria as for prime contractors (10-412.3 above). A report distributed to a procurement office because of subcontract rather than prime contract interest requires further distribution to each plant representative/ACO at the related prime contractor and any intervening subcontractors.

b. When distribution to a procurement office is not warranted, consider whether the reported conditions may nevertheless be significant to the plant representative/ACO at the next higher-tier contractor doing substantial business with the subcontractor. An estimating system survey of a subcontractor (if significant deficiencies are involved) is an example of a report that would normally be of interest to Government representatives at the next higher tier. Such reports are not intended for action by or release to the higher-tier contractors. Therefore, the audit report "RESTRICTIONS" statement concerning release of subcontractor information (10-212.3) is not required. If a higher-tier plant representative/ACO or auditor believes that the contractor should be advised of a particular condition at the subcontractor, an assist audit request should be processed so that an appropriate report may be prepared for the contractor's use.

10-412.5 Distribution to Other DCAA Offices

For each higher-tier plant representative/ACO included on the distribution list for a report on a subcontractor, also distribute a copy to the auditor at the higher-tier contractor.

10-412.6 Additional Distribution---NASA Contractors

a. If NASA contracts are subject to the system audit, one copy of the report should be sent to each of the NASA procurement centers that have current significant contracts with the subject contractor. See 15-1S2 for a listing of centers, which can be identified to the contractor's workload through the NASA contract code for each center. Major subcontract workload under NASA programs should also be considered (see 10-412.4).

b. If requested, a copy should be sent to the Inspector General's Office, Assistant IG for Auditing (see 15-1S1). Provide additional distribution if requested by NASA officials. (Also see 15-106.)

10-413 Real Time Reporting (Flash Reports)

When an internal control deficiency is observed during other attestation or performance audits, the auditor should immediately draft a flash internal control report and submit it to the contractor for comment. The purpose of the flash report is to get the resolution process started -- do not wait until the related audit is completed to issue the flash report. The flash report should be addressed to the principal cognizant ACO (10-404) and additionally, to the PCO (9-310) when reporting cost estimating deficiencies in cost estimates. The major sections for a flash report are discussed below.

10-413.1 Subject of Evaluation

This section should describe our continuing assessment of the contractor's internal control structure during related audits. The following statement would be appropriate for an estimating system deficiency disclosed during a price proposal audit:

> "Our price proposal audits include determining if the contractor consistently complies with established estimating system internal controls for developing accurate, current and complete cost estimates. Consistent application of sound estimating procedures should reduce instances of defective pricing and facilitate audit and evaluation of the contractor's proposals submitted in connection with Government procurement actions."

10-413.2 Scope of Evaluation

Briefly describe the procedures used to identify the internal control deficiency(ies) and explain that the evaluation was limited to contractor practices associated with a perceived internal control deficiency in one or more of the contractor's business systems. The following statement might be appropriate when an estimating deficiency is encountered during a price proposal audit:

> "Our evaluation was limited to certain contractor estimating practices used in preparing its proposal submitted in connection with RFP/RFQ No. __. We did not perform sufficient audit procedures to constitute an examination of all applicable estimating system internal controls in accordance with generally accepted government auditing standards."

10-413.3 Results of Evaluation

This section should focus on the observed deficiency(ies). The following statements might be appropriate when an estimating system deficiency is encountered during a price proposal audit:

> "Certain contractor estimating practices used in preparing its proposal(s) submitted in connection with RFP/RFQ No. __ [parenthetically reference the audit report where the deficiency(ies) was/were found] require corrective action to improve the reliability of its future cost estimates."

a. The auditor should follow the opening statement with a separate condition and recommendation statement for each cited deficiency. This section should identify the audit area affected, the projected cost impact, and the additional audit procedures needed to protect the Government because of this deficiency. Consider the general guidance in 10-409 and the information presented below:

(1) Condition. Describe each deficiency in sufficient detail to provide a thorough understanding of the situation.

(2) Cost and Audit Impact. Explain the significance of the deficiency, i.e., the cost impact on the current price proposal and the additional audit procedures needed on subsequent proposals until the deficiency is resolved.

(3) Recommendation. We may offer specific recommendation(s) for corrective action, but, in most cases, we would recommend that the contractor review the cited deficiency to determine if it is a systemic problem needing corrective action.

(4) Contractor's Reaction. Disclose any oral or written contractor reaction to the issue presented.

(5) Auditor's Comments. Offer any rejoinder to the contractor's reaction and response. [If there are a number of deficiencies, move the condition and recommendation statements to the end of the Results section and begin each on a separate page.]

b. The auditor should disclaim an opinion on the overall adequacy of the related system because the procedures necessary to express an opinion are normally not performed in other related financial audits. These procedures are normally performed as part of the cyclical audit of each applicable contractor accounting and management internal control system. For smaller nonmajor contractors, such procedures may be performed in appropriately scoped system audits, the annual incurred cost audit, or other scheduled audits (5-111.3). An example of this disclaimer follows:

> "This report is limited to the cited deficiency(ies). Accordingly, we express no opinion on the adequacy of the contractor's estimating system internal controls taken as a whole."

c. The next paragraph should state that we will initiate a separate assignment to review the internal control activities related to the applicable control objectives and issue a separate report as soon as possible (preferably within 90 days). For smaller nonmajor contractors, refer to the audit where follow-up steps will be performed. A statement similar to the following would be appropriate for a flash report on estimating system deficiencies:

> "A separate assignment has been established to review the internal control activities related to the applicable control objective(s) to determine the status of the cited deficiency(ies), the status of contractor corrective action(s), and the impact of the deficiencies on the overall adequacy of the contractor's estimating system internal controls taken as a whole." We expect to issue the report within approximately three months [or other appropriate time period].

10-413.4 Contractor Organization and System Section

The flash report updates the Contractor Organization and System section included in other related audits. Add the new deficiency to the existing list of any outstanding deficiencies. Briefly describe the deficiency, its impact on other related audits, and the status of contractor corrective action (see 10-210.7 and 10-410).

10-413.5 Impact on Other Related Audits

a. To ensure consideration of the observed deficiency in other related audits during the resolution process, the auditor should appropriately note/reference the deficiency on the applicable Internal Control Audit Planning Summary (ICAPS) form or Internal Control Questionnaire (ICQ) form for smaller nonmajor contractors. However, do not revise the overall system opinion in section III of the ICAPS form until a system audit or follow-up system audit has been performed and an audit opinion (versus disclaimer) reported (see 3-306a.).

b. In other related audit reports, such as a pricing proposal, the auditor would describe the impact, if determinable, of the observed internal control deficiency in the scope and the results of audit sections. The auditor would also list the deficiency and the status of contractor corrective action in the Contractor Organization and Systems section, until the deficiency is corrected.

10-500 Section 5 --- Audit Reports on Annual Incurred Costs

10-501 Introduction (Incurred Cost Reports)

a. This section presents guidance for preparing and distributing audit reports on final contracting officer determined (FAR 42.705-1) and final audit-determined (FAR 42.705-2) indirect cost rates. Guidance on reporting on a desk review of a low-risk incurred cost proposal (6-104.5) appears in 10-506.

b. Results of the concurrent audit of proposed direct costs will be reported in the audit report on annual indirect costs. Guidance on assist reports to other contract auditors is in 6-800.

c. Keep the ACO informed of significant issues that may ultimately require his or her action to resolve. If the contractor does not concur to the audit-determined rates, follow the procedures in 6-900 and prepare the audit report only after having coordinated with the ACO to ensure consideration of all information bearing on the area of nonconcurrence. If it appears that the contractor will not agree with the findings, provide the ACO with written documentation of the results of audit, which will be communicated to the contractor at the final exit conference. In addition, provide the ACO with a copy of the contractor's written rebuttal to the audit findings immediately upon receipt.

d. A requestor (or other DCAA office) may ask for an evaluation of limited aspects of (sub)contractor cost claims by means of agreed-upon procedures. Agreed-upon procedures between DCAA offices are appropriate in situations where (sub)contractor records are located off-site and the cognizant DCAA office requires verification of factual information against objective evaluation criteria. The (sub)contract or off-site DCAA office, and the cognizant DCAA office, must reach mutual agreement on the procedures to be applied. Guidance in 10-1000 should be followed, modified as necessary to conform to the requirements of (sub)contract incurred costs. The auditors should ensure that:

- the acknowledgment indicates the parties have reached a clear understanding regarding the terms of the engagement (see 4-103.d.);
- the report does not refer to the engagement as an “audit”;
- the report disclaims an opinion; and
- the restrictions are appropriate for agreed-upon procedures (see 10-1008).

10-502 Nature of Reports (Incurred Cost Reports)

a. Audit reports on incurred costs are designed to furnish audit information and recommendations on the allowability of costs and rates for settlement purposes and to provide support for establishment of final indirect cost rates. In order to initiate the waiting period for the contractor's response, all audit findings applicable to a fiscal period must be summarized in a single audit report. This does not preclude issuance of reports on significant system deficiencies, CAS/FAR noncompliances, or reports required to support timely issuance of DCAA Forms 1 (see 6-900). Also, the auditor should be discussing significant audit findings with the contractor during the audit to expedite the resolution process. Multi-year audit reports must clearly segregate all findings by fiscal period.

b. When direct costs are audited concurrently with the indirect costs, any questioned or disallowed direct costs will be included in the audit report. However, such reporting does not replace the issuance of the following:

(1) Notices of Costs Suspended and/or Disapproved (6-900).

(2) Audit reports on individual FPR/FPI price redetermination proposals (10-900).

(3) Final audit reports on individual cost-reimbursement type contracts and subcontracts (10-900).

(4) Interim assist audit reports to the upper-tier auditor when needed (6-800).

c. The audit report cannot be issued before the required field work has been completed and the final exit conference has been held. Required field work includes audit procedures and tests judged necessary by the auditors, and prescribed by generally accepted government auditing standards and MAARs.

10-503 Report Format and Content (Incurred Cost Reports)

a. Prepare the report in the format given in 10-200. It should be addressed to the contracting officer, and should include the information required by FAR 42.705-1(b)(2). The extent of detail to be included in the report exhibits and schedules should be governed by the materiality of the indirect cost pools, the Government's participation, and the amount of questioned costs. “Shell” reports for different types of incurred cost audits are provided on the DCAA Intranet and the APPS.

b. In the case of audit determined indirect rates, if the audit of the contractor's proposal discloses insignificant unallowable costs subject to penalty (6-609), the information normally included in the explanatory notes for each cost element as described in 10-504.5e.(3) does not need to be provided, as long as this is agreeable to the contracting officer. In the case of contracting officer determined rates, or if the audit resulted in unallowable costs subject to penalty, include sufficient indirect cost and rate data and explanatory notes for each account/element with questioned costs as described in 10-504.5e.(3) to provide the reader with an understanding of how the audit results were achieved. Including such data should also enable the negotiator to prepare the negotiation report when required.

c. Ensure that the audit report is issued within 60 days from the date the contractor's rebuttal comments are received. This should provide more than ample time since all significant issues should be discussed with the contractor on a real time basis. Enclose copies of applicable DCAA Forms 1 with the audit report and include a specific reference to the attached DCAA Forms 1 in the narrative body of the report.

d. In keeping with the guidance in 10-200, the report will consist of a cover sheet, narrative section including, exhibits and schedules, and appendixes assembled in the following sequence:

- Cover Sheet
- Report Narrative
  - Subject of Audit*
  - Executive Summary
  - Scope of Audit*
    - Qualifications (if applicable)
  - Results of Audit*
    - Exhibits and Schedules
      - Indirect Costs
    - Direct Costs Questioned (if applicable)
    - Indirect Costs Subject to Penalty
    - Exhibit of Contracts (with annotations to those contracts that include the penalty clause.)
    - Schedule Listing Cumulative Allowable Costs by Contract
- Contractor Organization and Systems
- DCAA Personnel and Report Authorization
- Audit Report Distribution and Restrictions
- Appendixes (as applicable)
  - Other Matters to be Reported
  - Billing Rates
  - DCAA Forms 1
  - Indirect Cost Rate Agreement
  - Certificate of Final Indirect Costs

Assist Audit Reports
Contractor's Response
*Refer to 10-506 for reporting on Reviews of Low-Risk Incurred Cost Proposals

10-504 Report Narrative (Incurred Cost Reports)

10-504.1 Subject of Audit

This section should identify the period audited and the purpose of the audit.
Example 1 (Final Contracting Officer Determined Indirect Cost Rates):

"We examined the [*insert contractor's name*]'s [*date of proposal*] certified final indirect cost rate proposal and related books and records for reimbursement of FY *20XX* incurred costs. The purpose of the examination was to determine allowability of direct and indirect costs and recommend Contracting Officer determined indirect cost rates for [*insert fiscal year period of performance*]. The proposed rates apply primarily to the flexibly-priced contracts listed in Exhibit *X*, page *XX*. A copy of [*insert contractor's name*]'s Certificate of Final Indirect Costs, dated [*insert date*], is included as Appendix *X* to the report (see page *XX*)."

"The proposal is the responsibility of the contractor. Our responsibility is to express an opinion based on our examination."

Example 2 (Final Audit-determined Indirect Cost Rates):

"We examined the [*insert contractor's name*]'s [*date of proposal*] certified final indirect cost rate proposal and related books and records for reimbursement of FY 20*XX* incurred costs. The purpose of the examination was to determine the allowability of direct and indirect costs and establish audit determined indirect cost rates for [*insert fiscal year period of performance*]. The proposed rates apply primarily to the flexibly-priced contracts listed in Exhibit *X*, page *XX*. A copy of [*insert contractor's name*]'s Certificate of Final Indirect Costs, dated [*insert date*], is included as Appendix 1 to the report (see page *XX*)."

"The proposal is the responsibility of the contractor. Our responsibility is to express an opinion based on our examination."

10-504.2 Executive Summary

This section gives the reader a brief overview of the audit findings. It briefly describes the audit recommendations, and the significant issues supporting the opinion. This section can be omitted in reports where the Results of Audit sufficiently summarizes the audit findings. An example of an Executive Summary is shown in Figure 10-2-2.

10-504.3 Scope of Audit

a. Use this section to detail the scope of the audit or any scope limitations. The standard scope of audit statement is discussed in 10-210.3. The scope of audit should briefly describe the status of the contractor's accounting system for the fiscal year under audit, and the most applicable management systems which were used to control and account for the recording of costs (e.g., Indirect and ODC system). The scope paragraph should also provide the impact the auditor's assessment of control risk had on the scope of audit and the impact of any outstanding system deficiencies on the incurred cost audit. Additional detail should be provided in the Contractor Organization and Systems section of the report.

(1) An example paragraph where the contractor's accounting system and related internal controls have been audited and deemed adequate might read:

> "For 20*XX* [*the fiscal year(s) under audit*], we considered [*insert contractor's name*]'s accounting system to be adequate for accumulating, reporting, and billing costs on Government contracts, as described in the Contractor Organization and Systems section of this report (page __). The scope of our examination reflects our assessment of control risk and includes tests of compliance with laws and regulations that we believe provide a reasonable basis for our opinion."

(2) An example paragraph where internal control audits have not been performed at a nonmajor contractor might read:

> "[*If a post award accounting system audit under Activity code 17740 has been performed include the following sentence*: We consider [*Contractor's name*]'s accounting system to be adequate (*or inadequate*) for accumulating and billing costs on Government contracts.] We have not specifically examined [*Contractor's name*]'s internal controls. [*If the contractor is a small business add the following sentence.* The contractor is a small business with limited resources to be applied to compliance procedures and testing.] The scope of our examination reflects our assessment of control risk and includes those tests of compliance with applicable laws and regulations that we believe provide a reasonable basis for our opinion."

This would generally include cases where a post award accounting system audit under Activity Code 17740 has been performed since it is not a full-scope audit of internal controls.

(3) An example paragraph where the contractor's accounting system and related internal controls have been audited and deemed inadequate might read:

> "For FY 20*XX* [*the fiscal year(s) under audit*], we considered [*insert contractor's name*]'s accounting system to be inadequate for accumulating, reporting, and billing costs on Government contracts. As described in the Contractor Organization and Systems section of this report (*page _*), [*insert contractor's name*]'s incurred cost submissions have been overstated in the past because of a lack of policies and procedures to identify and exclude unallowable costs. The scope of our examination reflects the risk of unallowable costs being included in the submission and includes expanded testing to provide a reasonable basis for our opinion."

b. If MAAR 6, Labor Floor Checks or Interviews, and MAAR 13, Purchases Existence and Consumption were considered necessary to complete the audit but could not be accomplished concurrently for the period audited (6-105.4), insert the following additional statement in the scope paragraph:

> "The concurrent verification of (*indicate whether labor, materials or both*) was omitted in this examination (*if accomplished in at least one year of a multi-year examination, state fiscal years omitted*)."

10-504.4 Qualifications

a. Identify any circumstances encountered that have a significant adverse effect on the audit or results. (See 10-210.4 for general guidance and 6-708.4 and 6-709.2 for specific limitations.)

b. If the incurred cost audit included requests for assist audits on subcontract or intracompany costs, the following information should be included in a report note or schedule for the unresolved subcontract/intracompany order(s).

- subcontract/intracompany order number
- subcontractor/intracompany name
- subcontractor/intracompany billed/claimed amount for the year
- name of the audit office performing the assist audit
- expected assist audit report date

When assist audits of subcontracts have been requested and the conditions identified in 6-708.4b or 6-709.2b(2) are met, a paragraph similar to the following example should be included:

"We have requested assist audits of subcontract costs included in the contractor's incurred cost proposal, as identified above. Upon completion of the related prime contracts, and prior to submission of our final audit report or cumulative allowable cost worksheets on these prime contracts, we will reconcile the subcontract costs claimed by the prime contractor to the cumulative allowable costs and fee/profit included in the final cumulative allowable cost worksheet or contract audit closing statement for the subcontract. These assist audit results do not impact the indirect expense rates of the prime contractor for this fiscal year. Any subcontract costs questioned in the assist audit will be reflected in future adjustment vouchers submitted by the subcontractor following settlement of the subcontractor rates. Therefore, the results of our evaluation are qualified to the extent that the issuance of this report does not indicate final acceptance of the claimed subcontract costs."

10-504.5 Results of Audit

Begin this paragraph with the phrase, "In our opinion . . ." If the report is qualified, modify the opinion statement, "In our opinion, except for . . ." Detail the major findings of the indirect and direct cost audit in this paragraph. Examples of lead in sentences for this section may read:

a. Indirect Rates

Example 1 (Indirect rates accepted as proposed.)

"Indirect Rates. In our opinion, [*except for the* (*describe the qualification and the potential impact on the results*)] the contractor's indirect rates are acceptable as proposed."

Example 2 (The auditor's indirect rate adjustments were accepted by the contractor.)

"Indirect Rates. In our opinion, [*except for the* (*describe the qualification and the potential impact on the results*)] the contractor's proposed indirect rates are acceptable as adjusted by our examination and the contractor has concurred with our findings. The examination results and recommendations are presented below. [*If rates are audit-determined, include the following sentence:*] The enclosed Indirect Cost Rate Agreement documents the contractor's concurrence with our findings and recommendations."

Example 3 (The auditor's indirect rate adjustments were not accepted by the contractor.)

"Indirect Rates. In our opinion, the contractor's proposed indirect rates are not acceptable as proposed. The examination results and recommendations are presented below.

The contractor did not accept our findings and recommendations with respect to [*state major areas of disagreement*]. [*If audit-determined rates, include the following sentence:*] The amounts disapproved are set out in the attached DCAA Form(s) 1."

b. Direct Costs

Example 1 (No direct costs questioned.)

"Direct Costs. In our opinion, [*except for the* (*describe the qualification and the potential impact on the results*)] claimed direct costs are acceptable and are provisionally approved pending final acceptance. Final acceptance of amounts proposed under Government contracts does not take place until performance under the contract is completed and accepted by the cognizant authorities and the audit responsibilities have been completed."

Example 2 (Direct costs questioned.)

"Direct Costs. In our opinion, [*except for the* (*describe the qualification and the potential impact on the results*)] the contractor's claimed direct costs are acceptable as adjusted by our examination. We questioned $ __ of direct costs proposed under Government contracts. [*Briefly describe the reasons for the major cost exceptions*.] Questioned direct costs by element within specific contracts are presented in Exhibit _, page _. Direct costs not questioned are provisionally approved pending final acceptance. Final acceptance of amounts proposed under Government contracts does not take place until performance under the contract is completed and accepted by the cognizant authorities and the audit responsibilities have been completed."

c. Indirect Costs Subject to Penalty

This paragraph applies to reports on incurred cost audits covering locations (1) having contracts active in the period under audit that contain FAR clause 52.242-3, and (2) corporate offices allocating costs to such locations. Include this paragraph when contracts that contain, or should have contained the identified clauses were active in the period and indirect costs are questioned (see 6-609 and examples at Figures 10-5-1 and 10-5-2).

Example 1 (No questioned costs are subject to the penalty.)

"Penalties for Unallowable Costs. None of the indirect costs questioned in this examination appear to be subject to the penalties provided in FAR 42.709."

Example 2 (Questioned costs are subject to the penalty.)

"Penalties for Unallowable Costs. Indirect costs questioned in this examination are believed to be subject to the penalties provided in FAR 42.709. Our recommendations for each questioned item are included in the notes to Exhibit(s) _ and their supporting schedules. Affected contracts are identified in Exhibit _, page _. Our recommendations concerning the interest to be recovered on unallowable costs paid will be furnished when we have received your determination on penalties to be assessed."

See 6-609.3f. for additional reporting requirements when questioned costs subject to the penalty are less than $10,000.

d. Cumulative Allowable Cost Worksheet.

This paragraph is applicable when a Schedule of Cumulative Allowable Costs is included in the incurred cost report. The use of the schedule should be coordinated in advance with the ACO and must contain sufficient detail to enable the ACO to close out contracts without individual contract audit closing statements.

"Cumulative Allowable Cost Worksheet (CACWS). The costs noted on the schedule of cumulative allowable costs in Exhibit __, Page __, represent costs that are considered allowable under each contract and are, therefore, reimbursable. As previously discussed and coordinated with the ACO, the cost information on the CACWS should be used to close out contracts. Individual contract audit closing statements will only be issued if requested by the ACO."

e. Exhibits and Schedules. The Results of Audit section of the report should contain all exhibits and supporting schedules required for a clear, complete presentation of the audit results. The specific procedures for achieving this reporting standard follow.

(1) In preparing the audit report, include the following categories of costs in the exhibits for each cost pool:

- Proposed Indirect Costs (Pool, Base and Rate)
- Voluntary Deletions
- Total Questioned Costs
- Questioned Costs (Concurred)
- Questioned Costs (Nonconcurred) (Attach DCAA Form(s) 1 if rates are audit determined)

(2) Summarize the results of audit in an exhibit format, showing the pool and base amounts for each indirect rate as proposed by the contractor and as questioned by the auditor. Include a table in this exhibit showing the extent of Government participation in the contractor's indirect allocation bases.

(3) Detail the audit results for each indirect cost rate classification in separate exhibits, with supporting schedules as required. Modify the presentation to accommodate complex rate determinations and negotiation problems. Questioned costs for each cost element or account should be supported by explanatory notes presented in the format discussed below. The auditor can briefly describe the reasons for the questioned costs in those instances when the contractor concurs. When advance agreements or special provisions governing specific contracts are in effect, reference the Other Matters to be Reported Appendix (10-505.1) in the explanatory notes associated with the applicable costs. Cross-reference the exhibits, schedules, appendixes, and the narrative portion of the report. Explanatory notes should be in the following format:

(a) Summary of Conclusions. Provide a summary statement on the audit findings and comments that explain why these costs were not accepted. Provide the basis for the questioned costs including a description of the questioned costs, details on the calculation of questioned costs, and a specific reference to the regulatory support such as the cost principle (FAR or DFARS), cost accounting standards, or contract terms. When quantitative methods are used as a basis for the audit conclusions; this should be disclosed for the individual cost elements examined. The note must disclose whether the auditor used either a nonstatistical or statistical sample as a basis for the audit conclusions. The note should adequately explain the computations and rationale supporting the audit conclusion, and it must also include details concerning the sample universe, the sampling method, and sampling unit. Exceptions should not be supported by reference to the DoD's Procedures, Guidance, and Information (PGI), which represent internal procedural instructions within the acquisition community.

(b) Basis of contractor's cost. Describe the basis of the contractor's submitted costs. Include enough detail to permit the contracting officer to fully understand how the contractor charged the specific cost element.

(c) Audit evaluation. Describe the steps taken to evaluate the cost element. When quantitative methods are used as a basis for the audit conclusions, these should be described. When statistical sampling was applied for variables, only one projected value or amount will be used (the point estimate). The note will state whether the statistical sampling results were projected to the sampling universe. If the sample results were projected

interval boundary amounts. If the results were not projected, the note should explain the

tions" and fully describe the effect these circumstances have on the submitted costs. Also include references to any "Qualifications" and fully describe the effect these circumstances have on the submitted costs.

(d) Contractor's reaction. Provide a statement that the contractor either agreed or disagreed with the questioned costs and the basis for any disagreement.

(e) Provide the auditor's response, if the contractor disagrees with the questioned costs.

(4) If the contractor concurs in the questioned costs, use auditor judgment on the extent of explanation needed to describe the questioned costs.

(5) If direct costs are questioned, include an exhibit summarizing the results of the audit of direct costs. Questioned direct costs should be supported by explanatory notes, in the same format as discussed above. The auditor can briefly describe the reasons for the questioned costs in those instances when the contractor concurs. Questioned amounts should be identified by procuring office, by contract, and by cost element.

(6) If the contractor's submission applies to contracts that contain, or should have contained the FAR or DFARS penalty clause and costs are questioned during the audit, include a schedule identifying questioned costs within pools by penalty class, amount, and percent of base subject to penalty (see Figure 10-5-1). For corporate home office expenses, the schedule should also include the allocable share for each division (see Figure 10-5-2).

(7) Include an exhibit listing all Government cost-reimbursement and flexibly priced contracts and subcontracts performed during the fiscal period. Indicate those contracts and subcontracts with advance agreements or governed by special provisions. Contracts that contain, or should have contained the FAR or DFARS "Penalties for Unallowable Costs" clause must be identified through a footnote (contracts where the penalty clause has been inadvertently omitted should be separately identified). Request the contractor to furnish the complete exhibit or the necessary information subject to your selective verification. Group the contracts by military departments or other Government agencies concerned. Identify prime contracts and subcontracts by number, and reference subcontracts to the prime contractor and prime contract number. (Note: If a properly completed CACWS, which meets all of the requirements of the Exhibit of Contracts, is attached to the report, a separate exhibit does not need to be included.)

(8) Include a schedule showing the cumulative allowable costs (inception to date) by contract or subcontract (see Figure 6-7-3). If not practical (e.g., if the schedule would be too voluminous), identify the location of the specific records that contain the allowable costs by contract and subcontract. (Note that the Indirect Cost Rate Agreement letter also includes this schedule as an enclosure, when practical; see 6-708.2c. If the schedule of cumulative allowable costs is included with the Indirect Cost Rate Agreement letter, it is not necessary to include it again here.)

f. Additional Remarks

(1) Conclude the Results of Audit narrative by providing remarks on the following items as appropriate:

(a) DCAA Form(s) 1,

(b) Indirect Cost Rate Agreements, or

(c) Certificates of Final Indirect Costs.

When discussing Form(s) 1, include an affirmative statement that the ACO was advised of the areas of disagreement that led to their issuance.

(2) If questioned costs are believed to be subject to FAR 42.709 or DFARS 231-70 penalties, request that the contracting officer's decision be furnished promptly.

(3) If the audit report covers audit-determined rates, and the contractor agrees with the audit findings, enclose a copy of the completed indirect cost rate agreement required by FAR 42.705-2(b)(2) with the audit report. In addition, include a specific reference to the attached indirect cost rate agreement in the narrative body of the report.

(4) Exit Conference

(a) If there were no findings, provide a summary of the exit conference. State the date held and the name and title of the contractor's designated representative(s) with whom the audit results were discussed, as required by 4-304.4 and 10-210.5e.(1).

(b) If there were findings, in addition to the requirements in (4)(a) above, summarize the contractor's overall reaction and any major differences. If the contractor submitted a written response, reference the appendix that contains the contractor's official reaction. The summary might read as follows:

> "We discussed the results of our examination with [*identify the contractor representative(s) by name and title*] in an exit conference held on [*date*]. [*If there are findings*] In response to our findings, [*summarize the findings and the contractor's reaction, if any.*] [*If the contractor provided a written response, also add*] The complete text of the contractor's response appears as Appendix [*X*]. [*If there are findings and the contractor provided no response, the following is an example of a statement that may be included.*] [*Identify the contractor representative*] reserved comment pending discussions with the Administrative Contracting Officer."

(5) Other Additional Remarks. See 10-210.5e. for other elements required in this portion of the narrative.

10-504.6 Contractor Organization and Systems

a. Contractor Organization.

Include information on the contractor's organization as discussed in 10-210.7.

b. Accounting System.

(1) For the contractor fiscal year audit, provide a brief summary of the accounting system or reference to the contractor's approved disclosure statement. Limit the description to the methods used for accumulating and allocating indirect costs to Government contracts and other work of the contractor. Typically, this would consist of a listing of the various indirect cost pools with brief explanations of their composition and of the related bases for allocation.

(2) Describe any significant change in indirect cost accounting and allocation methods made by the contractor since the prior audit, and your conclusions as to the propriety of the change.

(3) Briefly describe the status of DCAA's audit of the contractor's accounting system for the fiscal year under audit. Provide the system opinion and any accounting system deficiencies outstanding during the year under audit and the status of any contractor corrective action.

c. Contractor's "Systems". For major contractors and larger nonmajor contractors who have internal controls over some of the systems listed in 5-102d., this section should provide the background information on each relevant internal control system impacting the incurred cost audit (e.g., Material, Labor, and Indirect and ODC systems). (See 10-210.7c. through 10-210.7g.)

10-504.7 DCAA Personnel and Report Authorization

Conclude the narrative portion of the report with the information prescribed in 10-211.

10-505 Appendixes (Incurred Cost Reports)

Use appendixes as applicable to provide information and comments as described in the following paragraphs.

10-505.1 Appendix - Other Matters to be Reported

Use an appendix with this title to present any additional information, which cannot be conveniently included in the exhibits and schedules, and to cover any other matters which warrant the attention of the contracting officer. Use this appendix to describe any advance agreements and special provisions governing specific contracts as required by FAR 42.705-1(b)(2), unless this information is identified in the exhibit required by 10.504.5e.(7).

10-505.2 Appendix - Billing Rates

A billing rates appendix may be used to recommend billing rates when the indirect rates are contracting officer determined, or to establish billing rates when the indirect rates are audit-determined (FAR 42.704). Identify the period to which the recommended rates apply. Comments supporting the recommended rates should mention whatever factors you considered, such as cost trends, changes in production volume, and shifts in areas of activity. The recommended rates should be set low enough to ensure that the contractor will not be reimbursed for unallowable costs (see 6-705.1).

10-505.3 Other Appendixes

The report should include the following appendixes as applicable: DCAA Forms 1; Indirect Cost Rate Agreement; Certificate of Final Indirect Costs; assist audit reports; and contractor written comments to the audit results.

10-506 Reporting on Reviews of Low-Risk Incurred Cost Proposals

10-506.1 Standard of Review

Generally Accepted Government Auditing Standards have incorporated Statements on Standards for Attestation Engagements (SSAE) in guidance covering fieldwork and reporting on attestation audits (2-100). Attestation standards permit negative assurance when the evaluation meets the standards for a review. The objective of a review is to accumulate sufficient evidence to restrict attestation risk to a moderate level. Review procedures are typically limited to inquiries and analytical procedures. A desk review of an incurred cost submission may be performed if it is classified as low-risk (see 6-104.1) based on auditable dollars and known audit risk. Procedures (see 6-104.5) include evaluating the submission for completeness, unusual items, and significant changes, and mathematical verification of their accuracy. These, combined with the absence of audit leads indicating a high probability of significant questioned cost, are sufficient to support negative assurance on a desk reviewed proposal. Low risk proposals selected for audit will continue to be reported on in accordance with 10-504.

10-506.2 Report Elements

a. Cover Sheet. Assure that the review is never referred to as an examination, whether in the caption, in the table of contents section headings, or in headers.

b. Report Narrative

Subject of Review. Identify the contractor's proposal, the period reviewed, and the purpose of the review (see 10-210.1b(3)). End this section with the statement:

> "The proposal is the responsibility of the contractor. Our responsibility is to report our conclusions on the proposal based on our review."

Executive Summary. Because significant findings would require expansion of the evaluation from a review to an examination, this section should never be required. However, its use is not prohibited under exceptional circumstances.

Scope of Review. The scope statement should state the procedures applied, the standards to which claimed costs were compared, that an examination was not performed, and the stated criteria used to evaluate the proposal. The scope statement should be modified, as indicated below when DFARS or CAS do not apply. The paragraph may read,

> "We determined that no significant costs were questioned in prior years and that no indicators of audit risk had been identified. Accordingly, we limited our review to the verification of the mathematical accuracy of the proposal and a limited review of claimed costs for unusual items and items having obvious potential for including significant unallowable costs. We conducted our review in accordance with generally accepted government auditing standards. A review is substantially less in scope than an examination, the objective of which is the expression of an opinion on [*insert contractor's name*]'s incurred cost proposal. Accordingly, we do not express an opinion.
>
> We evaluated the incurred cost proposal using the applicable requirements contained in the:
> - Federal Acquisition Regulation (FAR);
> - Defense FAR Supplement (DFARS) [*for non DoD agencies, identify the specific agency supplement – see 9-102.2 and 15-102.3*]; and
> - Cost Accounting Standards (CAS) (*if applicable*)."

When CAS does not apply include a statement providing the basis for the contractor's exemption from CAS. For example, the following statement could be included when the small business exemption applies:

> "The contractor claims exemption under 48 CFR 9903.201-1(b)(3) from the practices required by the Cost Accounting Standards Board rules and regulations because it considers itself a small business concern."

Qualifications. Report qualifications are not applicable to review reports because of the limited assurance provided in a review report. Limitations on scope arising from the performance of a review rather than an examination will not be described as qualifications.

Results of Review. Begin this section with the statement,

> "Based on our review, nothing came to our attention that caused us to believe that significant costs claimed on the Government contracts identified in [*Exhibit of Contracts*] were unallowable, unallocable or unreasonable [*except as stated below*]."

Incorporate other Results sections as appropriate:

- Exhibits and Schedules [if necessary]
- Exhibit of Contracts (with annotations to those contracts that include the penalty clause, if any.)
- Schedule Listing Cumulative Allowable Costs by Contract (see Figure 6-7-3)

c. Contractor Organization and Systems (when available)
d. DCAA Personnel and Report Authorization (see 10-211).
e. Report Distribution and Restrictions (see 10-507)
f. Appendixes [if necessary] (see 10-505)

10-507 Distribution (Incurred Cost Reports)

Distribute one copy of the report to the following:

(a) Other DoD contracting officers or procurement officers administering a significant portion of the contractor's total Government business.

(b) The contract audit coordinator, if any.

(c) The prime contract auditor, if applicable. To facilitate distribution within the receiving FAO, the distribution list should identify the prime contractor(s) whose subcontracts are included in the period covered by the report. List the prime contractor name with the address of the FAO believed to be cognizant of the prime contractor:

DCAA-National Branch Office
20251 Century Boulevard
Germantown MD 20874-1162
Prime: Lockheed Martin ATM

(d) Upon specific request, other organizations consistent with 10-205 and the report restrictions (See 10-212 and Figure 10-2-4).

(e) The contractor, through the contracting officer, unless the report is restricted in accordance with 10-212.2.

(f). Non-DoD Organizations: Distribute a copy of the incurred cost audit report to non-DoD organizations as referenced in 15-100 and Supplements 15-1S1-15-1S6.

Figure 10-5-1
Schedule Of Unallowable Costs Subject To Penalty

Audit Report No._____ Schedule _____

SCHEDULE OF UNALLOWABLE COSTS SUBJECT TO PENALTY
Period _____ Through _____

	Amount Subject to FAR 42.709			
	Questioned Costs	Level One Penalty	Level Two Penalty	Reference
Cost Element				
Engineering Overhead:				
Consultants	$150,000	$100,000	$	SEE NOTE
Depreciation	100,000	100,000		BELOW***
Pension	100,000	100,000		
Relocation	100,000	50,000		
Legal Fees	80,000	40,000		
Professional Actv.	80,000	80,000		
Travel	75,000	20,000		
Insurance	25,000	25,000		
Entertainment	25,000	_____	25,000	
Totals	$735,000	$515,000	$25,000	
Participation of Contracts Subject to Penalty Clause				
		Total	Subject to Penalty	Not Subject to Penalty
Allocation Base		$40,000,000	$8,000,000	$32,000,000
Percent of Base		100%	20.0%	80.0%
Questioned Costs Subject to Level One Penalty ($515,000 X 20%)			$103,000	
Questioned Costs Subject to Level Two Penalty ($25,000 X 20%)			$ 5,000	

***NOTE: INCLUDE REFERENCES TO NOTES IN THE EXHIBIT CONTAINING THE PENALTY INFORMATION AS DISCUSSED IN CAM 10-504.5e(6).

Figure 10-5-2
Home Office Expense
Schedule Of Unallowable Costs Subject To Penalty

Audit Report No._____ Schedule _____

HOME OFFICE EXPENSE
SCHEDULE OF UNALLOWABLE COSTS SUBJECT TO PENALTY
Period _____ Through _____

	Amount Subject to FAR 42.709			
	Questioned Costs	Level One Penalty	Level Two Penalty	Reference
Consultants	$500,000	$300,000		See Note
Lobbying	150,000	150,000		Below***
Advertising	100,000	100,000		
Public Relations	100,000	100,000		
Relocation	80,000	40,000		
Travel	50,000	20,000		
Totals	$980,000	$710,000		
Allocation to Divisions				
Division	% Allocable	Amount		
Missile	60.0%	$426,000		
Submarine	20.0%	142,000		
Service Co.	10.0%	71,000		
Research	10.0%	71,000		
Total	100.0%	$710,000		

***NOTE: INCLUDE REFERENCES TO NOTES IN THE EXHIBIT CONTAINING THE PENALTY INFORMATION AS DISCUSSED IN CAM 10-504.5e(6).

10-600 Section 6 --- Audit Reports on Postaward Audits of Cost or Pricing Data

10-601 Introduction (Postaward Reports)

a. This section provides guidance for preparing and distributing reports on postaward audits of contractor cost or pricing data for compliance with 10 U.S.C. 2306a. Such reports embody the results of audits performed using the guidance in 14-1000. Auditors sometimes refer to these audits as “defective pricing audits,” “audits for possible defective pricing,” etc. In audit reports, however, FAOs should use the terms employed in this section.

b. Throughout this section the term “contracting officer” includes their representatives. The term “contract” also applies to subcontracts except where this section specifically notes a distinction.

c. Generally Accepted Government Auditing Standards incorporate Statements on Standards for Attestation Engagements (SSAE) in guidance covering fieldwork and reporting on attestation audits. Attestation standards prohibit evaluation of an entity's compliance with laws or regulations under the standards for a review. The objective of a postaward audit is expression of an opinion on the entity's compliance with the requirements of the Truth in Negotiations Act (10 U.S.C. 2306a) in negotiating the contract under audit. Accordingly a defective pricing evaluation must be performed and reported under the standards for an examination, with the objective of expressing an opinion on the assertion (cost or pricing data) underlying the pricing action (prime contract, modification, subcontract, etc.).

10-602 Nature and Timing of Reports (Postaward Reports)

a. The cost or pricing data for each pricing action (prime contract, modification, subcontract, etc.) is subject to a separate defective pricing audit. Therefore, separately report apparent defective pricing found on each pricing action. When reporting systemic defective pricing issues, however, see 14-120 and 10-606.6. Issue all audit reports promptly, whether or not apparent defective pricing is disclosed. However, see 10-605.1c.(1) for the issuance of a prime postaward audit report when a subcontract postaward audit is not complete.

b. For subcontract reporting, it is usually easier for the prime contract auditor to apply the prime contractor's additives to recommended subcontract price adjustments. The prime contract auditor may also need to perform other audit actions at the prime contract level, such as those involving possible “offsets” or the issuance of appropriate disapprovals under flexibly priced contracts for recommended subcontract price adjustments. Therefore, issue subcontract audit reports to the prime contract auditor. (However, see 4-702.8 for comments on issuing subcontract audit reports when there is alleged subcontractor fraud in connection with the defective pricing audit.) This procedure usually results in earlier holding of an exit conference with the prime contractor. It also provides for earlier involvement by the prime contract auditor in eventual negotiation of recommended prime contract price adjustments.

10-603 Report Format and Contents (Postaward Reports)

a. The nature and extent of the detailed report depends on:
(1) whether or not the audit disclosed apparent defective pricing,
(2) materiality of recommended price adjustments,
(3) results of discussions with the contractor including those involving offsets, and
(4) items of special interest to the contracting officer or other authorized requestor.

b. Provide the information as stated in 10-606 regardless of audit findings.

c. Prepare the report using the basic guidance contained in 10-200 plus the supplemental information provided by this section. A “shell” report is provided on the APPS and the DCAA Intranet.

d. The general arrangement of report contents follows.
Cover sheet (see 10-205)
Narrative body of report (see 10-606)
Subject of Audit (10-606.1)
Executive Summary (10-606.2)
Scope of Audit (10-606.3)
Qualifications (10-606.4)
Results of Audit (10-606.5)
Opinion
Exhibits and schedules
Unsatisfactory Conditions (10-606.6)
Additional Remarks (10-606.7)
Contractor Organization and Systems (10-606.8)
DCAA Personnel and Report Authorization (see 10-211)
Report Distribution and Restrictions (see 10-212)
Appendixes (see 10-607)

10-604 Cover Sheet (Postaward Reports)

10-604.1 General Information

Follow the general format in 10-205 and Figure 10-2-1. Include the title of the report (Report on Postaward Audit of Cost or Pricing Data) on the subject line, the prime contract number and the subcontract identification, if applicable, on the reference line, and the contractor's name, city, and state on the contractor line.

10-604.2 Release of Subcontract Audit Report to the Higher-Tier Contractor

a. If a Government audit discloses defective subcontractor cost or pricing data, FAR 15.407-1(f) provides for contracting officer release of information, upon request to prime contractors or appropriate subcontractors to the extent necessary to secure a prime contract price reduction. However, the contracting officer must be careful to protect confidential business information from improper disclosure in such situations.

b. A reference line for release restrictions will be included on the cover sheet of subcontract defective pricing audit reports and on higher-tier contractor audit reports containing recommended subcontractor price adjustments. The release statement will appear in the report section entitled "Audit Report Distribution and Restrictions."

(1) If the subcontractor does not object to the release of the report, add the sentence shown at 10-212.3c.(2).

(2) If the subcontractor objects to the release of company proprietary information, which may be included in the audit report, the following statement will be included:

> "[*Name of subcontractor*] considers [*identify the data which the subcontractor objects to releasing*] to be trade secrets or confidential business information. Accordingly, the contracting officer should protect such information from improper disclosure in accordance with FAR 15.407-1(f)."

10-605 Addressing and Distributing Reports (Postaward Reports)

The general policy for addressing audit reports is stated in 10-206. Paragraph 10-212 states the general policy for report distribution. For reports covered by this section, include the onsite FLA (refer to the FLA Locator on the DCAA Intranet site) on the distribution list.

10-605.1 Addressing and Distributing Prime Contract Audit Reports

a. If the auditor performed the postaward audit of cost or pricing data in response to a specific Government request, address the report to the requestor with a copy to the plant representative/ACO and/or the PCO, as appropriate.

b. If DCAA initiated the audit, address the report to the PCO with an information copy to the plant representative/ACO, unless the plant representative/ACO has negotiation authority. In that event, address the report to the plant representative/ACO with a copy to the PCO. With the case of Wright Patterson Air Force Base (WPAFB), a centralized group has responsibility for dispositioning postaward audit findings in lieu of the PCO. The audit report should still be addressed to the PCO, with a copy furnished to the plant representative/ACO; however, an additional copy should be furnished to ASC Pricing, PKFB. The contract will identify negotiation authority for orders issued under basic ordering agreements.

c. The prime contract auditor will incorporate positive subcontract audit report findings and make distribution of a combined report (see 10-605.2).

(1) When the prime auditor becomes aware that a prime audit and a subcontract audit are scheduled to be performed in the same period, the prime auditor should incorporate results of the subcontract audit where incorporation of the subcontract audit will not cause an undue delay in the issuance of the prime contract audit report. If the incorporation of the subcontract audit will cause an undue delay in the issuance of the prime contract audit report, the prime auditor should issue the prime report without incorporating the results of the subcontract audit.

(2) When the prime contract auditor is unable to complete the prime contract audit and issue a combined report within 30 days of receiving a subcontract audit report with positive findings, he or she will, as an interim measure, issue and distribute an audit report that includes the subcontract findings and the prime contractor's add-ons. See 14-119.4 for the proper application of prime contractor add-ons.

d. If the prime contract is flexibly priced and the subcontract audit report recommends disallowance or nonrecognition of incurred costs (see 14-119.4b.), the prime auditor will immediately advise the PCO. Timely action (1) allows the PCO to notify the prime contractor that the increased costs may be disallowed or not recognized on the prime contract and (2) enables the prime contractor to exercise the price reduction clauses it should have in its contract with the subcontractor. Delays in reporting subcontractor defective pricing may prevent the prime contractor from obtaining a subcontract price reduction, thus precluding the prime's legitimate recovery of its costs.

e. Distribute one copy of each report with apparent defective pricing on Army contracts, certain Air Force contracts, and contracts issued by any contracting activity of the Defense Logistics Agency as shown in supplement 10-6S1.

f. One copy of any report regarding apparent defective pricing on NASA prime contracts may be sent to the NASA OIG for Auditing (15-1S1) if specifically requested.

10-605.2 Addressing and Distributing Subcontract and Intracompany Audit Reports

a. For a subcontract or intracompany audit that was performed in response to a request by a contracting officer or other authorized person or activity, address the report to the requestor with a copy to the prime contract auditor.

b. For a subcontract or intracompany audit report on a DCAA initiated audit, address the report to the prime contract auditor. Follow the release requirements in 10-212.3. Do not distribute copies of these reports outside DCAA, since the prime contract auditor will make distribution of the combined report, if appropriate. The prime contract auditor will distribute the combined report as provided in 10-605.1.

c. Follow procedures similar to the above when dealing with lower-tier subcontracts. The prime contract auditor is responsible for obtaining intermediate-tier subcontractor add-ons when there are positive findings below the first tier of subcontracts.

10-606 Narrative (Postaward Reports)

The body of the report will contain the following captioned paragraphs as applicable. See 10-200 for general guidance.

10-606.1 Subject of Audit

The first portion of this section should identify the pricing action audited and the purpose of the audit. It should also include information about the contract such as contract type, incentive provisions, total value of the pricing action covered by the audit, items purchased, and other appropriate information. Opening statements for five common situations could read as follows:

Example 1 (Prime contract audit requested by contracting officer):

"As requested by [*requesting office*] in [*memorandum/letter*] [*reference*] dated ___ , we examined contractor cost or pricing data related to initial pricing of the subject contract. The purpose of the examination was to test whether the price, including profit, negotiated in that pricing action was increased by a significant amount because the contractor did not comply with the statutory (10 U. S. C. 2306a) requirement to furnish accurate, complete, and current cost and pricing data. In its Certificate of Current Cost or Pricing Data dated __, the contractor certified the data as of __, the date of agreement on price. The contract, initially priced at $*XX*, is firm-fixed-price type and provides for production and delivery of ___. A Chronology of Significant Events concerning our examination of the cost or pricing data related to the pricing action is included as an appendix to this report.

The cost or pricing data are the responsibility of the contractor. Our responsibility is to express an opinion on whether the cost or pricing data submitted during the negotiation of [*pricing action*] complied with the requirements of 10 U.S.C. 2306a."

Example 2 (DCAA initiated audit):

"As part of our continuing program of evaluating contractor compliance with 10 U.S.C. 2306a and implementing regulations, we examined [*contractor cost or pricing data related to the pricing of Supplemental Agreement No. 4 to the subject contract*.] The purpose of the examination was to test whether the price, including profit, negotiated in that pricing action, was increased by a significant amount because the contractor did not comply with the statutory requirement to furnish accurate, complete, and current cost and pricing data.

In its Certificate of Current Cost or Pricing Data dated ___, the contractor certified the data as of ___, the date of agreement on price. The firm-fixed-price contract, initially priced at $XX, provides for ___. A Chronology of Significant Events concerning our examination of the cost or pricing data related to the pricing action is included as an appendix to this report.

The cost or pricing data are the responsibility of the contractor. Our responsibility is to express an opinion on whether the cost or pricing data submitted during the negotiation of [*pricing action*] complied with the requirements of 10 U.S.C. 2306a." Example 3

(Subcontract or intracompany audit requested by contracting officer/another FAO or is DCAA initiated):

Modify Examples 1 and 2 by substituting "subcontract" or "intracompany order" for "contract" wherever applicable.

Example 4 (Cost-reimbursement type contract):

For cost-reimbursement type contracts, the statement on purpose of the audit should not refer to "the price, including profit." Instead, use the following wording:

"The purpose of the examination was to test whether the estimated cost or fee negotiated in that pricing action, or any cost reimbursable under this contract, was increased . . ."

Example 5 (Lack of Certificate of Current Cost or Pricing Data):

If the contractor did not execute a Certificate of Current Cost or Pricing Data in connection with the pricing action(s) being reported on, modify the appropriate sentence in Examples 1 and 2. It may state, for example:

"In the absence of the contractor's Certificate of Current Cost or Pricing Data for this pricing action, we have treated __ [*the date that price agreement was reached or the date the contract (or modification) was executed*] as the effective date of the contractor's responsibility for the cost or pricing data submitted. The contract, initially priced at $XX, is firm-fixed-price type and provides for production and delivery of __. A Chronology of Significant Events concerning our examination of the cost or pricing data related to the pricing action is included as an appendix to this report."

10-606.2 Executive Summary

Provide a brief overview of the audit findings (qualified, if appropriate) in the Executive Summary section of the report. The summary by defective pricing issue is helpful to contracting officers because contractors often respond by issue. This type of information should be provided here if requested by the contracting officer. An example of suggested wording follows:

"Our examination disclosed that [*insert contractor's name*] overstated tooling repair and maintenance (TR&M) material costs as a result of submitting inaccurate cost or pricing data. The audit baseline and recommended adjustment are summarized as follows:

Audit baseline	$67,045,794
Recommended Price Adjustment	$ 326,088

SIGNIFICANT ISSUES:

- [*Insert contractor's name*] made an error when computing proposed TR&M material costs. As a result, the proposal was overstated by $225,237.
- The remaining recommended price adjustment results from applying the material burden, G&A expense, cost of money and profit rates to the overstated amount proposed for the TR&M material costs.
- [*Insert contractor's name*] agrees with the total recommended price adjustment."

10-606.3 Scope of Audit

a. Include an appropriate scope of audit statement, modified for circumstances that significantly affected the audit scope. Tailor the scope statement to accurately reflect the extent of audit work performed. Describe the impact of the assessment of control risk on the postaward audit for the accounting and estimating systems at the time of the proposal and price negotiation of the subject contract. In addition, use this section to describe any advance agreements and special contract provisions, which influenced the auditor's decision to recommend or not recommend a price adjustment. Use the following scope statements, as appropriate:

Example 1 (Unqualified report):

"We conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the data and records evaluated are free of material misstatement. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the amounts and disclosures in the data and records evaluated;
- assessing the accounting principles used and significant estimates made by the contractor;
- evaluating the overall data and records presentation; and
- determining the need for technical specialist assistance [*and quantifying the results of a Government technical evaluation*].

We evaluated the cost or pricing data using the public law contained in FAR Subpart 15.4 and [*the advance agreements and other pertinent provisions of the contract as referenced in [Appendix__*].The contractor's overall accounting and estimating systems in effect at the time of the proposal and price negotiation are considered adequate to ensure that forward pricing proposals and final certified contract prices are based on accurate, complete and current cost or pricing data. Our audit scope reflects our assessment of control risk and provides a reasonable basis for our opinion."

NOTE: For an inadequate accounting/estimating system, see 10-606.3b. for sample language.

Example 2 (Qualified report):

Precede the words "We conducted our examination" in the first sentence of Example 1 by the phrase "Except for the qualifications discussed below,"

Example 3 (Explanatory modification used when the auditor limited audit scope to that requested by the contracting officer and the audit conclusions are not qualified):

"To satisfy your specific request, we limited this current examination to the following aspects: [*insert specific information*]. Except for this limitation, we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the data and records evaluated are free of material misstatement. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;

- examining, on a test basis, evidence supporting the amounts and disclosures in the data and records evaluated;
- assessing the accounting principles used and significant estimates made by the contractor;
- evaluating the overall data and records presentation; and
- determining the need for technical specialist assistance [*and quantifying the results of a Government technical evaluat*ion].

We evaluated the cost or pricing data using the public law contained in FAR Subpart 15.4 and [*the advance agreements and other pertinent provisions of the contract as referenced in Appendix* _]. The contractor's overall accounting and estimating systems in effect at the time of the proposal and price negotiation are considered adequate to ensure that forward pricing proposals and final certified contract prices are based on accurate, complete and current cost or pricing data. Our audit scope reflects our assessment of control risk and provides a reasonable basis for our opinion. This report is limited to the pricing action under [*contract no.*] identified above. We may continue to audit other aspects of eligible pricing actions negotiated under the subject contract and may issue separate reports on them."

NOTE: For an inadequate accounting/estimating system, see sample language below.

b. Accounting and estimating systems assessment. Provide information on the adequacy of the accounting and estimating systems internal controls and their impact on the scope of the postaward audit. The following is an example to be used when the accounting and/or estimating system is considered inadequate:

"We evaluated the cost or pricing data using the public law contained in FAR Subpart 15.4. The contractor's accounting and estimating system in effect at the time of the proposal and price negotiation is/are considered inadequate to ensure forward pricing proposals and final certified contract prices are based on accurate, complete and current cost or pricing data. Because of an outstanding accounting and/or estimating internal control deficiencies, described in the Contractor Organization and Systems section of this report (page _), [briefly describe the impact of the deficiencies on the audit scope.]. Our audit scope reflects our assessment of control risk and includes expanded testing to provide a reasonable basis for our opinion."

10-606.4 Qualifications

a. Include a paragraph on circumstances affecting the audit only if the audit results must be qualified because the stated purpose and scope could not be accomplished. In such a case, both the "scope" statement and the "results of audit" paragraph must specifically refer to this paragraph. Do not refer to any unqualified audit conclusions and recommendations in this section. Properly explain them in the other portions of the report.

b. Clearly explain the nature and potential impact of each circumstance that prevents an unqualified conclusion, as well as any steps taken to overcome or mitigate the problem. If applicable, also explain any further action the auditor will take after issuing the report.

c. For situations involving more than one qualification, use sub captions to highlight the specific circumstances requiring a report qualification. For example, the sub captions might read "a. Contractor's Denial of Access to Records" and "b. Inadequate Contractor Cost Records."

10-606.5 Results of Audit

a. The auditor's opinion and details in support of the audit findings are provided in the Results of Audit section. Present all data and explanations using an exhibit type format to summarize the audit baseline and the results of the audit (see 14-116). Minimum data required are:

Audit baseline (see 14-116.2).

Recommended price adjustment (Enter the total recommended price adjustment or "none" if the amount is zero).

Adequately explain each price adjustment in the notes to the exhibits and schedules. Include the reason the item is defective by establishing that each of the five elements required for defective pricing have been met (see 14-102b.). In addition, include the relevant date for each recommended price adjustment when appropriate.

b. If the audit does not result in a recommended price adjustment, or the recommended price adjustment does not meet the guidelines in 14-120.1 for materiality, use wording similar to Example 1. If the results of audit reflect a recommended price adjustment, the basis of that adjustment should be fully explained in the explanatory notes (Example 2). On flexibly priced prime contracts, separately present findings in the prime audit report for (1) recommended price adjustments and (2) recommended disallowance or nonrecognition of incurred costs (14-119.4b.). Subcontract audit reports should clearly identify that the defective pricing at the subcontract level will result in disallowance or nonrecognition of incurred costs at the prime level. If the audit is qualified, make reference to the qualification paragraph.

Example 1 (Unqualified opinion with no audit exceptions):

"In our opinion, the contractor's certified cost and pricing data complied, in all material respects, with the requirements of 10 U.S.C. 2306a."

Audit baseline	$____
Recommended price adjustment	None"

Example 2 (Unqualified opinion with audit exceptions):

"In our opinion, the cost or pricing data submitted by the contractor was not compliant in all material respects with the requirements of 10 U.S.C. 2306a because the data was not accurate, complete, and current as of the date of agreement on price. [*Briefly discuss the major recommended price adjustments, including a reference to any CAS reports issued per 14-120.2.*]

The results of our examination follow:"

Example 3 (Qualified opinion with possible added exceptions):

Insert any needed qualifying wording at the beginning of the first sentence in Example 1 or the second sentence in Example 2. Refer specifically to the possible effects, not merely to the circumstances that led to the qualification. If access was denied to historical cost records, Example 2 might include the following qualification:

"In our opinion, except for additional recommended price adjustments, if any, that might result from access to the historical cost records of previously manufactured items as discussed above, the results of our examination follow:"

c. Paragraphs 10-606.5a. and 14-123 list minimum data required for exhibits and schedules. As discussed in 14-123, each audit report with a recommended price adjustment must specifically list the five points for establishing defective pricing in the explanatory notes and discuss how each point has been met (14-102b.). Highlights to be addressed in discussing the five points include:

- In discussing the first point, provide the relevant parts of the FAR definition of cost or pricing data along with an explanation of how the data in question fits the FAR definition. See 14-104.3.
- In discussing the second point, provide the date that the defective data was reasonably available to the contractor and the date of price agreement or, if applicable, the other date agreed upon between the parties. Emphasize that the availability date was prior to the date of price agreement. See 14-104.6.
- In discussing the third point, address how the auditor was able to confirm that the contractor did not submit the data (e.g., no record of submission in contractor or Government proposal files) and that the Government had no actual knowledge of the data (e.g., PNM language and confirming memorandum). See 14-105.
- In addressing the fourth point, discuss how reliance was confirmed, such as the date for the PNM and the confirmation memorandum from the contracting officer. See 14-116.1 and 14-122.
- In addressing the fifth point, explain how the Government's reliance on the defective data caused an increase in price.

d. Clearly identify details on significant offsets alleged by the contractor. Do this in a fashion similar to that used for explanatory notes. If appropriate, auditors can merely make reference to them here and cover the details in a separate exhibit. If the contractor has not submitted appropriate offset certifications for contracts entered into on or after February 15, 1987 (14-118b.), include in the report an additional statement that the contractor refused to provide a certification and, for this reason, we have not included the claimed offsets in our computation of the recommended price adjustment and do not express an opinion on the claimed offsets. Make reference to the auditor's notification for contracting officer assistance to obtain contractor certification prior to issuing the report.

e. When postaward audits disclose overpayments resulting from defective pricing on (1) DoD contracts or modifications awarded after November 7, 1985 or (2) other Government contracts or modifications awarded after January 22, 1991, include the following statement as part of this portion for prime contract audit reports (see 14-124):

> "The Government sustained a loss in the form of interest on overpayment which resulted from the contractor's failure to comply with the Truth in Negotiations Act (10 U.S.C. 2306a). As provided by the statute (*applicable to DoD contracts*) and/or FAR 15.407-1(b)(7) (*applicable to contracts of all Government agencies*), this interest amount is computed at the current rate prescribed by the Secretary of the Treasury under Section 6621 of the 1986 Internal Revenue Code, from the time of the overpayment to the date the Government is repaid."

f. When postaward audits at subcontractors disclose overpayments resulting from defective pricing on subcontracts meeting the conditions in e. above, the subcontract auditor should include in this portion of the report the statement in e. above and add the following sentence at the end of the paragraph:

> "Recommendations on interest due as a result of Government overpayments will be made by the prime contract auditor."

g. Provide exhibit information regarding interest only if requested by the contracting officer. If exhibit information is provided, add the following sentence to the above statement:

> "See page _, Exhibit _ for details the responsible procuring official will need for making the computation."

See 14-124 and Figure 14-1-1 for an explanation of the information to be included in the exhibit.

10-606.6 Systemic and/or Unsatisfactory Conditions

a. To promote consistency in resolving cases where the cited condition is systemic, report the systemic findings in a single report that identifies all affected pricing actions and contracting officers and identify the systemic nature of the condition. See 14-120.3b. for guidance on coordination with contracting officers. If other reports were already issued before the systemic nature of the issue was known, include the following statement:

> "In our opinion the condition resulting from submission of the inaccurate, incomplete, or noncurrent data identified on page _, Note _, is systemic. We have issued similar audit reports on other affected contracts. To assist in the timely and consistent resolution of the reported findings, a current list of these reports and the affected PCOs is included in Appendix _."

b. When there is reasonable basis to suspect that the contractor knowingly submitted inaccurate, incomplete, or noncurrent cost or pricing data, issue a referral of suspected irregular conduct using DCAA Form 2000.0. Following the procedures in 4-702.5, transmit a copy of the form to the contracting officer only if the responsible investigative agency does not object (see DCAAI 7640.16). For DoD contracts or modifications awarded after November 7, 1985, include the following statement in the transmittal:

> "Notwithstanding any potential civil or criminal fraud violations, 10 U.S.C. 2306a, as amended by Section 952(a) of the 1987 Defense Authorization Act, states that a contractor who knowingly submits inaccurate, incomplete, or noncurrent cost or pricing data must pay a penalty in an amount equal to the overpayment. In our opinion, there is a reasonable basis to conclude that [*contractor name*] made a knowing submission as contemplated under the statute and, therefore, is liable to the Government for $ [*amount*]."

c. When a pattern of deficiencies or discrepancies suggests fraud, other unlawful activity, or the existence of unsatisfactory conditions, refer or report the matter using the guidance in 4-700 or 4-800.

10-606.7 Additional Remarks

a. Use this paragraph to confirm that factual matters relating to any apparent defective cost or pricing data were coordinated with the procuring contracting officer (PCO) or the PCO's representative during the course of the audit. (Provide auditor's name and title and PCO's name and title.) In addition, include a statement that a copy of the draft report exhibits and explanatory notes describing the recommended price adjustments were provided to the PCO (provide PCO name and date) in order to ensure that a mutual understanding of the facts and issues was reached (CAM 14-122). Also see 10-210.5e for other elements required in this portion of the narrative.

b. Exit Conference

(1) If there were no findings, state the date held and name and title of the contractor's designated representative(s) with whom the audit results were discussed as required by 4-304.3 and 10-210.5e.(1).

(2) If there were findings, prepare the exit conference statement as follows:

(a) In addition to the requirements in 10-606.7b.(1) above, summarize the major recommended price adjustments.

(b) Include a summary of the contractor's reaction to the major recommended price adjustments and the date that the draft and notes explaining the findings were provided to the contractor. Note, however, that comments on offsets alleged by the contractor are

part of an earlier portion of the report (see 10-606.5d.). When appropriate, state that the report includes the contractor's complete written response as an appendix.

(c) In a brief auditor rejoinder following the summary of the contractor's reaction, discuss the validity of the contractor's response.

(d) An example of a report paragraph with recommended price adjustments and contractor reaction is as follows:

> "We discussed the results of our examination with [*identify the contractor representatives(s) by name and title*] in an exit conference held on [*date*]. [*Include a summary of the results.*] In response to our findings, [*include a summary of the contractor's reaction to the results.*] The complete text of the contractor's response appears as Appendix [*X*]. [*Include the auditor's rejoinder to the results; discuss the validity of the contractor's response.*]"

c. For apparent defective pricing cases with positive findings, request that the auditor be provided the opportunity to evaluate and comment on any data received after report issuance that pertains to report recommendations. Also request that the contracting office advise the audit office of the disposition of the audit recommendations (FAR 15.407-1(d)).

10-606.8 Contractor Organization and Systems

Include information describing the contractor's accounting and estimating system internal controls that affect the scope and results of audit. Also provide a listing of all internal control deficiencies that were relevant to the contract under audit during its proposal and negotiation stages. Provide the status of the contractor's corrective action for these deficiencies.

10-607 Appendixes (Postaward Reports)

Use an appendix only for required supplementary or supporting information, as explained in 10-213. The report body or an exhibit or schedule will refer to any appendix included as part of the report.

10-607.1 Chronology of Significant Events

Use this appendix to show the significant events concerning the postaward audit of cost or pricing data, including important dates for significant items reported in the exhibit to provide a clearer presentation.

10-607.2 Contractor's Written Remarks

If received, include as an appendix a copy of the contractor's written comments resulting from the exit conference (see 10-606.7).

10-6S1 Supplement --- Distribution (Postaward Reports)

Army

In those cases where the U.S. Army Aviation and Missile Command (AMCOM) is not the requesting office, distribute one additional copy of each report on apparent defective pricing on AMCOM prime contracts to:

Commander, U.S. Army Aviation and Missile Command
ATTN: AMSMI-AC-BM-B
Redstone Arsenal, AL 35898

Also, e-mail a copy of each report on apparent defective pricing on all contracts issued by U.S. Army Tank-Automotive & Armaments Command procurement offices (identified by Army Activity Address Numbers DAAE07, DAAE20, DAAE24, DAAE30, DAAE32) to DAMI_AUDITS@conus.army.mil.

Air Force Materiel Command (AFMC)

Distribute one additional copy of each report on apparent defective pricing on prime contracts issued by AFMC procurement offices, identified by AF or F station codes as listed below, to the related pricing function as follows:

Codes	Procurement Office
33600 33615 33657	Aeronautical Systems Center ATTN: ASC/PKFC Building 16 2275 D Street, RM 119 Wright-Patterson AFB, OH 45433-7237 E-mail: asc.pkf@wpafb.af.mil
19628	Air Force Electronics Systems Center ATTN: PKF 104 Barksdale Street Hanscom AFB, MA 01731-1806
04701 04693	Space and Missile Systems Center 155 Discoverer Blvd. Suite 1213 Los Angeles AFB, CA 90245-4692
08635	Munitions Systems Center ATTN: Pricing Office, PMF Eglin AFB, FL 32542-5000
34601 34608 34650	Oklahoma City Air Logistics Center ATTN: Pricing Division OC-ALC/PKF 3001 Staff Dr., Suite 2A184A Tinker AFB, OK 73145-3015

42600 Ogden Air Logistics Center
42610 ATTN: Pricing Division
42620 OO-ALC/PKPF
42630 6038 Aspen Ave
Bldg. 1289 2nd Floor
42650 Hill AFB, UT 84056-5805
E-mail: chris.larsen@hill.af.mil
09603 Warner Robins Air Logistics Center
ATTN: PKP
235 Byron Street
Robins AFB, GA 31098-1611
E-mail: dpadmin@pk.robins.af.mil

(Example: Contract F09603-C-82-0093 or AF 09(603)-001 would have been issued by the Warner Robins Air Logistics Center, AFLC, Code 09603.)

Defense Logistics Agency (DLA)

Distribute one additional copy of apparent defective pricing reports for contracting actions issued by the Defense Supply Centers and other DLA contracting offices only (not DCMAs or DPROs) to the following address:

HQ Defense Logistics Agency
ATTN: DLA-J-73
8725 John J. Kingman Rd.
Fort Belvoir, VA 22060-6233

10-700 Section 7 --- Audit Reports on Termination Settlement Proposals

10-701 Introduction (Termination Reports)

a. This section provides guidance for preparing and distributing audit reports on contractors' termination settlement proposals. As used here, the term contractor includes subcontractor. Do not use the term offeror in audit reports related to termination settlements.

b. These reports furnish termination contracting officers (TCOs) information and audit recommendations to assist them in negotiating termination settlements with contractors. For reports covering a subcontractor's termination settlement proposal to a higher-tier contractor, include a statement on the subcontractor's agreement or disagreement with the release of the report to the higher-tier contractor in the Report Distribution and Restrictions section of the report.

c. A requestor may ask DCAA to evaluate limited portions of contractor termination settlement proposals by means of agreed-upon procedures. Agreed-upon procedures are appropriate when objective evaluation criteria exist and the auditor and requestor reach mutual agreement on the procedures to be applied. Guidance in 10-1000 should be followed, modified as necessary to conform to the requirements of termination reports. The auditor should ensure that:

- the acknowledgment indicates the parties have reached a clear understanding regarding the terms of the engagement in advance of initiation of the fieldwork (see 4-103.d.);
- the report does not refer to the engagement as an “audit”;
- the report disclaims an opinion; and
- the restrictions are appropriate for agreed-upon procedures (see 10-1008).

10-702 Report Format and Contents (Termination Reports)

a. Prepare the report using the format given in 10-200. Address the report to the TCO assigned responsibility for settlement of the contract. Include all pertinent information needed by the TCO to negotiate an equitable settlement.

b. The report will consist of a cover sheet, narrative section including exhibits and schedules, assembled as follows:

- Cover Sheet (10-205)
- Report Narrative (10-210)
  - Subject of Audit (10-703)
  - Executive Summary (10-704)
  - Scope of Audit (10-705)
    - Qualifications (10-210.4)
  - Results of Audit (10-706)
    - Opinion (10-706.1)
    - Exhibits and Schedules (10-706.2)
    - Additional Remarks (10-706.5)
- Contractor Organization and Systems (10-707)
- DCAA Personnel and Report Authorization (10-211)
- Report Distribution and Restrictions (10-708)
- Appendixes (10-308)
  - Comments on Profit (or Fee)
    - Fixed Price Contracts (12-307)
    - Cost-Type Contracts (12-403)
  - Assist Audit Reports
  - Government Technical Reports

10-703 Subject of Audit (Termination Reports)

a. This part of the narrative will refer to the audit request, state the settlement proposal amount and whether it was submitted on the inventory or total cost basis. Also give summary information on the contract item, amount, and the status of completion when terminated if needed to understand the audit results.

b. Mention any aspects of the proposal emphasized during the audit at the express request of the contracting officer (12-202.d.). Include a statement that the submission is the responsibility of the contractor and that the auditor's responsibility is to express an opinion based on the audit or report our conclusions based on our evaluation (see 10-210.1b.(1)). Add other appropriate information as necessary.

10-704 Executive Summary (Termination Reports)

Develop an appropriate executive summary using the guidelines provided in 10-210.2 and 10-304.2.

10-705 Scope of Audit (Termination Reports)

a. Develop an appropriate scope of audit statement using the guidelines provided in 10-304.3. This statement will also include the applicable criteria of FAR Part 49. Place the scope statement as a separate paragraph after comments made about the purpose. Also describe the impact of the current assessment of control risk on the audit scope (10-210.3f). Include a statement that the termination settlement proposal costs were evaluated using the applicable requirements contained in:

- Federal Acquisition Regulation (FAR), including Part 49, Termination of Contracts;
- [*Agency's Supplement to the FAR, as appropriate*],
- [*Cost Accounting Standards (CAS), if applicable*]; and
- Contract Terms.

b. Qualifications. Identify any circumstances that adversely affect the audit, or its results, per 10-210.4. For example, if the auditor requested the Government technical evaluation or inventory verification reports and these reports were not provided, this section of the audit report would include an explanation of the affect on the audit scope and results of not receiving this information.

10-706 Results of Audit (Termination Reports)

Follow the guidance in 10-210.5 and 10-304.5 when preparing this part of the report. However, modify the language to fit the circumstances of a termination settlement proposal. For example, add a reference to FAR Part 49 (contains the criteria for terminating contracts). If the terminated contract is CAS-covered, modify the reference to Public Law 91-379 as necessary to conform with the exceptions noted in 12-104. Generally, a reference to "the practices required by applicable Cost Accounting Standards" will suffice.

10-706.1 Audit Opinion - Termination

Begin the Results of Audit section with the opinion paragraph. Follow the guidelines in 10-304.6.

10-706.2 Exhibits and Schedules

a. The Results of Audit section of the report should contain all exhibits and supporting schedules required for a clear and complete presentation of the audit results.

b. Follow the guidelines in 10-210.6 for preparing explanatory notes. Furnish the TCO enough information so he or she can clearly understand the basis of the amount proposed, the scope of the evaluation, and the recommendations for each cost element. Show the contractor's reaction to the recommendations, particularly for questioned costs.

c. Show the results of audit in exhibits and schedules using columns labeled “Questioned Costs” and “Unresolved Costs.” Do not use the category “unsupported costs” and do not use a column for accepted costs. Where several items were improperly classified in the contractor's settlement proposal (e.g., an item proposed as “other cost” which is more properly an element of settlement expense), insert a reclassification column in the exhibit.

10-706.3 Questioned Costs

The criteria and guidance in 10-304.8b. for questioned costs also applies to termination settlement proposal evaluations. Comments such as “not necessary or incident to contract performance” or “excessive to contract requirements” require further explanation to adequately support a questioned cost.

10-706.4 Unresolved Costs

10-304.8d. states the criteria for this category. Due to the nature of termination action, this category may include items on which the auditor cannot reach a definitive conclusion. This is because it may be some time before the contractor's net cost or liability is firmly established (see 12-313). Examples of these items are severance or dismissal pay and the cost of unexpired leases. FAR 49.109-2 requires the TCO to include an appropriate reservation in the settlement agreement for any items still unresolved at settlement.

10-706.5 Additional Remarks

Conclude the Results of Audit section of the report narrative with the following additional remarks, as appropriate:

a. Exit Conference (also see 10-210.5e.(1) and (2))

(1) State the date held and the name and title of the contractor's designated representative with whom the factual matters were discussed (see 4-304). See 12-507 for guidance concerning what information can be disclosed to the contractor.

(2) Include the contractor's reaction to factual differences and the major areas of difference likely to be pursued at negotiations. The summary might read as follows:

> "We discussed the factual results of [*audit or procedures, etc.*] with [*identify the contractor representative(s) by name and title*] in an exit conference held on [*date*]. We did not provide the dollar impact of our findings. [*Include a summary of the contractor’s reaction, and the major areas likely to be pursued at negotiations, if any.*] [*If there was no response, the following is an example of a statement that is permissible to include but not required.*] [*Identify contractor representative*] reserved comment pending discussions with the Termination Contracting Officer.”

b. Other Additional Remarks

Follow the guidelines provided in 10-210.5e. to prepare other additional remarks.

10-707 Contractor Organization and Systems (Termination Reports)

Include relevant information, which impacts the scope and the results of the termination audit. Tailor it to the contractor's size and where possible reference previous reports. Follow the guidelines in 10-210.7.

10-708 Distribution (Termination Reports)

a. Send the original and one copy of each audit report on a prime contract termination settlement proposal to the TCO. Furnish a copy when applicable to the onsite financial liaison advisor office servicing the TCO (refer to the FLA Locator on the DCAA Intranet site).

b. Address assist audit reports on subcontract settlement proposals (original and two copies) to the auditor who made the request. On receipt, the requesting auditor will furnish the two copies to the TCO. These copies are either for his or her use, or if appropriate, for redistribution to the prime contractor or higher-tier subcontractor.

c. Furnish additional copies of the audit report as requested by the TCO.

10-800 Section 8 --- Audit Reports on Cost Accounting Standards Matters

10-801 Introduction (CAS Reports)

a. This section provides guidance for preparing and distributing audit reports related to Cost Accounting Standards (CAS). These reports furnish administrative contracting officers with information and audit recommendations to assist them in making CAS determinations.

b. Generally Accepted Government Auditing Standards have incorporated Statements on Standards for Attestation Engagements (SSAE) in guidance covering fieldwork and reporting on attestations (see 2-100). Attestation standards (AT chapter 6) prohibit a review of an entity's compliance with laws or regulations. Accordingly, CAS evaluations must be performed and reported upon as an examination (as opposed to a review) under the Attestation Standards, with the objective of expressing an opinion on whether the entity has complied with applicable CAS Board rules, regulations, and standards.

10-802 Nature of Reports (CAS Reports)

There are six basic types of CAS related reports. They are:
(1) reports on the adequacy of initial disclosure statements,
(2) reports on the compliance of initial disclosure statements,
(3) reports concerning adequacy and compliance of disclosure statement revisions,
(4) reports on CAS compliance audits,
(5) reports on CAS noncompliances, and
(6) reports on cost impact proposals.

Except for reports on noncompliances and CAS compliance audits, CAS reports are usually prepared in response to an audit request received from the cognizant Federal agency official (CFAO). The CFAO is the contracting officer assigned by the cognizant Federal agency to administer CAS. Within DoD, the CFAO is the cognizant administrative contracting officer (ACO).

10-803 Report Format and Content (CAS Reports)

a. Prepare the report following the guidance in 10-200, supplemented by this section. Address the reports to the CFAO. They should contain sufficient information for the CFAO to determine, as appropriate:
(1) disclosure statement adequacy or inadequacy,
(2) noncompliance of the disclosure statement with CAS or FAR,
(3) CAS noncompliance during contract performance or proposal submission, and
(4) any necessary contract price adjustments.

The report formats included in this section are intended to reduce report writing effort and increase uniformity in report presentation among FAOs.

b. Assemble reports on CAS matters as follows:
Cover Sheet (10-205)
Report Narrative (10-210)
- Subject of Audit (10-210.1)
- Executive Summary (10-210.2)
- Scope of Audit (10-210.3)
  - Qualifications (10-210.4)
- Statement of Changes (10-806.5)
- Results of Audit (10-210.5)
  - Opinion/Disclaimer (10-804.5b.)
  - Exhibits and Schedules, as appropriate
  - Statement of Conditions and Recommendations (10-804.5c)
  - Cost Impact (10-809)

Additional Remarks (10-804.5d)
Contractor Organization and Systems (10-804.6)
DCAA Personnel and Report Authorization (10-211)
Report Distribution and Restrictions (10-212)
Appendixes (as necessary)

The format and content for each of the six basic types of CAS related reports are discussed in the following paragraphs.

10-804 Audit Reports on Adequacy of Initial Disclosure Statement (Disclosure Statement Reports)

These reports are intended to inform the CFAO whether the contractor's initial submission of its disclosure statement adequately describes the contractor's cost accounting system. The title of this type of report should be "Report on Adequacy of Initial Disclosure Statement Dated [*date*]" (subject line of cover sheet).

10-804.1 Subject of Audit

Include the following statements in this paragraph:

"By submitting a CAS disclosure statement, [*entity name (short name)*] asserts that its disclosed cost accounting practices adequately describe the practices used to estimate, accumulate, and report costs incurred or to be incurred on Government contracts covered by 48 C.F.R. Chapter 99. The purpose of our examination was to evaluate whether the subject disclosure statement adequately describes the cost accounting practices which the contractor proposes to use in the performance of Government contracts covered by 48 C.F.R. Chapter 99.

The disclosure statement and related data are the responsibility of the contractor. Our responsibility is to express an opinion on the adequacy of the disclosure statement based on our examination."

10-804.2 Executive Summary

Develop an appropriate Executive Summary using the guidelines provided in 10-210.2.

10-804.3 Scope of Audit

a. Include the following scope statement in this paragraph:

"We conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the contractor's disclosure statement adequately describes its cost accounting practices. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the adequacy of the disclosure statement; and
- evaluating the overall disclosure statement presentation.

We evaluated the subject disclosure statement using the applicable requirements contained in the:

- Federal Acquisition Regulation (FAR); and
- CAS Board rules, regulations and standards."

b. The next paragraph in the Scope section should describe the impact of the current assessment of control risk (e.g., Environment and Overall Accounting Controls) on the audit scope (see 10-210.3.f). As required by the AICPA Statement on Standards for Attestation Engagements (SSAE) AT 601.57g, end the Scope section with the following statement:

"Our examination does not provide a legal determination on [*short name's*] compliance with the specified requirements."

10-804.4 Qualifications

Separately identify and describe any special circumstances or conditions adversely affecting the audit or its result as discussed in 10-210.4.

10-804.5 Results of Audit

a. Opinion. This section of the report presents an opinion regarding the adequacy of the disclosure statement. Examples of optional statements are provided below:

(1) "In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the subject disclosure statement adequately describes the contractor's cost accounting practices."

(2) "In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the subject disclosure statement, amended by pages dated ___, adequately describes the contractor's cost accounting practices."

(3) "In our opinion, the subject disclosure statement does not adequately describe the contractor's cost accounting practices. Accordingly, we recommend the contractor be requested to submit a revised disclosure statement."

b. Disclaimer. The section will also include the following report disclaimer:

"This examination was limited to evaluating the adequacy of accounting practice descriptions in the subject disclosure statement. Accordingly, we express no opinion on whether the disclosed practices are proper, approved, or agreed to for pricing proposals, accumulating costs, or reporting contract performance data."

c. Statement of Conditions and Recommendations. When the disclosure statement is considered inadequate, use this paragraph to present the statement shown below:

"We identified the following inadequacies in the contractor's disclosure statement:"

Each inadequacy should then be described using the following format:
(1) Condition. Identify the disclosure statement item number and explain sufficiently to permit a thorough understanding of the problem.
(2) Recommendation. Include a recommendation for corrective action.
(3) Contractor's Comments. Include the contractor's comments about the condition and recommendation.

(4) Auditor's Response. Provide appropriate comments if the contractor disagrees with the auditor's conclusions.

d. Additional Remarks. Provide concluding remarks at the end of the Results of Audit section, as discussed in 10-210.5e. Provide a summary of the exit conference. The summary may read as follows:

> "We discussed the results of our examination with [*identify the contractor representative(s) by name and title*] in an exit conference held on [*date*]. [*If there were adverse findings*] In response to our findings, [*provide the contractor's reaction, if any.*] [*If there was no response, the following is an example of a statement that is permissible but not required.* (*Identify the contractor representative*) reserved comment pending discussions with the cognizant Federal agency official.]"

10-804.6 Contractor Organization and Systems

Use this section to provide supplementary information on the contractor's operations and systems necessary for a better understanding of the circumstances surrounding any reported condition and the auditor's recommendation. Refer to 10-210.7 for general guidance on preparing this section.

10-804.7 Report Distribution and Restrictions - Adequacy

Refer to the guidance provided in 10-810 for report distribution and release restrictions.

10-805 Audit Reports on Compliance of Initial Disclosure Statement (Disclosure Statement Reports)

These reports are intended to inform the CFAO whether the accounting practices disclosed in the contractor's initial submission of its disclosure statement comply with CAS and FAR Part 31. The title of this type of report should be "Report on Compliance of Initial Disclosure Statement Dated (*date*)" (subject line of cover sheet).

10-805.1 Subject of Audit

Include the following statements in this paragraph:

> "By submitting its CAS disclosure statement, [*contractor's name*] asserts that the disclosure statement adequately describes its cost accounting practices, and the disclosed practices comply with Cost Accounting Standards Board rules, regulations, and standards contained in 48 C.F.R. Chapter 99. The purpose of our examination was to determine whether the disclosed practices described in [*contractor name*]'s disclosure statement [*date*] comply with applicable Cost Accounting Standards and FAR Part 31.
>
> The contractor is responsible for the disclosure statement and compliance of the disclosed accounting practices with applicable Cost Accounting Standards and FAR Part 31. Our responsibility is to express an opinion on whether the disclosed accounting practices comply with those requirements based on our examination."

10-805.2 Executive Summary

Develop an appropriate Executive Summary using the guidelines provided in 10-210.2.

10-805.3 Scope of Audit

a. Include the following scope statement in this paragraph:

"We conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the contractor has complied with the requirements referred to above. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence relating to the descriptions of the proposed cost accounting practices; and
- assessing whether the described practices comply with applicable requirements.

We evaluated the contractor's disclosure statement using applicable requirements contained in the:

- Federal Acquisition Regulation (FAR); and
- CAS Board rules, regulations and standards."

b. The next paragraph in the Scope section should describe the impact of the current assessment of control risk (e.g., Environment and Overall Accounting Controls) on the audit scope (see 10-210.3f). As required by the AICPA Statement on Standards for Attestation Engagements (SSAE), AT 601.57g, end the Scope section with the following statement:

"Our examination does not provide a legal determination on [*short name's*] compliance with the specified requirements."

10-805.4 Qualifications

Separately identify and describe any special circumstances or conditions adversely affecting the audit or its result as discussed in 10-210.4.

10-805.5 Results of Audit

Begin this section with an opinion statement on the compliance of the described practices. Examples of optional statements are provided below:

(1) The disclosed practices, as described, are compliant.

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the disclosed cost accounting practices comply with applicable Cost Accounting Standards, and FAR Part 31. We have not tested the actual practices for compliance with FAR and CAS, and accordingly, we express no opinion on the contractor's actual compliance with the regulations."

(2) The disclosed practices, as described, are noncompliant.

"In our opinion, certain of the contractor's disclosed practices are in noncompliance with [*insert CAS number(s) and/or specific FAR Part 31 reference*]. The de-

tails of the noncompliance(s) have been reported separately in audit report number [*insert report number*]."

(3) The disclosed practices are compliant with CAS and FAR Part 31. Although the audit scope is limited to compliance of the disclosed practices with CAS and FAR Part 31, DCAA may be aware through other audit work that an actual practice is noncompliant with the disclosed practice. In this case, the following language should be used.

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the contractor's cost accounting practices, as described, comply with applicable Cost Accounting Standards and FAR Part 31. Although the audit scope is limited to *compliance* of the disclosed practices with CAS and FAR Part 31, we are aware that the contractor's actual cost accounting practices [*identify area of noncompliance*] are not consistent with disclosed practices and are in noncompliance with [*identify CAS or FAR requirement violated*]. Details of the noncompliance(s) have been reported separately in [*insert report number*]."

10-805.6 Contractor Organization and Systems

Use this section to provide supplementary information on the contractor's operations and systems necessary for a better understanding of the circumstances surrounding any reported condition and the auditor's recommendation. Refer to 10-210.7 for general guidance on preparing this section.

10-805.7 Report Distribution and Restrictions – Compliance

Refer to the guidance provided in 10-810 for report distribution and release restrictions.

10-806 Audit Reports on Concurrent Adequacy and Compliance Audits of Revised Disclosure Statements (Concurrent CAS Reports)

Use the report format described below for reporting on accounting practice changes where a disclosure statement revision was submitted.

10-806.1 Subject of Audit

Examples of purpose statements are provided below (use 1 & 2 for audits requested by the contracting officer; use only 2 for self-initiated audits):

(1) "In response to your (*date*) request, Case No. __, we examined the (*Contractor name*)'s revised disclosure statement (*date*)."

(2) "By submitting its revised CAS disclosure statement, [*contractor's name*] asserts that the disclosure statement adequately describes its cost accounting practices, and the disclosed practices comply with Cost Accounting Standards Board rules, regulations, and standards contained in 48 C.F.R. Chapter 99. The purpose of our examination was to determine whether (*Contractor name*)'s revised disclosure statement (*date*) adequately describes the cost accounting practices that the contractor proposes to use in performing Government contracts covered by 48 C.F.R. Chapter 99, and whether the revised practices comply with applicable Cost Accounting Standards and FAR Part 31. [*If the audit included the steps to test compliance with actual practices, add*] We also evaluated the consistency of the revised cost accounting practices with actual practices."

"The contractor is responsible for the disclosure statement and compliance of the disclosed accounting practices with applicable Cost Accounting Standards and FAR Part 31. Our responsibility is to express an opinion on the adequacy of the disclosure statement and whether the disclosed accounting practices comply with those requirements based on our examination."

10-806.2 Executive Summary

Develop an appropriate Executive Summary using the guidelines provided in 10-210.2.

10-806.3 Scope of Audit

a. Insert the following paragraph in both contracting officer requested and self-initiated audits:

"*Except for the qualifications discussed below*, [*omit if the report is not rendering a qualified opinion and there is no "Qualifications" section within the "Scope" paragraph*], we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the contractor has complied with the requirements referred to above. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence relating to the descriptions of the proposed cost accounting practices;
- assessing the descriptions of the revised cost accounting practices proposed and determining whether they describe practices which, when implemented, should be compliant with applicable requirements; and
- evaluating the overall disclosure statement presentation.

We evaluated the contractor's revised disclosure statement using applicable requirements contained in the:

- Federal Acquisition Regulation (FAR); and
- CAS Board rules, regulations and standards."

b. The next paragraph in the scope section should describe the impact of the current assessment of control risk (e.g.,Environment and Overall Accounting Controls) on the examination scope (see 10-210.3f). As required by the AICPA Statement on Standards for Attestation Engagements (SSAE), AT 601.57g, end the Scope section with the following statement:

"Our examination does not provide a legal determination on [*short name's*] compliance with the specified requirements."

10-806.4 Qualifications

Separately identify and describe any special circumstances or conditions adversely affecting the audit or its result as discussed in 10-210.4.

10-806.5 Statement of Changes

a. Use this paragraph to state the change, along with the effective date of the change, on which the revision to the contractor's disclosure statement is based. For example, the paragraph may read:

"The subject disclosure statement revision reflects the following change to the contractor's accounting practices (*or operations, organization, etc.*), and is effective on [*date*] (*or on the dates noted below*)."

b. The paragraph should also contain an appropriate reference to the procedures prescribed in the FAR clause for disclosure statement revisions. Examples of statements are provided below:

(1) "The change(s) results from implementing a new Cost Accounting Standard and is therefore subject to negotiation with the CFAO for an equitable adjustment under FAR 52.230-2(a)(4)(i)."

(2) "The unilateral change(s) has not been agreed to by the contracting parties. Terms and conditions are therefore subject to negotiation with the CFAO under FAR 52.230-2(a)(4)(ii)."

(3) "The desirable change(s) agreed to by the contracting parties is subject to negotiation with the CFAO for an equitable adjustment under FAR 52.230-2(a)(4)(iii)."

(4) "The change(s) results from the contractor's agreement with, and correction of, a previously determined noncompliant condition, and is, therefore, subject to Government recovery of increased costs in the aggregate together with interest under FAR 52.230-2(a)(5)."

10-806.6 Results of Audit

a. Opinion. This paragraph presents an opinion on the adequacy and compliance of the disclosure statement revision. Examples of optional statements are provided below:

(1) The description is adequate and the disclosed practices are compliant.

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the subject revision adequately describes the contractor's revised cost accounting practices. The practices, as described, comply with applicable Cost Accounting Standards, and FAR Part 31. The revision is effective as of [*date*]. Because the contractor has not implemented the revised practices, as of [*date fieldwork completed*], we have had no opportunity to observe whether the contractor complies with the revised practices, and accordingly we express no opinion on the contractor's compliance with the revised practices."

[*If the examination included steps to test compliance with actual practices.*]

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the subject revision adequately describes the contractor's revised cost accounting practices. The practices, as described, comply with applicable Cost Accounting Standards and FAR Part 31 and are consistent with the contractor's actual practices."

(2) The description is inadequate and DCAA has not evaluated its compliance.

"In our opinion the subject disclosure statement revision does not adequately describe the contractor's revised cost accounting practices. Accordingly, we recommend the contractor be requested to submit a revised disclosure statement.

Because of the significant inadequacies, we were unable to evaluate the disclosure statement revision for compliance with applicable Cost Accounting Standards and

FAR Part 31. Accordingly, we express no opinion on the compliance with CAS and FAR Part 31."

(3) The description is adequate but one or more disclosed practices are noncompliant.

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the subject revision adequately describes the contractor's revised cost accounting practices. However, during our examination we identified certain of the contractor's disclosed practices which, we believe are in noncompliance with [*insert CAS number(s) and/or specific FAR Part 31 reference*]. The details of the noncompliance(s) have been reported separately in audit report number [*insert report number*]."

(4) The description is inadequate in part and the adequately disclosed portion contains noncompliant practices.

"In our opinion, the subject disclosure statement revision (*amendment*) does not adequately describe the contractor's revised cost accounting practices. Accordingly, we recommend the contractor be requested to submit a revised disclosure statement. Also, during our examination we identified certain of the contractor's revised practices which, we believe are in noncompliance with [*insert CAS number(s) and/or specific FAR Part 31 reference*]. The details of the noncompliance(s) have been reported separately in audit report number [*insert report number*]."

(5) The description is adequate and the disclosed practices are compliant, but DCAA has noted that the contractor's actual practices are noncompliant.

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the subject revision adequately describes the contractor's revised cost accounting practices. The practices, as described, comply with applicable Cost Accounting Standards and FAR Part 31. However, during our examination we noted that the contractor's actual cost accounting practices [*identify area of noncompliance*] are not consistent with disclosed practices and are in noncompliance with [*identify CAS or FAR requirement violated*]. Details of the noncompliance(s) have been reported separately in [*insert report number*]."

b. Statement of Conditions and Recommendations. This paragraph, applicable whenever inadequacies were found, should begin with the following statement.

"We identified the following inadequacies in the contractor's revised disclosure statement:"

List each inadequacy separately with the type of information cited in 10-804.5c.

c. Cost Impact. The paragraph should contain an estimate of the cost impact, if available, and a reminder to the CFAO to obtain a cost impact statement when the cost impact is material (FAR 30-602). To do this, start this paragraph with the following statement:

"In accordance with FAR 52.230-6(c), when requested by the CFAO, the contractor is responsible for submitting either a general dollar magnitude (GDM) proposal or a detailed cost-impact (DCI) proposal and for engaging in negotiations of adjustments resulting from changes to disclosed accounting practices. A GDM proposal should be prepared in accordance with the requirements of FAR 52.230-6(d) and (f), and a DCI proposal should be prepared in accordance with the requirements of FAR 52.230-6(e) and (f)."

"It is not practical to estimate the magnitude of the total cost impact for the change(s) in the revision prior to your obtaining this information from the contractor. However, in the way of a partial estimate. . . . (*Include an estimate of the cost impact or delete the last sentence if the auditor is unable to provide a partial estimate and instead explain why an estimate could not be provided.*)"

When there is increased cost to the Government because of a unilateral change that is subject to the provisions of FAR 52.230-2(a)(4)(ii), the following should be included:

"We estimate the increased cost to the Government because of the change to be $ __. However, any agreement which would result in net increased cost to the Government would be contrary to the provisions of FAR 52.230-2(a)(4)(ii)."

d. Additional Remarks. Provide concluding remarks at the end of the Results of Audit section, as discussed in 10-210.5e. Provide a summary of the exit conference. The summary may read as follows:

"We discussed the results of our examination with [*identify the contractor representative(s) by name and title*] in an exit conference held on [*date*]. [*If there were adverse findings*] In response to our findings, [*provide the contractor's reaction, if any.*] [*If there was no response, the following is an example of a statement that is permissible but not required.* [*Identify the contractor representative*] reserved comment pending discussions with the cognizant Federal agency official.]"

10-806.7 Contractor Organization and Systems

Use this section to provide supplementary information on the contractor's operations and systems necessary for a better understanding of the circumstances surrounding any reported disclosure statement inadequacy or instance of noncompliance and the auditor's recommendation. Refer to 10-210.7 for general guidance on preparing this section.

10-806.8 Report Distribution and Restrictions - Concurrent

Refer to the guidance provided in 10-810 for report distribution and release restrictions.

10-807 Audit Reports on Compliance with CAS (CAS Compliance Reports)

Use this report format when no instances of noncompliances are found during CAS compliance audits. If noncompliances are found, issue a memo to the file and close this assignment (194XX). Noncompliance(s) should be reported under the 19200 assignment code, following the noncompliance report format (see 10-808).

10-807.1 Subject of Audit

This section identifies the contractor's responsibility regarding CAS compliance. It also identifies the purpose of the audit and the period covered by the audit. Generally, a contractor's cost accounting practices related to each standard should be audited comprehensively as a single audit assignment. A limited scope audit should be performed only when it is not practical to audit all of the accounting practices related to the standard at once (e.g., too many significant pools to audit). If the audit was limited to a certain area(s) of the contractor's cost accounting practices (e.g., 3 indirect pools audited from 7 significant pools maintained by the contractor), this section should clearly identify the limited areas audited. The subject of audit paragraph may read:

"We examined [*entity name* (*short name*)]'s compliance with the requirements of the Cost Accounting Standards (CAS) [insert number and title of standard(s)]. The purpose of our examination was to determine if the contractor complied with the requirements of CAS [insert number] and any applicable FAR Part 31 requirements, [if applicable, include "in accounting for (identify the specific area(s) audited)"] during Contractor Fiscal Year (CFY) [*insert CFY covered by the audit*]. The contractor is responsible for compliance with the requirements of this standard. Our responsibility is to express an opinion on compliance with those requirements based on our examination."

10-807.2 Scope of Audit

a. Include the following scope statement in this paragraph:

"[*If applicable, include, "We limited our audit to an examination of the contractor's cost accounting practices related to* [*identify specific area(s) examined.*]*"*] We conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance that the contractor's accounting practices comply with the requirements referred to above. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the cost accounting practices; and
- assessing the actual cost accounting practices and compliance of those practices with disclosed cost accounting practices and applicable requirements.

We evaluated the contractor's cost accounting practices using the applicable requirements contained in the:

- Federal Acquisition Regulation (FAR); and
- CAS Board rules, regulations and standards."

b. The next paragraph in the Scope section should describe the impact of the current assessment of control risk (e.g.,Environment and Overall Accounting Controls) on the audit scope (see 10-210.3f). As required by the AICPA Statement on Standards for Attestation Engagements (SSAE), AT 601.55g, end the Scope section with the following statement:

"Our examination does not provide a legal determination on [*short name's*] compliance with the specified requirements."

10-807.3 Qualifications

Separately identify and describe any special circumstances or conditions adversely affecting the audit or its result as discussed in 10-210.4.

10-807.4 Results of Audit

a. Include the following opinion in this paragraph:

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] [*contractor name*] complied, in all material respects, with the requirements of Cost Accounting Standard(s) [*number(s) and title(s) of standard(s)*] [*if applicable, include "in accounting for* [*identify the specific area(s) examined*]*"*] during CFY [*insert the CFY covered by the audit*]."

b. Additional Remarks. Provide concluding remarks at the end of the Results of Audit section, as discussed in 10-210.5e. Provide a summary of the exit conference. The summary may read as follows:

"We discussed the results of our examination with [identify the contractor representative(s) by name and title] in an exit conference held on [date]."

10-807.5 Contractor Organization and System

Use this section to provide supplemental information on the contractor's operations and systems necessary for a better understanding of the circumstances surrounding the auditor's recommendation. Refer to 10-210.7 for general guidance on preparing this section.

10-807.6 Report Distribution and Restrictions - Compliance

Refer to the guidance provided in 10-810 for report distribution and release restrictions.

10-808 Audit Reports on Noncompliance with Disclosed or Established Practices, CAS, or FAR (Noncompliance Reports)

Each instance of noncompliance should be reported separately regardless of the assignment under which it was found, unless the noncompliances pertain to a single standard, or involve multiple standards but the noncompliances are inseparable. Use a 19200 assignment to report and resolve the noncompliance, regardless of the circumstances under which the noncompliance was found (see 8-302.7c.).

10-808.1 Subject of Audit

Examples of statements applicable to noncompliances found are provided below:
a. The following is an example of a paragraph to use when a noncompliance is found during an audit of the disclosure statement:

"By submitting a CAS disclosure statement, [*entity name (short name)*] asserts that its disclosed cost accounting practices used to estimate, accumulate, and report costs incurred or to be incurred on Government contracts comply with the CAS Board rules, regulations, and standards appearing in 48 C.F.R. Chapter 99. We examined the subject disclosure statement to evaluate whether the disclosed cost accounting practices comply with the CAS Board rules, regulations, and standards. We also examined the disclosed practices to evaluate whether they comply with applicable FAR Part 31 requirements. The contractor is responsible for compliance with CAS and FAR requirements. Our responsibility is to express an opinion on compliance based on our examination."

b. The following is an example of a paragraph to use when a noncompliance is found during contract performance and the noncompliance is found during a CAS compliance audit:

"We have examined [*entity name* (*short name*)]'s compliance with the requirements of the Cost Accounting Standards (CAS). The purpose of the examination was to determine if the contractor has complied with the requirements of CAS [*number(s) and title(s) of standard(s) and any applicable FAR Part 31 requirements*] [*if applicable, include "in accounting for* (*identify specific area(s) audited*)*"*]. The contractor is responsible for compliance with the CAS and FAR requirements. Our responsibility is to express an opinion on compliance based on our examination."

c. The following is an example of a paragraph to use when the noncompliance is found during contract performance and the noncompliance is found during an audit other than a CAS compliance audit.

> "Our continuous examination of the contractor's cost accounting practices during performance of contracts includes evaluating whether the contractor has complied with the CAS Board rules, regulations, and standards, and any applicable FAR Part 31 requirements. The contractor is responsible for compliance with those requirements. Our responsibility is to express an opinion on compliance based on our examination."

d. The following is an example of a paragraph to use when the noncompliance is found during a proposal evaluation:

> "Our examination of the contractor's cost accounting practices during proposal evaluations includes evaluating whether the contractor has complied with the CAS Board rules, regulations, and standards, and FAR Part 31. The contractor is responsible for compliance with those requirements. Our responsibility is to express an opinion on compliance with those requirements based on our examination."

10-808.2 Executive Summary

Develop an appropriate Executive Summary using the guidelines provided in 10-210.2.

10-808.3 Scope of Audit

Examples of statements applicable to noncompliances are provided below:
a. The following is an example of a paragraph to use when a noncompliance is found during an audit of the disclosure statement.

> "We conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the contractor has complied with the requirements referred to above. An examination includes:
> - obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
> - examining, on a test basis, evidence supporting the cost accounting practices;
> - assessing the descriptions of the cost accounting practices which, when implemented, should be compliant with applicable requirements; and
> - evaluating the overall disclosure statement presentation.
>
> We evaluated the contractor's disclosed cost accounting practices using the applicable requirements contained in the:
> - Federal Acquisition Regulation (FAR); and
> - CAS Board rules, regulations and standards."

b. The following is an example of a paragraph to use when noncompliance is found during contract performance.

> "[*If applicable (i.e., limited scope CAS compliance audit), include, "We limited our examination to an evaluation of the contractor's cost accounting practices related to* (*identify specific area(s) examined.*)*"*] We conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable as-

surance about whether the contractor has complied with the requirements referred to above. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the cost accounting practices; and
- assessing the actual cost accounting practices and compliance of those practices with the disclosed cost accounting practices and applicable requirements.

We evaluated the contractor's cost accounting practices used to accumulate contract costs using the applicable requirements contained in the:

- Federal Acquisition Regulation (FAR); and
- CAS Board rules, regulations and standards."

c. The following is an example of a paragraph to use when noncompliance is found during a proposal evaluation:

"We conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the proposal complies with the requirements referred to above. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the cost accounting practices;
- assessing the cost accounting practices used in estimating and compliance of those practices with the disclosed and/or established cost accounting practices and applicable requirements; and
- evaluating the overall proposal presentation.

We evaluated the contractor's cost accounting practices used to estimate costs using the applicable requirements contained in the:

- Federal Acquisition Regulation (FAR); and
- CAS Board rules, regulations and standards."

d. The next paragraph in the scope section should describe the impact of the current assessment of control risk (e.g., Environment and Overall Accounting Controls) on the audit scope (see 10-210.3f). As required by the AICPA Statement on Standards for Attestation Engagements (SSAE), AT 601.55g, end the Scope section with the following statement:

"Our examination does not provide a legal determination on [*short name's*] compliance with the specified requirements."

10-808.4 Qualifications

Scope limitations should not be reported as qualifications, but should be included in the Scope of Audit as discussed 10-210.4i.

10-808.5 Results of Audit

a. Opinion. This paragraph presents a summary statement of the noncompliance(s) being reported. An example follows:

"In our opinion, during this period (*state period covered by the audit)* the contractor was in noncompliance with CAS 4*XX* [*and FAR Part 31*]. As of the date of this report, the condition causing the noncompliance has [*has not*] been corrected."

b. The paragraph will include the following report qualification:

"This report is limited to the cited instance(s) of noncompliance. Accordingly, we express no opinion on whether other practices are proper, approved, or agreed to for pricing proposals, accumulating costs, or reporting contractor performance data."

c. Statement of Conditions and Recommendations. The paragraph should begin with one of the following statements:

(1) "Our examination identified a disclosed [*or established*] contractor practice which we believe is in noncompliance with the Cost Accounting Standards [*and/or FAR Part 31*], as follows:", or

(2) "Our examination disclosed that the contractor's failure to comply with a Cost Accounting Standard [*and/or failure to follow consistently a disclosed cost accounting practice*] has resulted or may result in increased cost paid by the Government. The areas of noncompliance and/or failure to follow disclosed practices are stated below:"

d. Separately list each noncompliance item, with the following information:

(1) Condition. Provide an introductory paragraph that includes a brief summary of the nature of the noncompliance, including a specific reference to the regulatory support for the noncompliance (e.g., 48 CFR 9904.401-40(a)); the time period during which the contractor was in noncompliance; and, an explanation of the significance of the noncompliance. Then describe the contractor's noncompliant accounting practices in sufficient detail to provide the CFAO with a thorough understanding of the nature and extent of the noncompliance. Describe the audit procedures used to evaluate the accounting practice.

(2) Recommendation. Provide a specific recommendation for corrective action with a statement about any acceptable alternative solutions proposed by the contractor.

(3) Contractor's Reaction. Provide a statement that the contractor either agreed or disagreed with the auditor's conclusion and the basis for any disagreement.

(4) Auditor's Response. Provide appropriate comments if the contractor disagreed with the auditor's conclusions and recommendations.

e. Include a statement regarding the contractor's responsibilities under the CAS administration clause at FAR 52.230-6(b & c). This statement may read as follows:

"Within 60 days of the contractor's agreement to the initial finding of noncompliance or the CFAO's determination of noncompliance, the contractor is required to submit the description of any change necessary to correct a failure to comply with CAS or follow a disclosed practice. In addition, when requested by the CFAO, the contractor is responsible for submitting either a general dollar magnitude (GDM) proposal or a detail cost-impact proposal prepared in accordance with the requirements of FAR 52.230-6(g) and (i) or (h) and (i) respectively."

f. Additional Remarks. Provide additional remarks at the end of the Results of Audit section, as discussed in 10-210.5e. Provide a summary of the exit conference. The summary may read as follows:

"We discussed the results of our examination with [*identify the contractor representative(s) by name and title*] in an exit conference held on [*date*]. In response to our find-

ings, [*provide contractor's reaction, if any.*] [*If there was no response, the following is an example of a statement that is permissible but not required.* (*Identify the contractor representative*) reserved comment pending discussions with the cognizant Federal agency official.]"

10-808.6 Contractor Organization and Systems

Use this section to provide supplementary information on the contractor's operations and systems necessary for a better understanding of the circumstances surrounding any reported noncompliance and the auditor's recommendation. Refer to 10-210.7 for general guidance on preparing this section.

10-808.7 Report Distribution and Restrictions - Noncompliance

Refer to the guidance provided in 10-810 for report distribution and release restrictions.

10-809 Audits on CAS Cost Impact Proposals

This section describes the format for audit reports on evaluations of cost impact proposals.

10-809.1 Subject of Audit

a. This paragraph should reference the audit request, other related audit reports (e.g., noncompliance reports), and any other documents that contain pertinent information about the contractor's cost impact proposal. The information contained in the referenced documents should not be duplicated in the cost impact audit report. Also include the date of the contractor's cost impact proposal.

b. Reports on cost impact proposals for cost accounting practice changes should include a summary description of the change and the effective date of the accounting practice change.

(1) The changed accounting practice should be described and categorized as either a:

(a) Required change resulting from either the implementation of a new standard or a prospective change from one compliant practice to another that is necessary for the contractor to remain in compliance (equitable adjustment),

(b) Unilateral change that is not deemed desirable by the cognizant Federal agency official (CFAO) (no increased costs to the Government), or

(c) Desirable change that was deemed desirable and not detrimental to the Government by the CFAO (equitable adjustment).

(2) An example of an acceptable statement for a required cost accounting practice change follows:

"As requested by your September 30, 20XX letter, we examined the XYZ Corporation's August 31, 20XX cost impact proposal reflecting the contractor's cost accounting practice change from a total cost input base to a value—added base for the allocation of general and administrative (G&A) expenses, effective November 1, 20XX. Since the CFAO has determined that the accounting change is required, the contractor is subject to the provisions of FAR 52.230-2(a)(4)(i), and the parties will negotiate an equitable adjustment."

(3) An example of an acceptable statement for a unilateral cost accounting practice change follows:

"As requested by your September 30, 20XX letter, we examined the XYZ Corporation's August 31, 20XX cost impact proposal reflecting the contractor's cost accounting practice change to combine the engineering and logistics overhead pools, effective November 1, 20XX. Since the CFAO has not determined that the accounting change is a desirable change, it is considered to be a unilateral change. Therefore, the contractor is subject to the provisions of FAR 52.230-2(a)(4)(ii), and the Government will not pay increased costs in the aggregate."

(4) An example of an acceptable statement for a desirable cost accounting practice change follows:

"As requested by your September 30, 20XX letter, we examined the XYZ Corporation's August 31, 20XX cost impact proposal reflecting the contractor's cost accounting practice change to combine the engineering and logistics overhead pools, effective November 1, 20XX. Since the CFAO has determined that the accounting change is a desirable change, the contractor is subject to the provisions of FAR 52.230-2(a)(4)(iii), and the parties will negotiate an equitable adjustment."

c. Reports on cost impact proposals resulting from CAS noncompliances should include a summary description of the noncompliance, reference the audit report number under which the noncompliance was reported, and provide the dates during which the contractor was in noncompliance. The date on which the contractor corrected the noncompliance should also be reported, if the contractor has completed corrective action. An example of an acceptable statement for a noncompliance follows:

"As requested by your September 30, 20XX letter, we examined the XYZ Corporation's August 31, 20XX cost impact proposal for the contractor's failure to comply with CAS 4XX for the period January 1, 19XX through May 31, 20XX, the date upon which the noncompliance was corrected. The noncompliance was previously reported in Audit Report No. XXXX-2003D19404001, dated March 1, 20XX. Since the CFAO has determined that the contractor failed to [*comply with the Cost Accounting Standards or follow consistently its disclosed accounting practices*], the contractor is subject to the provisions of FAR 52.230-2(a)(5), and the Government will not pay increased costs in the aggregate."

d. In each audit report on a cost impact proposal, end the Subject of Audit with the following sentence:

"The cost impact proposal and related supporting data are the responsibility of the contractor. Our responsibility is to express an opinion on the cost impact proposal based on our examination."

10-809.2 Executive Summary

Develop an appropriate Executive Summary using the guidelines provided in 10-210.2.

10-809.3 Scope of Audit

a. Insert the following paragraph:

"Except for the qualifications below [*omit if there are no 'Qualifications' in the report*], we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the cost impact proposal is free of material misstatement. An examination includes:

- obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence supporting the amounts and disclosures in the cost impact proposal;
- assessing the accounting principles used and significant estimates made by the contractor; and
- evaluating the overall cost impact proposal presentation.

We evaluated the contractor's cost impact proposal using the applicable requirements contained in the:
- Federal Acquisition Regulation (FAR) 30.6; and
- CAS Board Rules and Regulations, 48 CFR 9903.306."

b. The next paragraph in the scope section should describe the impact of the current assessment of control risk (e.g., Environment and Overall Accounting Controls) on the audit scope (see 10-210.3f.).

10-809.4 Qualifications

Separately identify and describe any special circumstances adversely affecting the audit or its result as discussed in 10-210.4. If applicable, include a qualification about the completeness and accuracy of the universe of CAS-covered contracts.

10-809.5 Results of Audit

a. Begin this paragraph with an opinion statement on the adequacy of the data submitted by the contractor. If the report includes a qualification paragraph within the scope of audit, the audit opinion must be qualified.

(1) The report on a cost impact proposal for a required change could read:

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the contractor has submitted data that [, *although not adequate in part (see comments on page _, note _*),] are acceptable for negotiating the cost impact due to the required change. We have determined that the required change will result in increased [*decreased*] costs to the Government on CAS-covered contracts and subcontracts in the aggregate of $ ___. We recommend that the CFAO negotiate an equitable adjustment in accordance with FAR 52.230-2(a)(4)(i). Our detailed findings and recommendations are included in Exhibit _."

(2) The report on a cost impact proposal for a unilateral change could read:

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the contractor has submitted data that [, *although not adequate in part (see comments on page _, note _*),] are acceptable for negotiating the cost impact due to the unilateral change. We have determined that the unilateral change will result in increased [*decreased*] cost to the Government on CAS-covered contracts and subcontracts in the aggregate of $ ___. Since the Government is prohibited from paying such increased costs in accordance with FAR 52.230-2(a)(4)(ii), we recommend that the CFAO take immediate action to recover the aggregate increased costs [*omit this sentence if there are decreased costs*]. Our detailed findings and recommendations are included in Exhibit _."

(3) The report on a cost impact proposal for a desirable change could read:

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the contractor has submitted data that [, *although not adequate in part (see comments on page _, note _),*] are acceptable for negotiating the cost impact due to the desirable change. We have determined that the desirable change will result in increased [*decreased*] costs to the Government on CAS-covered contracts and subcontracts in the aggregate of $ ____. We recommend that the CFAO negotiate an equitable adjustment in accordance with FAR 52.230-2(a)(4)(iii). Our detailed findings and recommendations are included in Exhibit _."

(4) The report on a cost impact proposal for a noncompliance could read:

"In our opinion, [*except for the (describe the qualification and the potential impact on the results*),] the contractor has submitted data that [, *although not adequate in part (see comments on page _, note _),*] are acceptable for negotiating the cost impact due to the noncompliance. We have determined that the noncompliance will result in increased [*decreased*] cost to the Government on CAS-covered contracts and subcontracts in the aggregate of $ ____. Since the Government is prohibited from paying such increased costs in accordance with FAR 52.230-2(a)(5), we recommend that the CFAO take immediate action to recover the aggregate increased costs [*omit this sentence if there are decreased costs*]. Our detailed findings and recommendations are included in Exhibit _."

b. Exhibits and Schedules. The Results of Audit section of the report should contain all exhibits and supporting schedules required for a clear and complete presentation of the audit results and recommendations on all items in the cost impact proposal. Clearly define each use of brackets or parentheses in the schedules and exhibits so the reader will understand the implication of each negative number. For example, if cost accumulations will be decreased by a changed accounting practice, state "…a negative number means that fewer costs will be accumulated using the new accounting practice." All exhibits and schedules should clearly distinguish between (i) increased or decreased cost estimates or accumulations, including associated profit/fee; and (ii) increased or decreased costs to the Government. At a minimum, the report should include the following information:

(1) An exhibit summarizing the contractor's cost impact proposal by contract type, showing the proposed impact on cost, profit/fee, and price/amount; results of audit; and explanatory notes (see Figure 10-8-1). Explanatory notes should include:

(a) Summary of Conclusions. Provide a summary statement of the audit exception(s) and the basis for the exception(s), including a specific reference to the regulatory support in the CAS [*for example: 48 CFR 9903.201-4(a)(5) or 48 CFR 9903.306(c)*]. The following table and related statements are recommended tools for the auditor to use in preparing the Summary of Conclusions. The table explains the effect of the contractor's cost accounting practice change or noncompliance on contract prices (costs and profits or fees) paid by the Government. This table should not be included in the audit report. Use the table by reading down and across under the appropriate categories of cost impacts. The numbers in each box correspond to the sentences that follow the table. Use these sentences in the order shown in the table to explain the effects of cost accounting practice changes and noncompliances on each type of contract.

Contract Type	Estimating Noncompliance	Accumulation Noncompliance	Cost Accounting Practice Changes	Estimating and Accumulation Noncompliance
Flexibly Priced:				
CPFF	1, 11	2, 12	2, 11	2, 11
CPAF	1, 13	2, 13	2, 13	2, 13
CPIF	1, 14	2, 15	2, 15	2, 16
FPI	1, 14	2, 15	2, 15	2, 16
T&M Materials	6, 17	7, 17	7, 17	7, 17
Fixed Price				
FFP	3, 11	4, 12	5, 11	3, 11
T&M Labor Rates	8, 11	9, 12	10, 11	8, 11

1. Cost estimates prepared by the contractor using noncompliant practices do not affect costs paid by the Government on flexibly priced contracts and subcontracts.

2. Costs paid by the Government on flexibly priced contracts and subcontracts are based on accumulated costs, not cost estimates. When cost accounting practice changes or CAS noncompliances increase/(decrease) cost accumulations during performance of flexibly priced contracts and subcontracts, the Government pays increased/(decreased) costs.

3. Cost estimates prepared by the contractor using noncompliant practices affect the costs paid by the Government on fixed-price contracts and subcontracts. The Government experiences increased costs (pays a higher price) when estimates are overstated due to the use of noncompliant practices. Conversely, the Government experiences decreased costs (pays a lower price) when estimates are understated due to the use of noncompliant practices.

4. CAS noncompliances in cost accumulation during contract performance do not affect costs paid by the Government on fixed-price contracts and subcontracts.

5. Cost accounting practice changes during contract performance affect costs paid by the Government on firm-fixed-price contracts and subcontracts.

6. Material cost estimates prepared by the contractor using noncompliant estimating practices do not affect costs paid by the Government on time and materials (T&M) contracts and subcontracts.

7. The Government pays for materials on time and materials (T&M) contracts and subcontracts based on actual material costs incurred, not estimated material costs. When cost accounting practice changes or CAS noncompliances increase or decrease material costs accumulated during contract performance of T&M contracts and subcontracts, the Government pays increased or decreased costs.

8. Labor rate estimates prepared by the contractor using noncompliant estimating practices affect the costs paid by the Government on time and materials (T&M) contracts and subcontracts. The Government experiences increased costs (pays a higher price) when estimated labor rates are overstated due to the use of noncompliant practices. Conversely, the Government experiences decreased costs (pays a lower price) when estimated rates are understated due to the use of noncompliant practices.

9. CAS noncompliances in cost accumulation during contract performance do not affect labor rates on time and materials (T&M) contracts and subcontracts.

10. Cost accounting practice changes during contract performance affect labor rates on time and materials (T&M) contracts and subcontracts.

11. Profit and fixed fees are generally based on estimated costs and are affected by cost estimates that are prepared using noncompliant practices and cost accounting practice changes during contract performance.

12. Profit and fixed fees are generally based on estimated costs and are not affected by CAS noncompliances in cost accumulation during contract performance.

13. Award fees are generally based on factors other than contract costs and, therefore, are not affected by cost accounting practice changes or CAS noncompliances.

14. Incentive fees are generally used to reward the contractor's ability to manage estimated (target) contract costs and are based on both estimated and accumulated costs. When costs are estimated using noncompliant practices, increases/decreases to the cost estimates affect incentive fees paid by the Government.

15. Incentive fees are generally used to reward the contractor's ability to manage estimated (target) contract costs and are based on both estimated and accumulated costs. Cost accounting practice changes and accumulation noncompliances during contract performance affect the cost accumulations and incentive fees paid by the Government.

16. Incentive fees are generally used to reward the contractor's ability to manage estimated (target) contract costs and are based on both estimated and accumulated costs. Noncompliant practices used for both estimating and accumulating costs affect incentive fees in opposite ways.

17. Profit and fees are not permitted on materials under T&M contracts in accordance with FAR 16.601(a).

(b) Basis of Contractor's Proposal. Describe the basis of the contractor's cost impact proposal, including comments on the netting methodology among contract types used by the contractor. When appropriate, provide references to the specific parts of the contractor's proposal that provide more details on the basis.

(c) Audit Evaluation. Provide a description of the audit procedures used to evaluate the elements of the cost impact proposal (costs and profit/fee). Include sufficient detail on the calculation of the audit exceptions for the CFAO to understand the basis for the audit exceptions.

(d) Contractor's Reaction. Provide a statement that the contractor either agreed or disagreed with the auditor's conclusions, and the basis for any disagreement.

(e) Auditor's Response. Provide appropriate comments if the contractor disagrees with the auditor's conclusions.

(2) A schedule showing results of audit by agency, contract type and significant contracts (see Figure 10-8-2).

c. Additional Remarks. Provide concluding remarks at the end of the Results of Audit section, as discussed in 10-210.5e. Provide a summary of the exit conference. That summary might read as follows:

> "We discussed the results of our examination with [*identify the contractor representative(s) by name and title*] in an exit conference held on [*date*]. [*If there were adverse findings*] In response to our findings, [*provide the contractor's reaction, if any.*] [*If there was no response, the following is an example of a statement that is permissible but not required.* (*Identify the contractor representative*) reserved comment pending discussions with the cognizant Federal agency official.]"

d. Include an appendix describing the settlement alternatives to recover increased costs paid by the Government in the aggregate, as described in 8-503.1e, providing specific recommendations for settlement and offering assistance to the CFAO in determining the appropriate settlement alternative.

10-809.6 Contractor Organization and Systems

Use this section to provide supplementary information on the contractor's operations and systems necessary for a better understanding of the circumstances surrounding the auditor's recommendation. Refer to 10-210.7 for general guidance on preparing this section.

10-809.7 Report Distribution and Restrictions – CAS Cost Impact

Refer to the guidance in 10-810 for report distribution and release restrictions.

10-810 Distribution and Restrictions

a. Furnish copies of CAS audit reports to non-DoD agencies as noted in 15-100 and Supplements 15-1S1-15-1S6.

b. Furnish the CAC/CHOA/GAC copies of all CAS audit reports as provided in 15-200.

c. Furnish the region copies of CAS audit reports, following the procedures established by the region.

d. Refer to the guidance provided in 10-212 for general requirements for the report distribution and release restrictions.

Figure 10-8-1
Statement of Contractor's Proposed Contract Price Adjustments and Results of Audit

	CONTRACTOR'S PROPOSAL			RESULTS OF AUDIT			
CONTRACT/ SUBCONTRACT TYPE	COST	PROFIT/ FEE	PRICE AMOUNT	INCREASED/ (DECREASED) ACCUMULATED COST/ ESTIMATES	INREASED/ (DECREASED) PROFIT/FEE	INCREASED/ (DECREASED) COST PAID BY THE GOVERNMENT	REFERENCE
Flexibly Priced							
CPFF							
CPAF							
CPIF							
FPI							
T&M Material							
Fixed Price							
FFP							
T&M Labor Rates							
Total							

Figure 10-8-2
Statement of Audit Recommended Increased/(Decreased) Cost to the Government by Agency, Contract Type and Major Contract

	RESULTS OF AUDIT				
CONTRACT/ SUBCONTRACT TYPE	U.S. ARMY	U.S. NAVY	U.S.AIR FORCE	NASA	OTHER AGENCIES
FLEXIBLY PRICED					
CPFF					
CPAF					
CPIF					
FPI					
T&M Materials					
FIXED PRICE					
FFP					
T&M Labor Rates					
TOTAL					

10-900 Section 9 --- Audit Reports on Contract Audit Closing Statements, Other Contract Closings, and Price Redeterminations

10-901 Introduction

a. This section provides guidance for the preparation and distribution of:

- contract audit closing statements (CACS) on cost reimbursement and time and material type contracts and subcontracts, whether issued as a written report or an electronic data transmission; and
- repricing proposals for incentive and price redeterminable fixed-price contracts.

b. Guidance involving requests for contract audit closing statements for non-DoD agencies is in 15-103. Guidance on assist reports to other contract auditors is in 6-800. Further guidance concerning processing completion vouchers is in 6-1000.

c. Generally, contract closeout audits are administrative in nature. The audit work performed and opinion on the allowable contract costs are contained in the annual audit of the contractor's incurred costs. If these audits have not yet been performed, the contract generally cannot be closed out unless the periods unaudited qualify for quick-closeout as discussed in 6-1010.

d. A single audit report may be issued on each contract or on a group of contracts. If a single audit report is issued on more than one contract, coordinate with the contracting officer on needed report information prior to issuing the report. If available, use the Cumulative Allowable Cost Worksheet (CACWS), or a comparable worksheet, as the source for the information to complete the Contract Audit Closing Statement (CACS). In most instances, the CACWS should be acceptable to the ACO to close contracts without the need for a traditional CACS (see 6-711.3).

10-902 Cumulative Allowable Cost Worksheet (CACWS), Comparable Worksheets, or Contract Audit Closing Statement Reports (CACS)

Completed contracts should be closed by one of these methods (in order of preference):

(1) issuing a CACWS (see 6-711.3) without a traditional final written CACS report, if acceptable to the ACO;
(2) issuing one closing audit report for multiple contracts; or
(3) issuing an audit closing statement for each contract.

a. The contract audit closing statement or CACWS is usually the final report to be submitted upon completion or termination of a cost-reimbursement or time and material type contract or subcontract.

b. Some contracts have numerous task orders, sub-line items, or other separate portions that are separately funded. If the customer agrees, it is frequently more efficient to issue a single contract audit closing statement or CACWS with a listing of cost data by separate task order, line item or funding provisions. This is an acceptable alternative to issuing a separate report for each task order or line item number. Such a consolidated report must provide all pertinent information for each task order or line item number being closed.

c. Generally, the contract audit closing statement contains the following sections:

- Cover Sheet
- Subject of Audit
- Scope of Audit
- Results of Audit
- DCAA Personnel and Report Authorization
- Audit Report Distribution and Restrictions.

The “shell” report and the audit program are available on the Audit Planning and Performance System (APPS) and the DCAA Intranet. Some additional considerations for the Scope of Audit and the Results of Audit sections are presented below.

d. Subject of Audit. The purpose of the audit is to verify the contractor's assertion that costs claimed represent allowable costs and fee for the contract. Briefly state information which is pertinent to the closing of the contract such as contract number, final voucher number, dollar amount of contract, description of work performed, and the period of contract performance.

e. Scope of Audit. Generally, the traditional scope paragraph (see 10-210.3) is appropriate. The following information or pertinent comments should be provided in the "Qualifications" paragraph when significant and appropriate.

(1) A brief statement should be made of any deficiencies in the contractor's accounting procedures, with the auditor's recommendations for corrective actions. (Note that such deficiencies should be identified as qualifications only when the cost impact cannot be determined. If the impact can be determined, the deficiency would be reported in the Results of Audit section of the report.) This is necessary only where the contractor has other continuing auditable contracts or is expected to be awarded such contracts in the near future.

(2) When the cost impact cannot be determined, provide a statement of status of any unsettled disapprovals, outstanding subcontract legal actions, open insurance claims, or other unresolved items of which the auditor has knowledge. When the cost impact is known, this statement belongs in the Results of Audit section of the report.

(3) When quick-closeout procedures are being used, make a brief statement that the audit was performed in response to (a) the contractor's request for final payment, or (b) the contracting officer's request for assistance in closing out the contract (subcontract) using administrative quick-closeout procedures under FAR 42.708. This should be followed by statements on what fiscal years have been audited and which have not been audited. See 10-903 for suggested wording.

f. Results of Audit. The audit results should begin with the phrase, "In our opinion, [*except for the (describe the qualification and the potential impact on the results*)], . . ." and should comment on the following items:

(1) The overall allowability of the costs claimed by the contractor (when applicable, also comment on allowability regarding particular contract terms on cost such as task/delivery order limitations, ceiling rates, not to exceed costs, or other special cost provisions within the contract);

(2) Any contractor operations pertinent to cost sharing affecting final settlement of the contract;

(3) The impact of appropriate Qualifications;

(4) Any unclaimed wages, unclaimed deposits, unpresented checks, and potential credits and refunds.

(5) If Government funds were advanced to finance the contractor's operations, a statement should be made of the unliquidated balance of the advance, after all adjustments and any unpaid interest charges on such funds or contractor's failure to replace funds expended for disapproved expenditures.

(6) When the work contemplated by the contract has not been physically completed, the auditor should comment upon this situation so that the contracting officer may determine whether an adjustment should be made in the fixed fee payable under the contract.

(7) When Government furnished material or equipment is furnished to the contractor in amounts greater than contemplated by the terms of the contract, thereby relieving the contractor of the responsibility of furnishing the items, the matter should be commented on, in order that the contracting officer may determine whether the contractor is entitled to the stipulated fee. Additionally, if the contract provides for cost-sharing or participation by the contractor in cost savings, the auditor should indicate that part of the cost savings resulting from this factor.

(8) If an exit conference was conducted, follow the guidelines presented in 10-210.5e. If an exit conference was not conducted, include a statement explaining the circumstances. For example, a statement might read:

"An exit conference was not conducted because [*provide reason.*]"

10-903 Quick-Closeout Procedure Reports

The auditor should issue a contract audit closing statement when (i) a contractor requests final payment on a contract meeting the criteria for quick-closeout under FAR 42.708 (also see 6-1010) and (ii) the contracting officer requests DCAA's advice regarding the final payment and use of quick-closeout procedures. This is an application of agreed-upon procedures; follow the guidance in 10-1000 as supplemented in the following paragraphs.

When preparing the closing statement in this situation, the report will clearly indicate what costs and fiscal periods have been audited and which have not been audited. Suggested wording for the "Scope" paragraph follows:

> "This application of agreed-upon procedures is in response to your request for assistance in closing out the contract using the administrative quick-close out procedures under FAR 42.708. The costs of $__ claimed on the subject contract represent costs recorded for the contract during FYs 20X2-20X4. Of this amount, $__ represents amounts incurred during FYs 20X2-20X3. We have completed the annual audits of incurred cost for these years. The remaining claimed costs of $__ were recorded during FY 20X4. The audit of [*contractor's name*] FY 20X4 incurred costs is in process. We do not expect that the FY 20X4 audit results will find a significant exception to the claimed costs."

10-904 Repricing Proposal Reports for Incentive and Redeterminable Fixed-Price Contracts

a. The audits of incurred costs under repricing proposals for incentive (FAR 16.403) and redeterminable (FAR 16.205) fixed-price contracts are similar to other contract closeout audits, therefore, a similar closeout report is generally appropriate.

b. Because of the nature of such contracts, (cost/performance incentives and/or prospective/retroactive redetermination) the auditor should coordinate with contracting officials early -- to plan the audit and the report -- to be responsive to customer needs. In cases where the contract provides for an incentive fee based in part upon performance or quality, coordination is essential to obtain technical information to determine the contract fee.

c. The Scope of Audit section should address the applicable Qualifications listed above (10-902e.), as well as any pertinent qualifications involving incentive fee and profit computations.

d. The Results of Audit section would be generally consistent with the guidance above (10-902f.) and include a specific recommendation on incentive fee and profit computation. Other pertinent comments might include:

- Cost sharing provisions
- Outstanding Form 1s
- Warranty clauses
- Make or Buy decisions
- Subcontracts -- cost pyramiding
- Contractor overpayments

10-905 Report Distribution – CACS and Repricings

a. Contract audit closing statement shall be distributed as follows:

(1) Closing statements other than in (2) through (6) below will be submitted to the administrative contracting officer.

(2) Closing statements for terminated contracts will be submitted to the termination contracting officer. The closing statement should be issued no later than the submission date of the advisory audit report on the contractor's termination settlement proposal.

(3) Closing statements related to NASA contracts will be sent to the cognizant contracting officer. If requested by NASA IG, furnish a copy to the NASA Office of Inspector General, Assistant IG for Auditing. (See Supplement 15-1S1.)

(4) For the Department of Health and Human Services (DHHS), closing statements will be submitted to the DHHS Inspector General office that requested the audit (See 15-1S3).

(5) Reports issued on AID contracts should be addressed to:

Office of Inspector General
U. S. Agency for International Development
Director, Financial Audit Division
1300 Pennsylvania Avenue, NW
OIG/A/FA, Room 8.10-001
Washington, DC 20523-7802
e-mail: faudit@usaid.gov

Also see (see 13-706.4) and 13-706-7).

(6) Reports related to National Guard Bureau contracts will be issued to the United States Property & Fiscal Officer (USP&FO) designated as the contracting officer (14-903.5).

b. Where the completion voucher and related closing documents (original and six copies) have not been previously submitted to the ACO/TCO, they should be forwarded by transmittal memorandum at the conclusion of the closing statement, but not as part of the closing statement. This will expedite electronic transmission of the closing statement.

c. Reports for repricing proposals will be submitted to the requesting ACO/PCO and other appropriate recipients.

d. All report recipients will be identified in the Distribution section of the report.

10-1000 Section 10 --- Reports on Application of Agreed-Upon Procedures

10-1001 Introduction (Agreed - Upon Procedures)

This section provides guidance for preparing application of agreed-upon procedures reports in accordance with generally accepted government auditing standards (GAGAS). GAGAS incorporated the Statements on Standards for Attestation Engagements (SSAE) Section 201, Agreed-Upon Procedure Engagements. Guidance covering the performance of agreed-upon procedures is in 14-1000.

10-1002 Nature of Reports (Agreed-Upon Procedures)

a. In an agreed-upon procedures engagement, an auditor is asked by a requestor to issue a written report covering all findings arising from the application of clearly defined procedures agreed to by the requestor and auditor and performed on the contractor's subject matter or assertion, such as a price proposal or other submission (see 14-1000). The concept of materiality does not apply to findings to be reported in an agreed-upon procedures engagement unless the definition of materiality is agreed to by the auditor and requestor. In the absence of such an agreement, all findings must be reported, even if immaterial. The auditor should report only on procedures agreed to and where the requestor has taken responsibility for the sufficiency of the procedures.

b. An application of agreed-upon procedures does not constitute an examination or a review. Our report assists the requestor in evaluating a subject matter or assertion. An agreed-upon procedures report provides findings based on the comparison of the specified subject matter or assertion against agreed-upon criteria. The requestor selects the procedures and criteria to achieve an intended purpose.

10-1003 Report Format and Contents (Agreed-Upon Procedures)

Prepare reports following the standard aspects of report preparation (see 10-200) and the professional standards for reporting (see 2-400). The report should contain all necessary and pertinent information to be fully responsive to the needs of the recipient. Reports should be prepared using the following format:

- Cover Sheet
- Report Narrative
  - Subject of Application of Agreed-Upon Procedures
  - Executive Summary
  - Scope of Application of Agreed-Upon Procedures
    - Description of the Nature of Technical Assistance Provided (if applicable)
    - Restrictions on Procedures (if applicable)
  - Results of Application of Agreed-Upon Procedures
    - Disclaimer of Opinion
    - Exhibits and Schedules with Procedures Performed and Findings
    - Additional Remarks
- DCAA Personnel and Report Authorization
- Report Distribution and Restrictions
- Appendixes (if applicable)

10-1004 Report Narrative (Agreed-Upon Procedures)

a. DCAA limits the word "audit" to reports on examinations. Therefore, the word "audit" is not included in the report number, the report title, the section headings, or the report header. Instead, the words "Application of Agreed-Upon Procedures" are included in the section headings. The use of the term "engagement" rather than "audit," "examination," or "review," is more appropriate to describe the work performed by DCAA in an agreed-upon procedures engagement.

b. Example report language for each section is included in the report shells that are delivered by APPS for Activity Codes 28000, Application of Agreed-Upon Procedures and 17900, Agreed-Upon Procedures, Other Than Price Proposals. Those report shells are also available on the DCAA Intranet. The body of the report will contain the following captioned paragraphs, as applicable.

10-1005 Subject of Application of Agreed-Upon Procedures

a. The first paragraph of the subject section refers to the request and identifies the subject matter or assertion to which the agreed-upon procedures were applied and the time period covered by the assertion or subject matter.

b. The second paragraph of this section states that the subject matter or assertion is the responsibility of the contractor. However, because an examination is not performed, the statement that it is the auditor's responsibility to express an opinion is omitted (see 10-210.1).

10-1006 Executive Summary

Due to the limited nature of the agreed-upon procedures, this section usually is not needed. However, an Executive Summary should be used if it is necessary to direct the user's attention to significant findings addressed in the report.

10-1007 Scope of Application of Agreed-Upon Procedures

a. The first paragraph of the scope section states that the engagement was performed solely to assist the requestor in evaluating the subject matter or assertion and was performed in accordance with GAGAS. It also states that the sufficiency of the procedures is solely the responsibility of the requestor and disclaims DCAA responsibility for their sufficiency.

b. The traditional scope paragraphs regarding evaluation criteria and control risk are omitted because an examination is not being performed. The specific criteria against which the subject matter or assertion is measured are generally included within the procedures and not set out separately in the report.

c. Include a reference to the Results of Application of Agreed-Upon Procedures section of the report for a listing of the specific procedures performed and related findings.

d. If applicable, provide a description of the nature of the assistance provided by a technical specialist.

10-1008 Restrictions on Procedures (Agreed-Upon Procedures)

Restrictions on procedures refer to circumstances that restrict the auditor's ability to perform procedures agreed-upon by the requestor (see 14-1002.3). The Restrictions on Procedures section is similar to the scope qualification in audit reports when a qualified opinion is provided. However, a qualification section is not used in application of agreed-upon procedures reports because the auditor disclaims an opinion. Generally, inadequate systems or instances of non-compliance with FAR or CAS do not restrict the

auditor's ability to perform agreed-upon procedures; therefore, such circumstances are generally not appropriate restrictions on procedures. However, such circumstances may, in some cases, be included as "Other Matters to be Reported" (see 10-1011).

10-1009 Results of Application of Agreed-Upon Procedures

a. The results section includes the following elements which are discussed in more detail below: (1) a disclaimer of opinion paragraph, (2) exhibits and schedules detailing the agreed-upon procedures performed and related findings, and (3) additional remarks applicable under the circumstances.

b. The report will provide neither positive nor negative assurance. The results of applying agreed-upon procedures should be expressed in the report as findings (as defined in AT 201.24 – 201.26), rather than adjustments, recommendations or questioned cost. The report should exclude opinion like language and language that implies negative assurance. For example, the report should not include statements such as "in our opinion," "the costs are reasonable," "nothing came to our attention," or "costs are understated." In addition, the opinion statement sentences in 10-304.6, e.g., regarding the adequacy of cost or pricing data and the acceptability of the proposal for negotiation, are not to be used in a report on the application of agreed-upon procedures.

10-1009.1 Disclaimer of Opinion Paragraph

The first paragraph of the results section includes the following elements: (1) a statement that an audit was not performed, (2) a disclaimer of opinion, (3) a reference to the appendix, "Other Matters to be Reported," if there are matters, unrelated to the specific agreed-upon procedures, that should be called to the requestor's attention (see 10-1011), and (4) a statement that if additional procedures had been performed, other matters might have come to our attention that would have been reported.

10-1009.2 Exhibits and Schedules – Procedures Performed and Findings

The next part of the results section should separately list each agreed-upon procedure performed, followed by the related findings and explanatory notes. While exhibits and explanatory notes in agreed-upon procedures reports are usually not as extensive as those in audit reports, they should be sufficient in the specific circumstances, to clearly and concisely explain the findings to the requestor. The following subheadings should be included, as applicable, for each agreed-upon procedure.

a. Agreed-Upon Procedure. Briefly describe the agreed-upon procedure, including any agreed upon materiality limits. The agreed-upon procedures listed in the report should generally be the same as those detailed in the acknowledgment letter or, if they were modified during the course of the engagement, in the working papers (14-1002.3).

b. Summary of Findings. This will generally be a table summarizing the findings, including explanatory notes if needed to adequately explain the procedures performed and the related findings. A narrative description of the findings, rather than a table, may be used if more appropriate in the circumstances. Report all findings, even if immaterial, unless the definition of materiality was agreed to by the auditor and requestor (see 10-1002).

c. Contractor's Reaction. If appropriate, provide a statement that the contractor either agrees or disagrees with the findings and the basis for any disagreement.

d. Auditor's Response. Provide any appropriate comments if the contractor disagrees with the findings.

10-1009.3 Additional Remarks

a. Indicate the date an exit conference was held and the name and title of the contractor's designated representative with whom the exit conference was conducted (see 4-304). Also, briefly describe the contractor's reaction in this section. Detailed comments on the contractor's reaction to the report findings will be included in the explanatory notes, where appropriate. When the contractor provides a formal, written response, it should be referenced within the Results of Application of Agreed-Upon Procedures section and included as an appendix to the report.

b. Further remarks should be included when appropriate to the circumstances. For example, include remarks if information in the report was provided to the contracting officer in advance.

10-1010 Report Distribution and Restrictions (Agreed-Upon Procedures)

Follow the guidelines at 10-212. However, restrictions paragraph 4 should be revised to limit use of the report to certain parties. The APPS report shells for Activity Codes 28000 and 17900 include the appropriate language.

10-1011 Appendixes (Agreed-Upon Procedures)

Follow general guidelines at 10-213 and the specific guidance below.

Other Matters to be Reported. This appendix should be used to communicate matters, unrelated to the specific agreed-upon procedures, that come to the auditor's attention that may significantly impact or contradict the subject matter or assertion being reported on (see 14-1002.3). When providing information on relevant systems that were previously reported to be inadequate and related internal control deficiencies, the report should clearly communicate that the opinions are based on previous engagements. The APPS report shells for Activity Codes 28000 and 17900 include examples of appropriate language.

10-1100 Section 11 --- Audit Reports on Price Adjustment Proposals or Claims

10-1101 Introduction (Claim Reports)

a. This section provides guidance for preparing reports on price adjustment proposals or claims. For additional significant report requirements on price adjustment proposals and claims, refer to 12-800.

b. A requestor may ask DCAA to evaluate limited portions of contractor price adjustment proposals or claims by means of agreed-upon procedures. Agreed-upon procedures are appropriate when objective evaluation criteria exist and the auditor and requestor reach mutual agreement on the procedures to be applied. Guidance in 10-1000 should be followed, modified as necessary to conform to the requirements of price adjustment reports. The auditor should ensure that:

- the acknowledgment indicates the parties have reached a clear understanding regarding the terms of the engagement (see 4-103.d.);
- the report does not refer to the engagement as an “examination” or a “review;”
- the report disclaims an opinion; and
- the restrictions are appropriate for agreed-upon procedures (see 10-1008).

c. Because of the sensitivity of a claim and the possibility that it will become the subject of litigation, it is unlikely that a requestor will want to limit the evaluation to a review. However, the evaluation of a claim may be performed as a review if necessary to meet time constraints or other special needs of the requestor. Modify the subject, scope and opinion paragraphs as shown in 10-210.

d. While it is possible to evaluate a portion of a claim using the standards for an audit, either an examination or a review, it may be inadvisable to do so. The elements of the claim may be highly interconnected. Should the FAO receive a request for an audit of part of a claim, the specific issues to be addressed should be analyzed, and a determination made as to whether the elements covered by the request may be evaluated on a stand-alone basis. The analysis should be documented in the working papers.

e. If it is determined that auditing parts of a price adjustment proposal or claim is appropriate, refer to 10-305 for suitable report language, modified as necessary. Revise section headings to include the words "... OF AUDIT OF PARTS OF A PRICE ADJUSTMENT PROPOSAL (CLAIM)".

10-1102 Proper Terms (Claim Reports)

a. For price adjustment proposals, incorporate in the resulting audit report the terms “negotiation” and “Truth in Negotiations Act” as if the submission were a price proposal (a pricing action). Since a claim is no longer considered a pricing action, the appropriate terms cited in these cases are “adjudication” or “settlement” versus “negotiation.” Refer to the correct type of submission; e.g. a price adjustment proposal or a claim, when the submission meets the requirements of FAR 33.201. Refer to 12-504 for further guidance.

b. Some pro forma comments used in price proposal reports are not suitable for claim reports. When the audit concerns a claim being appealed to the ASBCA or courts, do not refer to pricing terms that apply to expected negotiations. In particular, question costs for lack of support rather than classifying them as unsupported, because claim audits generally deal with after-the-fact costs. Also, do not refer to 10 U.S.C. 2306a on claims required to be certified by the Contract Disputes Act of 1978 (use 41 U.S.C. 601).

10-1103 Report Format and Contents (Claim Reports)

a. Since claims often involve legal issues and frequently are complex, the audit report must be sufficiently clear, complete and accurate to withstand the rigors of the appeal process.

b. The nature and extent of detail in the report depends on:

(1) the complexity of the proposal or claim,
(2) the significance of errors or omissions,
(3) the materiality of the auditor's recommended adjustments,
(4) results of discussions with the contractor, and
(5) the contracting officer's specific requests.

c. The minimum data requirements stated in 10-1105.1 apply, even if the audit did not result in questions regarding the contractor's submitted costs or other qualitative or quantitative aspects. Also include in the report the information stated in 10-1104, regardless of the audit findings.

10-1103.1 General Format

Prepare the report following the guidance in 10-100 and 10-200, as supplemented by this section. The general arrangement of report contents follows:

- Audit Report Cover Sheet (10-205)
- Report Narrative (10-210)
  - Subject of Audit (10-1104.1)
  - Executive Summary (10-1104.2)
  - Scope of Audit (10-1104.3)
    - Qualifications (10-1104.4)
  - Results of Audit (10-1105)
    - Opinion (10-304.6)
    - Exhibits and Schedules (10-1105.1)
    - Unsatisfactory Conditions and/or Other Audit Recommendations (4-800)
    - Additional Remarks (10-1105.3)
- Contractor Organization and Systems (10-1106)
- DCAA Personnel and Report Authorization (10-211)
- Report Distribution and Restrictions (10-212)
- Appendixes (10-1107)

Following the general format in 10-205, include the title “Report on Price Adjustment Proposal” or “Report on Price Adjustment Claim” on the subject line. Also include the prime contract number on the reference line; and the contractor's name, city, and state on the contractor line.

10-1103.2 Addressing and Distributing Reports

The general policy for addressing audit reports is stated in 10-206; for report distribution, in 10-212. For all reports covered by this section, include the onsite FLA (refer to the FLA Locator on the DCAA Intranet site) in the distribution. Follow the guidance in 10-212.2 on the release of draft audit reports to the contractor. For reports on those claims appealed to a BCA or court, coordinate the release of the report with the Government trial attorney.

10-1104 Report Narrative

The body of the report will contain the following paragraphs, as applicable. (See 10-210 for paragraph format.)

10-1104.1 Subject of Audit

The first paragraph under this heading should identify the type of submission and purpose of the audit. It should state the contract type, incentive provisions, total value of the submission, and whether the submission represents a price adjustment proposal, or a claim under the Contract Disputes Act of 1978. Also include a statement that the

submission is the responsibility of the contractor and that the auditor's responsibility is to express an opinion based on the audit [see 10-210.1b.(1)]. Add other appropriate information as necessary.

10-1104.2 Executive Summary

This section is intended to give the reader a brief overview of the audit findings -- audit opinion, recommendations and the significant issues supporting the opinion. Follow the guidelines presented in 10-210.2 and 10-304.2.

10-1104.3 Scope of Audit

a. Include the following scope of audit statement as a separate paragraph, modified as shown where appropriate. This section should also be used to provide information regarding advance agreements and special contract provisions having a bearing on the proposal or claim.

> "Except for the qualification(s) discussed below, [*omit if there is no "Qualification(s)" section within the "Scope" paragraph*], we conducted our examination in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the examination to obtain reasonable assurance that the price adjustment proposal (*claim*) is free of material misstatement. An examination includes:
> - obtaining an understanding of the contractor's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
> - examining, on a test basis, evidence supporting the amounts and disclosures in the price adjustment proposal (*claim*);
> - assessing the accounting principles used and significant estimates made by the contractor;
> - evaluating the overall price adjustment proposal (*claim*) presentation; and
> - determining the need for technical specialist assistance [*and quantifying the results of a Government technical evaluation*]."

b. The next paragraph should identify the established or stated criteria used to evaluate the proposal or claim. (See 10-210.3d.). For contractors with CAS covered contracts, if the subject contract is exempt from CAS for any of the reasons identified in 48 CFR 9903.201-1, state this fact in the report (see 10-210.3e.). For example:

> "Contract number *XXXX* is not covered by Cost Accounting Standards Board rules and regulations because it is a sealed bid contract and is therefore exempt from all CAS requirements under 48 CFR 9903.201-1(b)(1)."

c. The last paragraph in the Scope of Audit section should describe the impact of the current assessment of control risk on the audit scope. (See 10-210.3f.).

10-1104.4 Qualifications

a. Include this section only if qualifying the audit opinion due to limitations related to the stated purpose and scope of audit (see 10-304.4). In such a case, both the "Scope of Audit" and the "Results of Audit" must specifically refer to this section. (Properly explain any unqualified audit conclusions and recommendations in other portions of the report. Do not refer to them in this part of the report.)

b. This section must clearly explain the nature and potential impact of each circumstance that prevents an unqualified opinion, and any steps taken to overcome or mitigate

the problem. If applicable, also explain any further action that the auditor will take after issuing the report.

c. For situations involving several circumstances, use separately numbered subparagraphs for each qualification (e.g., contractor's denial of access to records or inadequate contractor cost records).

10-1105 Results of Audit (Claim Reports)

a. This section should begin with the phrase, “In our opinion. . .” and should present the audit opinion (qualified, if appropriate) and refer to applicable exhibits, schedules, and appendixes. (See 10-304.5).

b. Reporting standards (see Chapter 2) require an opinion on the adequacy of submitted cost or pricing data and their compliance with FAR and Cost Accounting Standards where such regulations and standards apply. See 10-304.6c for guidance on developing an opinion.

c. Claims or proposals that include significant questioned costs, including costs questioned for lack of support, may warrant an adverse audit opinion (see 10-304.6). Express an adverse opinion when the contractor should take some specific corrective action before the Government can consider the claim or proposal and related material as an adequate basis for adjudication, settlement or negotiation of a price adjustment (see 9-211.3).

10-1105.1 Exhibits and Schedules

a. Use an exhibit to summarize the proposal or claim as part of the results of the audit (see 10-304.7). Include structured notes to give the reader a comprehensive understanding of the basis of the proposal or claim and, if applicable, the reasons for the auditor's use of a different method to determine a price adjustment. Present important dates in an appendix titled “Chronology of Significant Events” (10-1107.1).

b. Results of audit of the Eichleay formula (see 12-805) should be presented in the report exhibit or a structured note, and should include:

(1) the contractor’s computations;
(2) the audit computations;
(3) discussion of the basis for the differences by each element of the formula; and
(4) any audit adjustments to the computed damages.

See 12-806 for further guidance.

10-1105.2 Unsatisfactory Conditions or Other Audit Recommendations

Use this section to report any unsatisfactory conditions or questionable practices relating to the contractor's operations and the contract being audited. Whether the auditor should include a particular condition or practice in this section depends on its significance and the frequency of previous reporting. When the audit of a contractor's or subcontractor's records or information from other sources suggest fraud, other criminal activity, or the existence of unsatisfactory conditions, send a referral as provided by 4-700 or 4-800 (whichever is more appropriate in the circumstances).

10-1105.3 Additional Remarks

Conclude the Results of Audit section of the report narrative with the following additional remarks, as appropriate.

a. Exit Conference (see 10-210.5e.(1) and (2))

(1) In all evaluations, state the date and the name and title of the contractor's designated representative with whom the results of audit and/or the factual matters were discussed (see 4-304).

(2) In addition, if there were findings, summarize the contractor's reaction to the audit results and/or factual matters, the major areas of difference likely to be pursued at negotiations, and any other comments relevant to resolution of the findings.

(3) When the contractor provides a formal, written response, it should be referenced within the Results of Audit section and included as an appendix to the report. Include any rebuttals in the "Auditor's Response" portion of the explanatory notes. Include the following statement.

"The complete text of the contractor's response appears as Appendix [*X*]."

(4) If the contractor provided no response, the following is an example of a statement that is permissible but not required.

"[*Identify the contractor representative*] reserved comment pending discussions with the cognizant Federal agency official."

(5) An illustration of a report paragraph is shown below:

"We discussed the results of audit with [*identify the contractor representative(s) by name and title*] in an exit conference held on [*date*]. [*If there are projected estimates for future work, do not disclose the audit results on these projections, disclose only factual matters and include the following as the second sentence:* During the exit conference we disclosed only factual matters regarding the estimates for future work not completed.] [*Include a summary of the audit results and/or factual matters.*] In response to our findings [*include a summary of the contractor's reaction to the audit results and/or factual matters.*] The complete text of the contractor's response appears as Appendix [*X*]. [*Include the auditor's rejoinder to the audit results and discuss the validity of the contractor's response.*]"

b. Per 12-507, draft and final audit reports on equitable adjustment claims should not be provided to the contractor unless the contracting officer or Government trial attorney authorizes the release in writing.

c. Indicate in this section that the results of the examination are based on the contracting officer's determination that the submittal is a price adjustment proposal or a CDA claim. Should this determination be changed, suggest that the auditor be notified so that the impact of such a change on the results of the examination can be assessed. See 12-504d. and 12-504e.

d. Use the guidelines provided in 10-210.5e.(2) to prepare other additional remarks.

10-1106 Contractor Organization and Systems (Claim Reports)

Include relevant information, which impacts the scope and the results of the audit. Tailor it to the contractor's size and where possible reference previous reports. Follow the guidelines in 10-210.7.

10-1107 Appendixes (Claim Reports)

Use an appendix only for required supplementary or supporting information, as explained in 10-213. The report body, exhibit, or schedule should refer to any appendix included as part of the report. The following should be used for a report on a price adjustment proposal or claim.

10-1107.1 Chronology of Significant Events (See Figure 10-11-1)

a. Include a chronology of significant events as an appendix in each proposal or claim audit report. This appendix lists the significant events leading up to or having a bearing on the proposal or claim. Its purpose is to ensure that the report's recipient and potential users (such as the ASBCA judge and attorneys) have an understanding of the key issues and events.

b. The chronology should show whether the contractor certified the claim under the Contract Disputes Act, the certification date, whether the contracting officer has made a decision on entitlement, the date and amount of the initial price proposal, the basic contract plus modification amounts, key events regarding contract performance issues, the dates of alleged delays or disruptions, performance dates anticipated at award date, and actual performance dates.

10-1107.2 Contractor's Written Comments

Include as an appendix a copy of the contractor's written comments submitted in response to the exit conference (see 10-1105.3).

10-1107.3 Observations on Entitlement

Include in an appendix on “other matters” any observations that relate to the contractor’s assertion of entitlement (see 12-701 and 12-802.1), such as evidence of delays caused by contractor delays in ordering materials, subcontractor caused delays, or malfunctioning machinery.

Figure 10-11-1 (Ref. 10-1107.1)
Evaluation of Proposal or Claim for Price Adjustment

Audit Report No. _____ **APPENDIX 1**

EVALUATION OF PROPOSAL OR CLAIM FOR PRICE ADJUSTMENT

Filed under Changes Clause ( ) or Disputes Clause (x)
Contract No. N00999-92-C-1234
Board of Appeals Case No. 33333

Contractor Name XYZ Company Telephone (703) 274-7775
Outside Proposal or Claim Preparer Samuel Jones Telephone (703) 274-7776
Trial Attorney Name Portia Barrister Telephone (202) 514-0832
Date of Initial Price Proposal Aug. 21, 1992 (compet. bid) Amount $1,000,000
Date of Basic Contract September 30, 1992 Amount $1,000,000
Contract type Firm-Fixed-Price Competitive
Total Amount of All Modifications $500,000
Date(s) of Alleged Abnormal Condition(s) October 1, 1992 - January 15, 1994
Description: XYZ Company alleges that the Government provided defective specifications and equipment, which resulted in increased cost.
Contract Specified Performance Dates: From: October 1, 1992 to: September 30, 1993
Actual Performance Dates: From: January 29, 1994 to: September 30, 1996

CHRONOLOGY OF SIGNIFICANT EVENTS

Event	Date
Contractor alleges defective specifications	Oct. 1, 1992
Contractor submits site drawings	March 15, 1993
Contracting officer rejects drawings as nonconforming to contract specifications	March 16, 1993
Contractor protests PCO's actions, requests 180-day delay	March 17, 1993
Contracting officer rejects contractor's request	June 27, 1993
Contractor submits revised drawings	Aug. 24, 1993
Contracting officer approves revised drawings	Nov. 22, 1993
Contractor alleges defective GFE	Jan. 10, 1994
Contracting officer notifies contractor of proposed termination for default	Jan. 15, 1994
Performance begins; TFD withdrawn	Jan. 29, 1994
Contractor submits price adjustment proposal	April 22, 1994
Claim submitted	Aug. 22, 1996
Claim certified under Contract Disputes Act	Aug. 22, 1996
Contracting officer determines contractor is not entitled to a price adjustment and issues final decision	Aug. 24, 1996
Contractor files ASBCA appeal	Nov. 23, 1996
Audit request	Nov. 29, 1996

10-1200 Section 12 --- Reports on Other Areas

10-1201 Introduction (Other Reports)

a. This section provides guidance for preparing reports on evaluations of an entity's adherence to specific financial compliance requirements such as Earned Value Management System (EVMS) criteria (see 11-200) and other DoD requirements (see 14-800), and contract audit areas not covered in Sections 3 through 11 of this chapter. Reports on other areas should be adapted to the specific audit performed. "Shell" reports for a progress payment audit and a financial capability audit can be found on the DCAA Intranet and the APPS.

b. Pro forma language for review reports has not been developed because it is unlikely that most of the evaluations listed below would be evaluated under the review standards. Additionally, there is some possibility that certain types of reports could be deemed to be determinations of compliance with law or regulation, and if so, they would be ineligible for reporting as a review. Should it become necessary to report results of an evaluation subject to this section as a review and review reporting language has not been furnished in the appropriate "shell" report on the APPS, modify the report to use review reporting language outlined in 10-200. Furnish a copy of the report to Headquarters, Attention PAS.

10-1202 Additional Guidance (Other Reports)

a. The principal audit areas to which the guidance in this section is applicable are listed below. The auditor should refer to the identified section for guidance on performing each type of evaluation, and to 10-212 for general guidance on report distribution.

(1) Audit Reports Pertaining to Suspected Fraud and Unlawful Activity (see 4-702.5).
(2) Voluntary Refunds (see 4-802.4).
(3) Contractor Financial Capability Reporting Requirements (see 14-309).
(4) Progress Payments (see 14-206).
(5) Contract Funds Status Reports (see 11-305).
(6) Cost Performance Reports (see 11-305).
(7) Cost/Schedule Status Reports (see 11-305).
(8) Contractor Cost Data Reports (see 11-409).
(9) Contractor Records of Government Property (see 14-408).
(10) Military Dependents Medical Care Program (see 14-902.3).
(11) Advance Payments (see 14-904.4).
(12) Special Audits Related to Government Rights in Inventions (see 14-906.4).
(13) Special Information Reports for NASA (see 15-106.4).
(14) Specific information requirements for reports under Agency for International Development contracts (see 15-107 and 13-706.4).
(15) Earned Value Management Systems (see 11-202.8 and 11-203.5).
(16) Performance Based Payments (see 14-910).
(17) Quarterly Limitation of Payments (QLOP) (see 11-105).

b. A requestor may ask DCAA to evaluate limited portions of the above subject matter by means of agreed-upon procedures. Agreed-upon procedures are appropriate when objective evaluation criteria exist and the auditor and requestor reach mutual agreement on the procedures to be applied. Guidance in 10-1000 should be followed, modified as necessary to conform to the subject matter of the report. The auditor should ensure that:

- the acknowledgment indicates the parties have reached a clear understanding regarding the terms of the engagement (see 4-103.d.);
- the report does not refer to the engagement as an "examination" or a "review";
- the report disclaims an opinion; and
- the restrictions are appropriate for agreed-upon procedures (see 10-1008).

10-1203 Report Format and Contents (Other Reports)

Prepare reports following the standard aspects of report preparation in 10-200 and the professional standards for audit reporting in Chapter 2. The auditor will also be guided by the reporting concepts contained in Sections 2 through 11 of this chapter and the comments that follow. The report should contain all necessary and pertinent information to be fully responsive to the needs of the recipient. Reports should be prepared using the following format:

- Cover Sheet (10-205)
- Report Narrative (10-210)
  - Subject of Audit (10-1204.1)
  - Executive Summary (10-1204.2)
  - Scope of Audit (10-210.3)
    - Qualifications (10-210.4)
  - Results of Audit (10-1204.5)
    - Opinion
    - Exhibits and Schedules
    - Additional Remarks
    - (10-210.5e)
- Contractor Organization and Systems (10-210.7)
- DCAA Personnel and Report Authorization (10-211)
- Report Distribution and Restrictions (10-212)
- Appendixes, if needed.

10-1204 Report Narrative (Other Reports)

Since this section applies to a variety of audit areas, it is imperative that the “Subject of Audit,” “Scope of Audit,” and the “Results of Audit” paragraphs be tailored to meet the specific requirements of the audit. Be sure the report does not imply acceptance for purposes other than those intended. For example, a progress payment audit report should not be misconstrued as determining the acceptability or allowability of costs claimed on the contractor's progress payment request.

10-1204.1 Subject of Audit

This paragraph should define why the evaluation was performed. Most of the audits covered in this section are evaluations of a specific contractor submission performed in response to requests. In such cases, the request should be referenced in this paragraph. General guidance is provided in 10-210.1. When the evaluation covers the contractor's compliance with one or more specific laws, regulations, or related requirements, the report format should identify the contractor's implicit assertion that it has complied with the requirements. For example, a report on an examination of compliance with EVMS requirements may read:

> “As requested by [*requesting office*] in [*memorandum/letter*] [*reference*] dated __ , we examined [*contractor name or short name*]’s integrated management system to assure that the system complies with the financial and accounting data requirements related to the Earned Value Management System (EVMS) guidelines established in DoDI 5000.2 and incorporated in DFARS 252.234-7002. By submitting invoices under contracts subject to EVMS criteria, the contractor asserts that it has complied with these requirements. The purpose of the examination was to test whether the relevant contractor's systems meet the standards established in DoDI 5000.2 during the period (*identify the period covered by the evaluation*)."

> “Compliance with DFARS 252.234-7002 is the responsibility of the contractor. Our responsibility is to express an opinion on the contractor's compliance with the requirements of DFARS 252.234-7002 based on our examination.”

10-1204.2 Executive Summary

Develop an appropriate Executive Summary paragraph using the guidelines provided in 10-210.2 and 10-304.2.

10-1204.3 Scope of Audit

Develop an appropriate scope paragraph using the guidelines provided in 10-210.3. The scope paragraph should describe the criteria used to evaluate the contractor's submission and any scope qualifications. Also describe the impact of the assessment of control risk on the audit scope (see 10-210.3f). If the report covers an evaluation of a contractor's compliance with a specific law or regulation, end this paragraph with the following statement:

> "Our examination does not provide a legal determination on [*short name's*] compliance with [*identify law or regulation*] requirements."

10-1204.4 Qualifications

This section sets forth any factors which have a significant adverse impact on the scope of audit and usually result in a qualified report. These circumstances include denial of access to records, nonreceipt of a technical evaluation report, insufficient time to perform the evaluation, etc. The section of the report which contains the detailed discussion of the item involved should be referenced (page number, exhibit, or schedule).

10-1204.5 Results of Audit

a. This section of the narrative tells the report recipient the auditor's opinion and what the audit findings are. If the evaluation was an examination, begin the Results paragraph with the phase, “In our opinion, [*except for the (describe the qualification and the potential impact on the results*)], . . .” Do not use the term “opinion” to describe the results of a review. If required, this paragraph should be supported by exhibits and schedules.

b. Many major Government contracts contain clauses requiring an approved Earned Value Management System (EVMS) meeting guidelines set forth in DoDI 5000.2 for performance measurement on selected acquisitions (11-200). If the contractor has contracts requiring an approved EVMS, provide an assessment of whether the deficiencies disclosed in the report are likely to materially affect the reliability of the contractor's EVMS. Discuss findings and recommendations relating to the EVMS with the Contract Administration Office EVMS monitor and the audit supervisor prior to issuance of the report. Immediately after issuing the report, the auditor should evaluate the impact of these deficiencies on specific contracts requiring an approved EVMS and where significant provide the details in EVMS surveillance reports (11-203.5.). For example, the systems report might say:

> “We believe the deficiencies noted in this report will have a material impact on the reliability of the contractor's Earned Value Management System (EVMS) and on the accuracy of the system's data. Immediately after issuing this report, we will evaluate these deficiencies to determine the impact on specific contracts requiring an approved EVMS and will provide the details in EVMS surveillance reports.”

c. Conclude the Results of Audit section of the report narrative with the following additional remarks, as appropriate:

(1) Exit Conference

(a) In all evaluations, state the date held and the name and title of the contractor's designated representative with whom the exit conference was held (see 4-304). The summary might read as follows:

> "We discussed the results of [*audit, review, procedures, etc.*] with [*Name and Title of contractor representative*] in an exit conference held on [*Date*]."

(b) Summarize the contractor's reaction to any factual differences. Include the major areas of difference likely to be pursued at negotiations, and any other comments relevant to resolution of the findings.

(c) If the contractor provides a formal, written response, it should be referenced within the Results of Audit section and included as an appendix to the report. Include the following statement:

"The complete text of the contractor's response appears as Appendix [*x*]."

(2) Other Additional Remarks

Use the guidelines provided in 10-210.5e.(2) to prepare other additional remarks.

10-1204.6 Contractor Organization and Systems (Other Reports)

Follow the guidelines provided in 10-210.7 to prepare comments regarding the contractor organization and systems section of the report.

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CHAPTER 11

11-000 Audit Of Contractor Compliance With Contract Financial Management Requirements

11-001 Scope of Chapter

This chapter provides guidance that is peculiar or special to the accomplishment of the audit of contractor compliance with contract financial management requirements. To the extent appropriate under the circumstances, Chapters 3, 4, 5, and 6 of this manual are equally applicable to the audit assignments discussed in this chapter.

11-100 Section 1 --- Audit of Contractor Compliance with "Limitation of Cost," "Limitation of Funds," and "Limitation on Payments" Clauses

11-101 Introduction

This section provides guidance for auditing contractual limitations on costs, funds, and payments.

11-102 General

Contract limitation of cost clauses (FAR 52.232-20 and 21) and limitation of funds clause (FAR 52.232-22) contain financial reporting requirements for cost-type contracts. The contract limitation on payments clauses (FAR 52.216-5, 6, 16, and 17) contain financial reporting requirements for contracts with price redetermination provisions and fixed-price incentive contracts. The limitation of cost and funds clauses in cost-type contracts require the contractor to advise the contracting officer in writing whenever the contractor has reason to believe that costs expected to be incurred under the contract in the next 60 days (may vary between 30 and 90 days) when added to all costs previously incurred, will exceed 75 percent (may vary between 75 and 85 percent) of the estimated total contract costs or funds allotted to the contract, respectively. The limitation of cost clause also requires the contractor to notify the contracting officer when there are indications that the total cost for the performance of a contract will be substantially greater or less than the estimated total contract cost. Under FAR 52.232-20, 52.232-21, and 52.232-22, the Government is not obligated to reimburse the contractor for costs incurred in excess of cost or funding limitations. Similarly, the contractor is not obligated to continue performance under the contract or otherwise incur costs in excess of the limitation or, if the contract is cost sharing, the amount then allotted by the Government to the contract plus the contractor's corresponding share. However, if the Government notifies the contractor in writing that the amount allotted to the contract has been increased and specifies the amount, the Government is then obligated to the total revised amount allotted to the contract. The limitation on payments clause in contracts with price redetermination provisions and fixed-price incentive contracts requires the contractor to report to the contracting officer the costs in relation to billing prices on items for which final prices have not been established. The objective of Limitation on Payments Statement quarterly submissions is to keep billing rates during contract performance in line with expected final prices; indicated overpayments can be recouped and excessive billing rates adjusted on a timely basis. This is a minimum requirement. The contract or the procuring agency may require additional reporting, or the contractor may prepare other internal reports in addition to those required by the Government.

11-103 Scope of Audit

Knowing the management tools available to a contractor in controlling, projecting and monitoring contract costs is of utmost importance. Obtaining this knowledge is an integral part of system audits aimed at determining the adequacy of contractor financial management systems. It is important for the auditor to ascertain that the contractor has the financial management tools necessary to adequately identify potential contract overruns or underruns. The auditor should promptly notify the contractor and the ACO of any deficiencies. In evaluating the contractor's financial management policies and procedures, the auditor should ascertain:

a. The nature and adequacy of controls which govern the establishment of budgets; the procedures for accumulating incurred costs by budget element; the actual cost compared to budgeted costs; the means provided for comparing incurred costs to the percentage of contract completion; and development of estimates to complete (ETC).

b. Whether the contractor's organization effectively utilizes its financial management tools to promptly report potential cost overruns and underruns to contractor management and subsequently to the Government.

c. The methods by which the overall contract financial controls relate to the day-to-day supervisory controls maintained at the operational level.

11-104 Audit Procedures

The audit procedures suggested in this section are not intended to be all-inclusive; the auditor, after considering these guidelines, must develop an audit program based on individual circumstances. At the beginning of the audit the auditor should coordinate with the cognizant contracting officer as discussed in 4-103.

11-104.1 Determination of Reporting Requirements

When appropriate, the auditor should:

a. Determine, from contract briefing files or other available sources, those contracts which require limitation of cost reports, limitation of funds reports, or limitation on payments statements.

b. Ascertain whether the contractor is required to meet additional reporting requirements not specifically required by the contract.

c. Ascertain whether internal reports, in addition to those required by the contract, are prepared to increase internal financial management controls. If so, they should be compared with the reports submitted under the contract to determine whether significant differences exist.

d. Compare the reporting requirements among various contracts and determine whether there is duplication in the reports required and in the information assembled. The auditor should consider the possibility of the contractor using reports required by one military department, command, or Service to satisfy the needs of all contracting officers.

11-104.2 Evaluation of Reporting Controls

When appropriate, the auditor should:

a. Evaluate the contractor's procedures applicable to the budgetary controls of individual contracts and compare the estimated cost of individual tasks and departments in the cost estimate with the budgeted funds.

b. Ascertain and evaluate for each division (or plant) the internal procedures for controlling the financial status of Government contracts and determine the source of the reported incurred costs and the basis for ETC. The auditor also should determine the extent and frequency of supervisory reviews of the status reports and whether explanations are required when there are significant deviations from the budget.

c. Ascertain and evaluate the manner in which revised ETC, in terms of engineering and production manhours, relate to the production control schedules and engineering manpower schedules at specific work centers.

d. Evaluate the documentation flow of the financial status reports from the various sources to the finance manager responsible for preparing the overall financial report for the assigned project.

e. Evaluate the controls exercised by the finance manager, including:

(1) the manner in which the source data are reviewed for reliability,

(2) the basis for changes to the source data, and

(3) a determination of the extent to which requests for explanations from operations responsible for the source data are made relative to causes of potential cost overruns or underruns.

11-104.3 Audit Objectives

The audit objectives are:

(1) to determine whether the contractor has complied with the reporting requirements contained in the contract clause and

(2) whether the financial data contained in the contractor's reports and statements are reasonable and consistent with the data presented in other required Government reports and/or claims.

11-104.4 Audit Guidelines

The audit guidelines which are applicable to the minimum reporting requirements in 11-102 are as follows:

a. Ascertain whether the contractor is submitting reports required by its contracts. Compare these reports with the contractor's internal financial reports for consistency.

b. Evaluate limitation of cost reports. The limitation of cost clause requires the contractor to provide the contracting officer advance notice whenever the total cost incurred on the contract will exceed a specified percentage of, or will be greater or substantially less than, the estimated cost specified in the contract. The contractor must submit a revised estimate of the total cost of performing the contract as part of the notification. Limitation of cost reports should be evaluated using the following guidance:

(1) Evaluate the contractor's revised EAC using the guidance in 14-205f.

(2) Ascertain whether the limitation of cost reports in successive periods reflect significant cost underruns or overruns.

(3) Ascertain whether the contracting officer has obtained contractor explanations for overruns when continuous overruns have occurred over an extended period.

(4) When continuous underruns are projected over an extended period, and when the overall estimated contract price has not been reduced, the auditor should ask the contracting officer why.

(5) When individual contracts indicate continuous significant cost overruns or underruns, the auditor should evaluate this condition in relation to the price established at the time of award. If it is determined that consistent overruns or underruns resulted from defective initial pricing, the contracting officer should be so advised.

c. Evaluate limitation of funds reports. The limitation of funds clause requires the contractor to provide the contracting officer advance notice whenever the total cost incurred on the contract will exceed a specified percentage of the funds currently allotted or, for cost sharing contracts, this amount plus the contractor's corresponding share. This notice must include an estimate of the amount of additional funds required to continue performance for the period specified in the contract. Limitation of funds reports should be evaluated using the guidance in 11-104.4b above.

d. Evaluate limitation on payments statements. Limitation on payments (LOP) statements must be submitted quarterly, in accordance with the provisions of FAR

52.216-5, 6, 16, or 17. The primary objectives of LOP statements are to provide for recoupment of overpayments and to indicate a need for a reduction in billing prices. These conditions become apparent when the contractor is underrunning targets used to establish billing prices. Overruns are indicated when estimated final prices exceed invoice amounts. This indicates possible need for increased billing prices and/or revision of liquidation rates. The general objective is to keep billing prices in line with expected final prices during contract performance. Progress payments and LOP statements should be evaluated at the same time. Even though a request for audit may specify a particular document, auditors should try to identify both submissions with comparable cutoff dates for direct comparison and reconciliation. Evaluate LOP statements and reconcile them to progress payment requests using the following guidance:

(1) The auditor should determine that costs related to delivered items are the same as the amounts excluded from costs shown as a basis for unliquidated progress payments (Item 20a of the progress payment request).

(2) The price of items invoiced should be the same as Item 21a on the progress payment request when both submissions have the same cutoff date.

(3) The EACs used to prepare LOP statements and progress payment requests should be the same. The most current estimates should always be used. EACs should be evaluated using the guidance in CAM 14-205f.

(4) The auditor should assure the comparability of contract items used in computations required by the various subsections of the Limitation of Payments Statement. In all instances, cost data should relate to supplies and services delivered and accepted.

(5) The auditor should determine the methods used by the contractor to identify actual costs of delivered and invoiced items. Understatement of this amount usually results in an overpayment of progress payments by overstating the costs eligible for progress payments applicable to undelivered and uninvoiced items.

(6) The auditor should ascertain whether the contractor makes prompt refunds or adjustments when cost underruns are indicated in the performance of fixed-price redeterminable contracts.

11-104.5 CAS Compliance

The auditor should determine if reporting practices comply with CAS 401, "Consistency in Estimating, Accumulating, and Reporting" (See Chapter 8).

11-105 Reports

Reports will be furnished in response to specific requests for evaluations in this area. Audit reports will be prepared in accordance with 10-1200. When there is reason to recommend correction of a substantial deficiency, a special report will promptly be initiated by the auditor even if there is no request from a contracting officer. Other deficiencies may be included in periodic reports on the overall system of accounting and internal control.

11-200 Section 2 --- Audit of Contractor Compliance with Earned Value Management System (EVMS) Guidelines

11-201 Introduction

a. This section provides guidance for auditing contractor management systems on selected contracts. The mandatory guidelines that must be met by the contractor are prescribed in DoDI 5000.2.

b. In December 1996, the Under Secretary of Defense (Acquisition, Technology and Logistics) accepted Industry Guidelines for Earned Value Management (EVM) replacing the DoD Cost/Schedule Control System Criteria (C/SCSC). The industry guidelines adopted by DoD are the American National Standards Institute (ANSI)/Electronic Industries Alliance (EIA) EVMS standard (ANSI/EIA-748-1998). The implementation of EVMS guidelines for DoD contracts is contained at DFARS 234.2, 252.234-7001 and 252.234-7002. The guidelines represent the framework for an integrated management system that provides for:

(1) planning the timely performance of work,
(2) budgeting resources,
(3) accounting for costs and measuring actual performance against plans, and
(4) replanning resources needed to complete the contract when significant deviations from plans are identified.

A contractor's management system must meet 32 guidelines organized into the following five major categories: Organization; Planning, Scheduling and Budgeting; Accounting Considerations; Analysis and Management Reports; and Revisions and Data Maintenance. Detailed uniform guidance for implementing the guidelines and conducting systems audits is provided in the Earned Value Management Implementation Guide (EVMIG). The EVMIG may be accessed through the DCAA Intranet under Audit Tools, EVMS.

c. For contracts awarded prior to April 6, 2005, DoDI 5000.2 required the implementation of EVM guidelines on contracts or agreements for research, development, test and evaluation (RDT&E) with a value of $73 million or more; and procurement or operations and maintenance (O&M) contracts or agreements with a value of $315 million or more (in fiscal year 2000 constant dollars). Exceptions may be made for individual contracts. In any event, the auditor must refer to the specific terms of the contract to determine whether the contract contains reporting requirements for EVMS guidelines. Effective for contracts awarded based on solicitations or requests for proposal issued on or after April 6, 2005, EVM compliance is required on cost or incentive contracts valued at or greater than $20 million. Cost or incentive contracts valued at or greater than $50 million require compliance with the EVM guidelines and an earned value management system that has been formally validated and accepted by the cognizant contracting officer. Application of EVM on firm-fixed price contracts requires a waiver from the Milestone Decision Authority. General responsibilities of the auditor during EVMS implementation and surveillance are delineated in the Earned Value Management Implementation Guide (EVMIG), which supplements and elaborates on the provisions of DoDI 5000.2.

d. The Defense Contract Management Agency (DCMA) is the DoD Executive Agent responsible for the implementation of EVMS on DoD contracts. DoD components are required to implement earned value effectively and notify DCMA of their EVMS focal point.

e. Since DoD's C/SCSC are considered to be equivalent to EVMS guidelines, contractors' previously approved cost/schedule control systems are considered to be acceptable under the EVMS guidelines. Accordingly, contractors with acceptable cost/schedule control systems under C/SCSC are not required to demonstrate that their management systems meet the EVMS guidelines, and are not subject to the initial compliance audit procedures outlined in 11-202.2.

11-202 EVM Integrated Baseline Reviews, Initial Compliance Audits, and Post Acceptance Audits for Cause

11-202.1 Integrated Baseline Reviews

The Integrated Baseline Review (IBR) is a joint assessment conducted by the Government and the contractor following contract award to verify the technical content of the Performance Measurement Baseline (PMB) and the accuracy of the related resources (budgets) and schedules. The IBR will be conducted within six months of contract award. An IBR will also be conducted when work on a production option of a development contract begins or, at the discretion of the program manager, when a major modification to an existing contract significantly changes the existing PMB. The IBR is a streamlined approach to assessing the PMB on new contracts. The IBR is conducted under the assumption that the contractor is using an accepted EVMS internally for program management, and that there is a thorough and effective Government surveillance program ongoing at the contractor's facility. Therefore, this audit is not as comprehensive as the initial compliance and post-acceptance audits of contractors' EVMSs. Accordingly, audit assistance will not usually be requested. However, when any part of the system is not clearly understood, the assistance of the auditor may be desired. If the assistance of the auditor is needed, the program manager will notify the cognizant auditor as soon as possible. The auditor will be responsive to the program manager for evaluation of those accounting and/or financial aspects of the contractor's system.

11-202.2 Initial Compliance Audits

a. DFARS 252.234-7002, Earned Value Management System, requires the contractor to be prepared to demonstrate that its management system complies with the EVMS guidelines as required by DoDI 5000.2. Contractors whose EVMS was accepted for application to another contract of the same type (e.g., development or production) at the same facility will not be required to undergo an initial compliance audit. The initial compliance audit is conducted by a DoD team whose leader is appointed by DCMA. The team includes a DCAA auditor. Team members should be advised in advance of the estimated audit start date and furnished information about the contractor's EVMS.

b. The team will make a Progress Assistance Visit (PAV) to the contractor's facility, normally within 30 days after contract award, to conduct an initial audit of the EVMS description. The contractor will usually make presentations on the EVMS's design and operation and explain applicable reports. The team will examine selected documents and procedures proposed by the contractor, and a schedule will be developed for future visits to conduct the IBR and the initial compliance audit. Areas of noncompliance and potential problems will be identified. Recommendations for systems improvements should be forwarded to the team leader for evaluation and discussion with the contractor. The contractor will be given an opportunity to correct noted deficiencies.

c. The EVMS initial audit should begin as soon as practicable following completion of the PAV and implementation of the EVMS. The contractor will demonstrate to the team how the EVMS is structured and used in actual operation. The contractor shall provide the team with a written description of the EVMS. The review team will examine contractor records and information to ascertain compliance with the EVMS guidelines and document its findings.

d. After the demonstration review, the team will conduct the initial compliance audit using the system characteristics contained in the EVMS Evaluation Guide (Appendix B of the EVMIG). During the initial compliance audit, the contractor will provide an overview briefing to familiarize the team with the proposed EVMS and identify any changes to the EVMS since the most recent PAV. If necessary, the team will evaluate any changes to the

PMB since the most recent IBR. The team will evaluate, on a sampling basis, the reporting of cost and schedule performance against the baseline plan to verify the adequacy of contractor controls and accuracy of management reporting information. The team may conduct interviews of selected contractor personnel to verify that the EVMS is fully implemented and being used in the management of the contract. A report will be issued 30 days after completion of the audit and approval of all significant contractor corrective actions, if necessary.

e. A system for controlling development effort is generally different from a system for controlling production work; accordingly, separate initial compliance audits may be required for each, although only one program may be involved. Simultaneous audits of the EVMS used for development and production may be performed. This eliminates the necessity for multiple audits. In addition, the contractor may implement one system for both types (development and production) of contracts. When the contractor implements one system for both types of contracts, the system to gain acceptance must clearly demonstrate that it meets the guidelines applicable to production type contracts in the way work is planned and controlled and the way costs are collected and analyzed. The focus of the compliance audit will be determined by the extent and nature of the production effort in the contract.

f. After the successful completion of an initial compliance audit, an advance agreement between the Government and the contractor is executed, which specifies that the contractor will maintain and use the accepted EVMS as an integral management process on the current, as well as future, contracts. The agreement should be incorporated into each contract requiring the application of the EVMS guidelines. The agreement is signed by the ACO and a contractor representative at the commensurate level, e.g., the division manager may sign the agreement when the EVMS is used throughout the corporation's division. In addition, a Memorandum of Agreement (MOA) may be executed between the Program Management Office (PMO) and the Contract Management Office (CMO). The MOA identifies key Government EVMS individuals and establishes the working relationships between the PMO and CMO. Auditors normally should not be requested to sign advance agreements or MOAs. The auditing standard of independence precludes DCAA from entering into most agreements. Auditors may communicate in writing by a memorandum to the CMO the auditor's expected role in the EVMS surveillance process. If the CMO insists on the FAO entering into an advance agreement or MOA, the FAO should send the proposed agreement or MOA and background material through the regional office to Headquarters, ATTN: P, for coordination before executing the agreement or MOA.

11-202.3 Post Acceptance Audits for Cause

After the initial acceptance of a contractor's EVMS, no further audits for system acceptance will be conducted unless there is a specific need determined by the Government. A post acceptance audit may occur when conditions warrant, e.g., solving a major system application problem identified by the program manager or a surveillance monitor. The scope and conduct of the audit will focus on the system processes affected by the problem. The audit will be scheduled based on written Government notification to the contractor. The review team director will be selected by the CMO EVMS monitor and the review team will be composed of the appropriate EVMS Government surveillance personnel needed to address the identified problem. The review is similar to an initial compliance audit, and the EVMS Evaluation Guide should be used when compliance with specific guidelines is required. The review director will issue a report within 30 days after completion and approval of all significant contractor corrective actions.

11-202.4 Auditor Participation in Integrated Baseline Reviews, Initial Compliance Audits, and Post Acceptance Audits for Cause

Upon receipt of a specific request, the FAO will assign an auditor to be a member of the IBR, initial compliance audit, or post acceptance audit for cause team. Auditors assigned to these teams should be familiar with the EVMIG and have some training in EVMS guidelines. Prior to the audit, auditors should become thoroughly familiar with the contractor's EVMS by reviewing the contractor's system description and analyzing cost management reports for the contract under audit, if applicable.

11-202.5 Audit Objectives

The auditor's primary objective is to audit the accounting system and related financial areas to determine whether the management control system complies with the EVMS guidelines on areas assigned and is being implemented on the contract under audit. The auditor is responsible for advising the team chief, on the areas audited, of the conclusions and will be responsible to the team chief for the timely completion of the effort specifically assigned. As members of an EVMS guidelines review team, auditors may be involved in cost account/functional manager interviews, questionnaire completion, discrepancy report preparation, documentation audits, and audit report preparation. Auditors should perform as much preliminary work as possible in advance of the team visit in order to provide conclusions on any EVMS deficiencies to the team chief by the end of the EVMS guidelines audit.

11-202.6 Scope of Audit

a. The DCAA team member is responsible for the preparation and execution of a detailed audit program for all areas assigned by the team chief. Technical direction will be provided by an audit supervisor. Auditors should also assess whether deficiencies disclosed in reports on MMAS, labor, other accounting systems, forward pricing rates, budgets, and billing systems are likely to affect the contractor's EVMS. If the contractor has other contracts requiring an approved EVMS, the auditor should also determine if deficiencies being reported in EVMS surveillance reports (11-203) have an impact on the contract under audit.

b. The auditor is responsible for advising the team chief, on the areas audited, whether the management system meets the requirements of the EVMS guidelines. Unresolved disagreements between the auditor and review team chief should be referred to the regional office and, when necessary, to DCAA Headquarters, ATTN: P.

c. If the auditor becomes aware of significant accounting or financial aspects of the contractor's EVMS that have been omitted from the IBR, initial compliance audit, or post acceptance audit for cause, thereby resulting in an inadequate review of the system, the circumstances should be immediately brought to the attention of the team chief and documented in the DCAA files. Comments on these matters should also be included in the audit report together with statements regarding their expected impact on the system and related reporting of contract performance.

d. An EVMS is intended for contractor use in managing contracts and for Government use in monitoring contract performance. Application of the provisions of DoDI 5000.2 should not result in the development or use of two systems, one for the contractor's internal use and the second merely to satisfy the intent of the guidelines. Evidence of intended or actual parallel operation should be fully evaluated and the results discussed with other members of the EVMS guidelines review team. A determination that only one system will be used is necessary prior to acceptance of the proposed EVMS.

e. Unrestricted access to all data affecting contract costs, both direct and indirect, including budgets and operating forecasts, is necessary to properly audit an EVMS. If the contractor refuses access to required data, the auditor will advise the team chief and the

CMO EVMS monitor and enlist their aid in obtaining the information. If the contractor continues to deny access, the auditor will recommend, in writing, that the system not be accepted. In the event that access to required data is made available during the audit, but the auditor has been formally advised by an authorized representative of the contractor that the data will be withheld during the surveillance process, a comment to that effect will be included in the audit report, together with a statement that lack of access to data may result in qualification of system surveillance audit reports.

f. In addition to serving as EVMS guidelines review team members, auditors are responsible for monitoring contractor corrective action in assigned areas. If the contractor fails to take effective corrective action or fails to make acceptable progress in resolving deficiencies, contractual remedies should be recommended (e.g., withhold progress payments, disallow costs).

g. In those cases when management control acceptance is delayed for an extended period of time after contract award because the system has not been fully accepted or has been found to be unacceptable, DCAA surveillance activities should concentrate on verification of reported data and consistency between cost and schedule information and information from other contractor systems.

11-202.7 Audit Procedures

a. Select those tests and other auditing procedures that are necessary to adequately complete the work assigned. These procedures will include tests to verify that the management control system meets the guidelines for the areas assigned. Make maximum use of prior audits and knowledge accumulated by prior audit staff so as to avoid duplication of effort. However, auditors should conduct sufficient tests of the assigned guidelines during each EVMS guidelines review to confirm that the management control system has in fact been implemented on the contract being audited.

b. In evaluating whether a contractor's management control system complies with the guidelines, the auditor should conduct audit procedures similar to those performed during surveillance of the EVMS guidelines (11-203.3). Guidelines which DCAA is commonly asked to evaluate include: Organization Guideline 4; Planning, Scheduling and Budgeting Guidelines 8, 9, and 13; all of the Accounting Considerations Guidelines; Analysis and Management Reports Guidelines 22, 24 and 27; and Revisions and Data Maintenance Guideline 30. See Part I, Section 3 of the EVMIG for a narrative description of each EVMS guideline. The team members should use the EVMIG, as necessary in the examination of contractor management control systems to ensure compliance with the guidelines. The EVMS Evaluation Guide includes a restatement of guidelines, followed by the related system characteristics expected to be part of an acceptable EVMS. Auditors will need to perform specific audit steps to verify that the expected system characteristics are present in the contractor’s EVMS.

c. The auditor's supervisor will provide technical direction to assure the proficiency of the work performed. All work will be reviewed by the supervisor prior to forwarding reports or conclusions to the team chief.

11-202.8 Reporting Results of Audit

a. When the audit work related to an IBR, initial compliance audit, or a post acceptance audit for cause is finished, the auditor will discuss the findings and recommendations with the audit supervisor and furnish them to the team chief in such form and detail as required for the EVMS guidelines review team report, using the general guidelines provided in 10-1200. Any findings and recommendations will be provided to the team chief prior to completion of the in-plant effort of the EVMS guidelines review team to enable the team chief to conduct the exit conference with the contractor. The FAO will retain the detailed working papers covering DCAA's part of the audit. Working papers supporting the auditor's conclusions regarding compliance or noncompliance with specific guidelines will be

documented in all instances and will include a record of the conclusions which have been furnished to the team chief. Reported deficiencies should be identified to specific guidelines or the contractor's system description whenever possible. The auditor's report will be formally issued as soon as possible after the EVMS guidelines review team exit conference with the contractor. The team chief will also be provided with any summary schedules and/or copies of working papers required for consolidation of statistical data or as additional supporting documentation for the EVMS guidelines audit file.

b. Provide Headquarters, ATTN: P, with a copy of each report which meets any of the following criteria:

(1) Recommends the disapproval of a previously accepted EVMS.

(2) Discloses significant discrepancies in a contractor's EVMS.

(3) Discloses significant restrictions on the audit caused by a denial of access to records.

11-203 EVM Surveillance Audits

a. Immediately following demonstration and acceptance of the contractor's management control system, surveillance by DCAA and the Contract Management Office (CMO) is performed to ensure that the contractor's system continues to comply with the EVMS guidelines and produces valid and timely data. Surveillance is also performed to ensure that any proposed or actual changes to the EVMS comply with the guidelines and are reflected in the contractor's system description. Surveillance includes verifying, tracing, and evaluating the information contained in the reports submitted to DoD procuring components. In the event deficiencies are disclosed, or if there is an indication of an adverse effect on contract performance because of such deficiencies, discuss the deficiencies with the contractor and notify the CMO EVMS monitor.

b. Basic auditor responsibilities during surveillance audits are summarized in Part II, Section 3-2a(3) of the EVMIG; more specific audit guidance is provided in the following paragraphs. The auditor’s surveillance responsibilities, as identified in the EVMIG, include:

(1) reviewing the contractor’s accounting system policies and procedures for compliance with EVMS guidelines and contract provisions (system surveillance) and

(2) performing periodic reviews of selective financial data contained in various reports submitted by the contractor to determine whether they accurately reflect the contractor’s books and records (report surveillance).

c. A written description of the acceptable EVMS should be furnished to the auditor by the CMO EVMS monitor. The EVMS description should be included in the permanent files and used for planning the surveillance audit program.

d. To ensure adequate evaluation of the system and related output, and to preclude any duplication of effort, the FAO’s programmed surveillance audits should be coordinated with the CMO EVMS monitor. This coordination should include a discussion of those aspects of the system scheduled for audit, as contained in the FAO's annual plan. The program monitor should also be advised of other evaluations scheduled that may relate directly or indirectly to the EVMS. Formal agreement for surveillance activity should not be undertaken since the degree of surveillance required may vary considerably between contracts and from one period of contract performance to another.

e. As a minimum, the procedures contained herein will be considered in developing an audit plan for an EVM surveillance audit. The audit should include the procedures necessary to address any additional areas requested by the ACO or CMO EVMS monitor.

f. It is the prime contractor's responsibility to accept and maintain surveillance of subcontractor EVMSs. However, there are unique situations when a subcontractor EVMS will be accepted and/or surveillance will be performed by a DoD component rather than a prime contractor. This may occur when:

(1) the subcontractor, for competitive reasons, refuses access to records to a prime contractor;

(2) the subcontractor is performing multiple contracts containing EVMS reporting requirements under more than one prime contractor; or

(3) the subcontractor may be functioning as a prime contractor on an accepted EVMS.

g. In the instances described in f. above, the cognizant auditor at the subcontractor location will perform the necessary system surveillance by following the procedures described herein. When the prime contractor has retained surveillance responsibility, the audit plan at the prime contractor location should include the following steps:

(1) The prime contractor's program for surveillance of the subcontractor's EVM system should be evaluated to determine depth, scope, and overall adequacy.

(2) The results of the prime contractor's surveillance efforts, including follow up, should be evaluated to ensure that deficiencies are subsequently corrected.

(3) The results of the prime contractor's evaluation of subcontractor-reported data, including action taken by the prime on significant variances reported by the subcontractor, should be evaluated. The auditor should verify that estimates to complete the subcontract are revised to reflect the impact of significant variances.

(4) The timeliness of subcontract reporting and subsequent incorporation of related data in the prime contractor's monthly report should be evaluated.

(5) The auditor should report the need for necessary assist audits on areas not adequately evaluated by the prime contractor and on deficiencies disclosed by the prime contractor's surveillance activities that have gone uncorrected over an extended period of time. In this connection, auditors at subcontractor locations should advise auditors at prime contractor locations of any deficiencies noted during the system audit that may have an impact on the continued acceptability and validity of the subcontractor's system and related output. Routing of requests for assist audits and submission of audit reports will be accomplished through ACO channels.

11-203.1 Audit Objectives

a. System Surveillance. The objectives of the system surveillance portion of the audit are to ensure that the contractor's management control system continues to:

(1) provide valid and timely management information;

(2) comply with the DoD EVMS guidelines;

(3) provide timely indications of actual or potential problems; and

(4) provide baseline integrity.

b. Report Surveillance.

(1) The objectives of the report surveillance portion of the audit are to ensure that the contractor's required external cost management reports (CPR, C/SSR and CFSR) contain:

(a) information that is derived from the same data base as that used by contractor management;

(b) explicit and comprehensive variance analysis, including proposed corrective action in regard to cost, schedule, technical, and other problem areas; and

(c) information that depicts actual conditions.

(2) The cost management reports typically generated by a contractor’s EVMS include:

(a) Cost Performance Report (CPR)

The objective of the CPR (DD Form 2734) is to provide data to Government system managers that may be used by them to:

(i) evaluate contract performance,

(ii) identify actual and potential problem areas having significant cost impact, and

(iii) respond to requests for program status information on major weapon/support system acquisitions.

To permit this type of management control, the CPR requires, among other things,

- information on cost and schedule performance by work breakdown structure and functional cost categories,
- actual manpower utilization versus the budgeted plan, and

- narrative comments explaining major cost and schedule variances, as well as an identification of significant problems and action contemplated for their resolution.

The CPR is submitted monthly unless otherwise provided for in the contract.

(b) Cost/Schedule Status Report (C/SSR)

The objective of the C/SSR (DD Form 2735) is to provide summarized cost and schedule performance status information on contracts over 12 months in duration when application of the Cost Performance Report (CPR) is not appropriate. The C/SSR requires:

(i) information on cost schedule performance by work breakdown structure and

(ii) narrative comments explaining major cost and schedule variances, as well as an identification of significant problems and action contemplated for their resolution.

The C/SSR is submitted in accordance with the terms specified in the contract, but is not required more frequently than monthly.

(c) Contract Funds Status Report (CFSR)

The objective of the CFSR (DD Form 1586) is to provide information about contract funding requirements for specifically designated programs to assist the system manager in:

(i) updating and forecasting contract fund requirements,

(ii) planning and decision making on changes in the fund requirements,

(iii) developing fund requirements and budget estimates in support of approved programs, and

(iv) determining funds in excess of contract needs and available for deobligation.

The CFSR is normally prepared quarterly and submitted within 25 calendar days after the cut-off date or the number of days specified in the contract. Under unusual circumstances monthly reporting may be required.

11-203.2 Scope of Audit - General

a. EVM surveillance audits should be performed at least once a year, but should be performed as frequently as necessary to ensure continued reliance on the system and related output. Based on a risk assessment, the scope of the surveillance audit may:

(1) include system and report surveillance or

(2) be limited to report surveillance.

b. An initial determination of the overall scope of the surveillance audit (i.e., system and report surveillance or report surveillance only) will be made based on a risk assessment performed as part of the annual program planning process. Report surveillance will be performed on at least an annual basis. The need for system surveillance will be based on the following criteria:

(1) A detailed evaluation of the EVM system's continuing adequacy and compliance with EVMS guidelines should be performed every two to four years.

(2) If a detailed evaluation of the EVM system's continuing adequacy and compliance with EVMS guidelines has been performed within the last two to four years, a limited system evaluation should be planned to cover the portions of the system affected by the following specific risk factors, to the extent that they exist:

(a) changes in the system since the last detailed evaluation was performed,

(b) related internal control deficiencies, and

(c) any specific ACO concerns.

(3) If a detailed evaluation of the EVM system's continuing adequacy and compliance with EVMS guidelines has been performed within the last two to four years, and none of the risk factors identified above exist, no system surveillance is required for the current FY. Only report surveillance would be required.

11-203.3 Scope of Audit – System Surveillance

a. System surveillance may consist of either a detailed evaluation, encompassing all of the EVM guidelines assigned to DCAA, or may be limited to the guidelines related to the specific risk factor identified.

b. In evaluating the compliance with the EVM guidelines, the auditor should consider the system characteristics related to the guidelines, as contained in the EVMS Evaluation Guide.

c. The auditor should consider the testing performed in related internal control audits (e.g., planning and budgeting, MMAS) when determining the testing required in the system surveillance audit. The testing performed in the related internal control audits should be used, to the extent possible, in determining the contractor's continued compliance with the EVM guidelines under review.

d. If the contractor's system has changed since the last surveillance audit, the auditor should evaluate the changed policies and procedures for continued compliance with the EVM guidelines under review.

e. For all system surveillance audits, the auditor should select a sample of contracts to test to ensure the contractor has followed through with the implementation of the guidelines on contracts.

11-203.4 Scope of Audit – Report Surveillance

a. A universe of contracts with cost management reporting requirements (e.g., CPR, C/SSR, or CFSR) should be developed during the annual program planning process. Auditors may develop the universe of contracts based on:

(1) data obtained from the contractor,

(2) data obtained from the ACO,

(3) briefing contract provisions, specifically the Contract Data Requirements List (CDRL), DD Form 1423, or

(4) a combination of the data sources.

The universe of contracts should include contracts containing EVM requirements (DFARS 252.234-7002) as well as contracts which, while they do not contain the EVM requirement, include requirements for submission of the CPR, C/SSR, or CFSR.

b. The auditor should coordinate with the ACO to identify any sensitive, high risk, or high visibility contracts.

c. The auditor should select a sample of contracts to be tested as part of the annual EVM report surveillance. The sample of contracts should reflect:

(1) high-risk or sensitive contracts, including contracts where problems were identified in prior year testing, plus

(2) a three-year cycling of all other contracts containing reporting requirements, with at least one contract tested per year. The auditor should determine the extent of testing of report data and select the specific reports to be tested under the selected contracts based on the results of the audit risk assessment.

d. The auditor should audit the selected reports using the procedures below.

(1) Evaluation of Cost Management Reports (CPR, C/SSR, CFSR)

The purpose of evaluating the selected cost management reports is to ensure that the reports:

(a) are mathematically accurate;

(b) comply with contractual requirements, such as reporting due dates, format; and content; and

(c) are supported by the contractor's books and records.

The Performance Measurement Baseline is the time-phased budget plan against which contract performance is measured. It is formed by the budgets assigned to scheduled cost accounts and the applicable indirect budgets, which may also be known as the scheduled direct costs and applicable expense rates, and is sufficiently detailed to the work package level to ensure adequate performance measurement. The Budgeted Cost for Work Scheduled (BCWS) is the sum of budgets for all work packages scheduled to be accomplished and is the measurement of work scheduled to be accomplished within a given time period. The Budgeted Cost for Work Performed (BCWP) is the sum of budgets for completed work accomplished. The Actual Cost of Work Performed (ACWP) is the cost incurred and

recorded in accomplishing the work performed within a given time period. Each of these terms is precisely defined in Appendix H of the EVMIG. The auditor should consider the following procedures in evaluating the selected reports:

(i) From the lowest levels, work packages, or cost accounts, the auditor should summarize the budgeted and actual costs (accrued expenditures for the CFSR) through the Work Breakdown Structure (WBS) to the contract level and the CPR, C/SSR, or CFSR. This should be done for both the current month and cumulative to date amounts.

(ii) The auditor should verify that the BCWS and the BCWP on the CPR or C/SSR were computed in accordance with the Performance Measurement Baseline for the contract.

(iii) Amounts should be summations from the lowest points of accumulation without intermediate allocations.

(iv) Indirect cost and labor rates applied should be the originally planned rates for work scheduled (BCWS) and work accomplished (BCWP). Also, verify that acceptable rates are used for actual costs (e.g., the rates are calculated and applied in accordance with the contractor's usual/disclosed cost accounting practices).

(v) The auditor should obtain and review the contractor's reconciliation of the selected reports to its job cost ledgers. Selectively trace the reported actual cost data to the contractor's job cost ledgers.

(vi) Deficiencies disclosed or errors noted should be discussed with contractor personnel for subsequent correction. Schedule subsequent surveillance audits to verify that required follow-up actions have been completed.

(2) Reconciliations of Cost Management Reports (CPR, C/SSR, CFSR)

The purpose of reconciling external cost management reports, such as the CPR, C/SSR, and CFSR with each other and with contractor internal reports and other external reports, such as the Contractor Cost Data Report (CCDR), Quarterly Limitation on Payments (QLOP), progress payment requests, and public vouchers, is to ensure that the information being reported is accurate and differences in data from one report or level to another are logical, consistent, and explainable. The contractor should make the necessary reconciliations. The auditor should perform the following validation steps:

(a) The auditor should verify reconciliations between the CPR or C/SSR and the CFSR for contract target, actual cost, and estimated final cost.

(b) When applicable, the auditor should verify reconciliations of internally-reported and CPR or C/SSR-reported data with CCDR-reported data or other external data for actual costs to date and estimated final cost.

(c) In those instances when the reports do not reconcile or the reasons for variances do not appear valid, the auditor should coordinate with the ACO and the CMO EVMS program monitor in recommending necessary changes to ensure that subsequent valid reconciliations can be made.

(3) Evaluation of Estimate at Completion Reported on Cost Management Reports (CPR, C/SSR, and CFSR)

(a) The frequency of evaluations of the latest revised estimates at completion (EAC) for a contract will depend upon the adequacy of the contractor's procedures, including internal audit procedures and the extent of contract changes which may, to some extent, give rise to revisions to the anticipated cost at completion. Because of the importance of estimated costs at completion, to both the contractor and the Government, the auditor should perform a critical evaluation of the contractor's proposed amount. Coordination with technical personnel is necessary to properly evaluate the estimate at completion and preclude duplication of effort.

(b) Contractors sometime report EACs to the Government for billing and EVMS guidelines purposes that are different than those used for financial reporting purposes because of different risk assumptions and profit expectations. This is not a problem if the contractor can reconcile the differences. While it is necessary for auditors to compare EACs used by contractors for financial reporting purposes with those reported to the Government, the provisions of DoDI 5000.2 and the EVMS guidelines do not require a contractor to make

such reconciliations, and should not be used to gain access to financial statements. However, auditors should evaluate multiple EACs disclosed during EVMS guidelines audits. The contractor's inability to provide reconciliations may indicate performance to date and estimates of future conditions are not being accurately reflected in the contractor's EAC process, which could be an EVMS deficiency. Auditors should typically pursue access to EACs used for financial reporting purposes in these instances under billing system/progress payment audits.

(4) Variance Analyses (CPR, C/SSR)

(a) The CPR and C/SSR provide for monthly disclosure of schedule and cost variances and contractor comments on significant problem areas, reasons for variances, their impact on the program, and corrective action taken or to be taken. The purpose of the variance analysis is to assess variances in terms of their contribution to cost growth and schedule slippage. The auditor's responsibilities with respect to evaluating variances are to ensure that timely and responsible actions are taken by the contractor to:

(i) identify their causes and

(ii) minimize the impact of the variances on contract performance.

(b) Since schedule slippage and problems in technical performance contribute to variances, the evaluation of variances and the contractor's proposed actions with respect thereto should be coordinated with the Government program monitor and/or technical personnel. The following steps should be followed in evaluating variances:

(i) On a sampling basis, the auditor should select areas of significant cost variances, including those caused by indirect rate variances, as identified in the CPR or C/SSR, and trace to the required action level. The CPR or C/SSR generally provides for reporting of indirect expenses as a line item. The contractor will analyze significant variances between the planned and actual rates and, when unfavorable variances exist, the contractor should indicate the cause and corrective action to minimize the effect on cost performance. The auditor should be aware of rates used to establish the performance measurement baseline as related to the rates being reported, and also of any anticipated changes expected to occur that affect the value of planned effort, such as volume fluctuation, terminations, and revisions to the rate structure. Surveillance reports should indicate the actions taken by the contractor with respect to unfavorable variances and also data on expected changes that may create significant variances in subsequent periods.

(ii) The auditor should determine if the narrative descriptions of the variances are valid and adequate.

(iii) Causes and proposed remedies of the variances should be discussed with the contractor to determine if proposed actions will be responsive to the nature of the problem.

(iv) The auditor should evaluate estimated cost at contract completion to determine if the impact of any existing variances are reflected in the estimate to complete the contract.

(v) As necessary, the auditor should follow-up to ensure the contractor has effectively implemented its proposed corrective action(s) on the significant variances.

11-203.5 Reporting Results of Audit

a. As discussed in 11-203.2a, the scope of the EVM surveillance audits may include system and report surveillance or be limited to report surveillance.

The surveillance audit report should be prepared in accordance with 10-1200 and provide clear statements of the scope of the audit (i.e., system and report surveillance or report surveillance only) and any deficiencies noted, together with recommendations for their correction. Comments should also be provided regarding the results of discussions with the contractor's representative on deficiencies disclosed. To ensure that all pertinent data have been considered, the audit findings and recommendations will be discussed with the CMO EVMS monitor prior to issuance of the report. Systemic EVMS deficiencies should be highlighted in the report. Whenever possible, the auditor should relate any deficiencies to specific EVMS guidelines. The report should be issued in a timely manner to ensure report recommendations may be acted on appropriately. The report should be addressed to

the principal cognizant ACO. A copy of the report will be provided directly to the CMO EVMS monitor, the affected program office(s), and the FLA(s) where applicable. A copy of each report meeting any of the criteria stated in 11-202.8.b above will also be provided Headquarters, ATTN: P.

b. When applicable, surveillance reports should include a reference to reports issued on the results of system audits (see 10-408.2f) that had an impact on or were affected by the EVMS.

c. Deficiencies being reported in surveillance reports should also be reported in audit reports in an appendix on Other Matters on proposals expected to result in contracts covered by DFARS clause 252.234-7002, Earned Value Management Systems.

d. When deficiencies are disclosed while performing audits of material management and accounting systems (MMAS), labor, other accounting systems, forward pricing rates, budgets, and billing systems, the auditor will assess whether the deficiencies are likely to have a material effect on the reliability of the contractor's EVMS and provide comments in the related report on the system or forward pricing rates. The auditor should immediately evaluate the impact of these deficiencies on the contractor's EVMS data for specific contracts and, where material, provide the details in a flash EVMS surveillance report (10-1200). When a flash report is issued, periodic EVMS surveillance audits are still required.

e. When an audit of a CFSR submission discloses that a loss is anticipated for a fixed-price contract, the auditor will ascertain whether the contractor is entitled to progress payments. If so, the auditor should make sure that the indicated rate of loss disclosed in the CFSR audit is appropriately applied by the contractor for purposes of computing its progress payment request.

f. Continued availability of information supporting earned values, incurred costs, and estimates to complete is necessary to perform proper surveillance of EVMS. In the event access to required contractor data is withheld or unduly restricted, follow the procedures in 1-500. When denial is continued, each surveillance report should include appropriate modification of the scope and opinion statements, with identification of the data being denied and its relationship to system surveillance requirements. If internal management budgets and forecast data are not made available during the surveillance audit, the auditor should qualify the audit report and recommend that the system validation be withdrawn. When applicable, the CAC should establish uniformity in necessary report qualifications to ensure consistency within corporate structures when more than one corporate segment is subject to EVMS requirements.

11-204 Requested Audits of Individual CPR, C/SSR, and CFSR Reports

Periodically, contracting officers may request audits of individual cost reports submitted by EVM-covered contractors. Auditors should use the procedures set forth in 11-203.4d, modified as appropriate, to evaluate the individual report submissions. Reports on individual CPR, C/SSR, or CFSR submissions should be prepared in accordance with 11-203.5.

11-300 Section 3 --- Audit of Selected Cost Management Reports Submitted by Contractors Without Earned Value Management (EVM) Reporting Requirements

11-301 Introduction

This section provides audit procedures and guidance for auditing contractor management control systems, and the related cost reports (Contract Performance Reports (CPRs), (previously Cost Performance Reports), Cost/Schedule Status Reports (C/SSRs), and Contract Fund Status Reports (CFSRs)) at contractors who do not have contracts containing earned value management (EVM) reporting requirements. Audit guidance for contractors with EVM reporting requirements is contained in 11-200.

11-302 Background

a. Over many years, the Office of the Secretary of Defense and the military departments have developed a variety of management systems for use in the acquisition process. These systems provide the Government with the ability to obtain timely and valid cost, funding, schedule, and related management information for use in contract performance analysis and program control. In March 1996, DoD Directive 5000.1, and DoD 5000.2-R, “Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs,” respectively, were issued replacing all previous DoD acquisition management policies and procedures. DoD contract cost management reporting requirements such as the CPRs, C/SSRs, and CFSRs were contained in DoD 5000.2-R, Subpart 7.15.7, "Contract Management Reports" until October 30, 2002. On October 30, 2002, DoD Directive 5000.1 and DoDI 5000.2 were canceled and replaced with interim guidance. DoD 5000.2-R was converted from regulation to non-mandatory guidance and is now referred to as the Defense Acquisition Guidebook. In May 2003, DoD Directive 5000.1 and DoDI 5000.2 were reissued. Under the reissued DoD Directive 5000.1 and DoDI 5000.2, cost management reporting using the CPR, C/SSR, and CFSR is no longer mandatory, but rather at the discretion of the contracting officials. DCAA audit effort related to the CPR, C/SSR, and CFSR at contractors who do not have contracts containing EVM reporting requirements primarily involves the evaluation of contractor financial records to validate the accuracy and propriety of reported data.

b. The audit of a contract and the briefing of its provisions (see 3-200) will disclose whether the contract incorporates CPR, C/SSR, or CFSR reporting requirements.

(1) Contract Performance Report (CPR) (previously Cost Performance Report).
The objective of the CPR (DD Form 2734) is discussed in 11-203.1b(2)(a).

(2) Cost/Schedule Status Report (C/SSR).
The objective of the C/SSR (DD Form 2735) is discussed in 11-203.1b(2)(b).

(3) Contract Funds Status Report (CFSR).
The objective of the CFSR (DD Form 1586) is discussed in 11-203.1b(2)(c).

11-303 Audit Requirements

a. An annual risk assessment will be performed during the annual program planning process for each contractor without EVM-covered contracts, but with contracts containing CPR, CSSR, and/or CFSR reporting requirements. The risk assessment considers:

(1) the number of contracts containing CPR, C/SSR, or CFSR reporting requirements,

(2) sensitive or high risk contracts or conditions identified by the ACO, and

(3) the expected volume of covered contract reports where an audit will be requested.

The risk assessment is used to determine whether to perform a self-initiated audit of the contractor’s policies and procedures for accumulation of data and preparation of CPRs, CSSRs, and/or CFSRs, as well as selectively testing financial data contained in them.

b. Audits of individual CPR, C/SSR, or CFSR reports may be requested by the contracting officer. The contracting officer may also request an audit prior to the award of a

contract under which CPR, C/SSR, or CFSR requirements are contemplated to determine if the contractor's management system and procedures are adequate and reliable for CPR, C/SSR, or CFSR purposes, and will also consider the contractor's procedures for accumulating and reporting actual costs (cumulative expenditures for CFSR) and for estimating contract completion costs.

11-304 Audit Objectives and Procedures

a. Where an audit of the contractor's management system and procedures relative to CPRs, C/SSRs, and CFSRs is required, either based on a specific request from the contracting officer or based on the risk assessment described in 11-303a, evaluate the contractor's policies and procedures for developing and reporting actual and projected costs in the CPRs, C/SSRs, and CFSRs to ensure the system will produce accurate data that complies with contractual reporting requirements.

b. Use the procedures at 11-203.4d to perform audits of individual CPR, C/SSR, or CFSR reports requested by the contracting officer. Also use the procedures at 11-203.4d to selectively test financial data contained in the CPRs, CSSRs, and/or CFSRs submitted by the contractor, based on the risk assessment described in 11-303a.

11-305 Reporting Results of Audit

a. An audit report will be prepared:

(1) on each audit of contractor management system and procedures requested by the contracting officer,

(2) in response to the request of the contracting officer for audits of individual CPRs, C/SSRs, or CFSRs, and

(3) on each self-initiated audit of the contractor's policies and procedures for accumulation of data and preparation of CPRs, C/SSRs, and/or CFSRs.

b. Audit reports will be prepared in accordance with 10-1200 and provide clear statements of the scope of the audit and any deficiencies noted, together with recommendations for their correction. To ensure that all pertinent data have been considered, the audit findings and recommendations will be discussed with the ACO prior to issuance of the report.

c. Audit reports will be addressed to the activity requesting the audit with a copy to the ACO. Reports resulting from audits initiated by the auditor will be addressed to the ACO. A copy of the report will be provided to the affected program office(s), and the FLA(s), where applicable.

d. When an audit of a CFSR submission discloses that a loss is anticipated for a fixed-price contract, the auditor will ascertain whether the contractor is entitled to progress payments. If so, the auditor should make sure that the indicated rate of loss disclosed in the CFSR audit is appropriately applied by the contractor for purposes of computing its progress payment request.

11-400 Section 4 --- Audits of Contractor Cost Data Reports (CCDRs)

11-401 Introduction

The purpose of the CCDR system is to serve as the primary cost database for most DoD cost estimating efforts. DoD Components use the data collected in the CCDR system to:

(1) prepare program cost estimates for major system acquisition programs reviewed by the Defense Acquisition Board (DAB) and the Component Acquisition Executive (CAE);

(2) develop independent Government cost estimates in support of cost and price analyses and to estimate future contract costs; and

(3) develop estimates to support Analysis of Alternatives (AoAs), Cost as an Independent Variable (CAIV), and long-range planning efforts.

Detailed guidance related to CCDRs is contained in DoD 5000.4-M-1, the Contractor Cost Data Reporting (CCDR) Manual.

11-402 Acquisition Program Categories

DoDI 5000.2 specifies CCDR requirements based on a contract's designated acquisition program category. Category I applies to:

(1) all major defense acquisition programs that are estimated by the Under Secretary of Defense (Acquisition, Technology, and Logistics) to require an eventual total research, development, test, and evaluation (RDT&E) expenditure of more than $365 million, or an eventual total procurement expenditure of more than $2.190 billion in constant fiscal year 2000 dollars and

(2) other programs designated as Category I due to special interest.

Category IA applies to:

(a) all major automated information systems that are estimated by the DoD Component Head to require program costs (all appropriations) in any single year in excess of $32 million, total program costs in excess of $126 million, or total life-cycle costs in excess of $378 million in constant fiscal year 2000 dollars, and

(b) other programs designated as Category IA due to special interest. Category II applies to (1) all major systems not meeting the criteria for Category I, but estimated by the DoD Component Head to require an eventual total expenditure for RDT&E of more than $140 million, or an eventual total procurement expenditure of more than $660 million in constant fiscal year 2000 dollars, and (2) other programs designated as Category II due to special interest. Category III applies to programs not meeting the criteria for Category I, IA, or II.

11-403 Category I/IA Reporting Requirements

Unless waived by the Chair, OSD Cost Analysis Improvement Group (CAIG), for Category I acquisition programs, CCDRs are required for all major contracts and subcontracts valued at more than $50 million in constant fiscal year 2002 dollars, regardless of contract type. CCDR reporting is not required for contracts priced below $20 million in constant fiscal year 2002 dollars. The CCDR requirement on high-risk or high-technical-interest contracts priced between $20 and $50 million in constant fiscal year 2002 dollars is left to the discretion of the Cost Working Integrated Product Team (IPT). CCDR reporting does not apply to Category IA acquisition programs.

11-404 Category II and III Reporting Requirements

Contracts under Categories II and III acquisition programs, meeting the Category I contract dollar thresholds for CCDR reporting, also require CCDR reporting. However, specific program reporting requirements are left to the discretion of the military services.

The level of detail and frequency of reporting for Category II and III programs is normally less stringent than the level of detail and frequency required for Category I programs.

11-405 CCDR Implementing Procedures

To implement CCDR, the procuring activity must prepare a program Cost and Software Data Reporting (CSDR) Plan (previously referred to as a CCDR plan) showing the proposed collection of cost data by work breakdown structure for each program being reported, the required CCDR form, and the frequency with which reports are required. This plan must be approved by the CAIG Chair. The approved CCDR requirements are included in the Request for Proposal (RFP). In response to the RFP, the contractors submit a draft contract CSDR plan for negotiation with the DoD program office. The agreed-to-plan is submitted to the Defense Cost and Resource Center (DCARC) for coordination of the approval by the CAIG Chair prior to contract award. The approved CSDR plan is included in the contract and the required CCDR forms are incorporated in the contract by inclusion in the Contract Data Requirements List (CDRL).

11-406 CCDR Forms

a. CCDR forms from the 1921 series are the basis for the contractor's response to the RFP. Contractors will submit the information in the format required in the solicitation (for example, FAR 15.408, Table 15-2), supported by the CCDR forms when required by the procuring activity.

b. There are two DD forms for CCDR. A third form, the Plant-Wide Data Report (DD 1921-3) was deleted as a CCDR requirement as of December 31, 1999. The DD 1921-3 was replaced with forward pricing rate data now submitted to the DCARC by DCMA.

(1) The Cost Data Summary Report (DD Form 1921) summarizes all contract activities and reports total costs against each of the work breakdown structure reporting elements specified in the contract. The contractor submits this report as a program estimate in response to the RFP at the time of contract award, and as the contract specifies. It provides summary level cost data, cumulative to date and estimated at completion, with a breakout of recurring and nonrecurring costs.

(2) The Functional Cost Hour and Progress Curve Report (DD Form 1921-1)

(a) Part I, Functional Cost-Hour Report, identifies comparable functional cost and labor-hour data; for example, engineering, tooling, and manufacturing for the contract and/or selected reporting elements in the contract. A breakout is required for recurring and nonrecurring costs. These reports are also submitted as a program estimate in response to the RFP, and as the contract specifies.

(b) Part II, Progress Curve Report (previously DD Form 1921-2), provides a unit or an average unit cost of the unit or lot accepted during the reporting period. It also gives functional labor-hour and cost data on the average cost of units or lots accepted, the estimate for the next unit or lot, and the estimate to complete the contract. The report includes only recurring cost. The contractor must submit the report as specified in the contract. Contracts that do not provide for deliverable end items or hardware do not require this report, nor do RFPs.

11-407 Objectives of the Audit

The auditor is required to evaluate the effectiveness of the contractor's policies, procedures, and practices to produce data compatible with the objectives of CCDR and make selective tests of reported data.

11-408 Audit Procedures

a. If the contractor's CCDR system has not been audited, the DCARC may request the auditor to evaluate the contractor's proposed procedures for accumulating data and CCDR preparation to assure their compatibility with the accounting system and the reporting requirement in the RFP. Methods for auditing data in support of a price proposal should not be changed because of CCDR formats; however, the auditor should point out problems caused by system deficiencies to the contracting officer. Identifying and correcting deficiencies is critical at this point because the data, in the prescribed format, becomes the baseline for negotiation for 10 U.S.C. 2306a (TINA) and 41 U.S.C. 422 (CAS) purposes. Forms submitted at the time of contract award become the baseline for DoD data bank purposes and measuring contract performance. Failure to identify and correct major deficiencies would negate the purpose of the CCDR by making comparison of data meaningless.

b. The DCARC may request an audit of the first CCDR submission that includes actual costs under a contract. If the contractor’s CCDR system policies and procedures have not previously been audited, or if requested by the DCARC, the audit scope should include an evaluation of the effectiveness of the contractor’s policies and procedures for accumulating data and preparing CCDRs. The DCARC may request other audits of individual CCDR submissions as necessary.

c. Each year, FAOs should evaluate the effectiveness of the contractor's system, policies, and procedures for accumulating data and preparing CCDRs. In this evaluation, select a sample of the contractor’s CCDR-covered contracts for testing of report data to assure that the reported data are accurate and conform to the requirements of DoD 5000.4-M-1. The sample selected should be broad enough to ensure consistency of application of contractor procedures across programs. Coordinate with the DCARC to identify any high risk or sensitive contracts to include in the sample. Audits will be performed more frequently if they disclose significant deficiencies.

d. As with most audits, auditors should consider the results of other evaluations, such as internal control or earned value management surveillance audits, in determining the scope of audit. This will minimize the work required to accomplish the objectives of the CCDR audit.

e. The auditor should verify the contractor’s reported incurred to date costs, hours, and unit or lot cost to the contractor’s accounting system and other supporting documentation, where applicable. Request technical assistance, as necessary, to verify the contractor’s classification of cost as recurring or nonrecurring, classification of costs by functional area, and estimates of unit or lot cost, where applicable.

f. Evaluate the contractor’s reported estimate at completion. The evaluation should assure that it is the "best estimate" without regard to established ceilings or contract price, and that the contractor has properly considered currently authorized work plus any additional directed work for which execution or negotiation of amendments is pending. This also includes work not formally included in the contract price. Request technical assistance, as necessary, to evaluate the reported estimate at completion.

g. The auditor should evaluate the contractor’s inclusion of subcontract costs, if applicable, for compliance with the requirements of DoD 5000.4-M-1. DoD 5000.4-M-1 provides specific guidance on the incorporation of subcontract data in each of the CCDR forms, depending on whether the subcontractor

(1) reports CCDR data to the prime contractor;
(2) reports CCDR data directly to the DCARC; or
(3) has no CCDR reporting requirement.

h. Compare CCDR data with similar contractor information in other financial management reports, such as Contract Funds Status Reports and Cost Performance Reports, if applicable, for agreement or reconcilability.

i. The CCDR audit will include evaluating contractor compliance with report due dates in the contracts or established between the contractor and the contracting officer. Discuss

deficiencies in meeting due dates with the contracting officer so that corrective action can be taken.

11-409 Reporting Results of Audit

a. An audit report will be prepared using the format contained in 10-1200. The report will state the auditor's opinion on whether the contractor's CCDR preparation policies and procedures, if evaluated in the audit, are adequate and whether the CCDR evaluated is accurate and supported by the contractor's books and records.

b. If the audit discloses significant deficiencies, or the contractor cannot reconcile specific data with similar information for comparable periods, the audit report will:

(1) show the deficiencies' effect on the accuracy of the reported cost data,

(2) specify reports to which deficiencies pertain,

(3) recommend contractor corrective action, and

(4) state the contractor's reaction to the recommendations and any corrective action planned or initiated.

Audit reports will include the status of any previously reported deficiencies that have not been satisfactorily corrected. To ensure that all pertinent data have been considered, the auditor will discuss findings and recommendations with the contracting officer before the report is issued. Note that significant errors in detailed report data (e.g., specific WBS element or functional category) should be reported even if total reported cost is accurate, as the detailed CCDR data is used to develop the cost estimates discussed in 11-401.

c. All audit reports will be issued to the Defense Cost and Resource Center (DCARC) through the administrative contracting officer, with a copy to affected program office(s) and a copy to the FLA(s), where applicable. The DCARC's address follows:

Defense Cost and Resource Center
201 12th Street
Suite 220
Arlington, VA 22202

CHAPTER 12

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CHAPTER 12

12-000 Auditing Contract Termination, Delay/Disruption, And Other Price Adjustment Proposals Or Claims

12-001 Contract Terminations and Equitable Price Adjustments

This chapter describes procedures for auditing cost proposals under contracts and subcontracts which have been partially or fully terminated before completion. This chapter also provides guidance for contract price adjustments resulting from the following situations: changes in the work made by the contracting officer within the general scope of the contract; changes in the work resulting from abnormal conditions, such as delay/disruption; or extraordinary relief under 50 U.S.C. 1431-1435.

12-100 Section 1 --- Contract Termination Procedures---Overview

12-101 Introduction

a. This section provides general information on contract terminations. It also discusses the principles and procedures governing audits of settlement proposals submitted under terminated contracts and subcontracts. These principles and procedures serve as a guide and are not meant to limit professional judgment. The purpose is not to restate information contained in FAR Parts 31, 45.6, and 49 except when necessary for clarity. A knowledge and understanding of these FAR sections is essential in performing an adequate audit of terminated contracts. Refer, as necessary, to applicable FAR Supplements issued by the various agencies that relate to terminated contracts. As used in the termination sections of this chapter, the term "contracting officer" usually means termination contracting officer (TCO).

b. The right of the Department of Defense to terminate Government contracts is important in maintaining military procurement flexibility and obtaining the maximum use of procurement funds. Each DoD contract must include a termination clause.

c. When terminating a contract, one of the Government's basic objectives is to promptly negotiate a settlement which will pay the contractor for the preparations made and the work done under the terminated portions of the contract. When appropriate, the Government allows a reasonable profit on work performed. However, if analysis indicates a loss would have occurred if the contract had been completed, the Government adjusts the contractor's proposal accordingly. When the contractor does not present a settlement proposal within time limits provided, the contracting officer may determine the amount to be paid to the contractor. The same is true when the Government and contractor cannot settle on an amount. When authorized by the contract, the Government can make partial payments pending settlement of the claim.

d. A termination may be at the convenience of the Government or for default. The amount a contractor is entitled to receive depends in part on the cause for termination and the type of contract involved. FAR 49.403 discusses termination of cost-reimbursement-type contracts for default. Terminations of fixed-price contracts for default do not usually require audit services.

e. Refer to FAR Part 12 for regulations regarding termination of commercial contracts. Terminations of commercial contracts do not require audit services. The Government has no authority to audit the contractor’s records that support a proposal related to the termination of a commercial contract for convenience.

f. A termination may be either partial or complete. A contract is completely terminated when the termination notice directs the immediate cessation of all remaining contract

work. Under a partial termination, the contractor continues to perform on the unterminated portions of the contract following the existing contract terms.

g. No-cost settlements occur when:

(1) the contractor has not incurred any costs for the terminated portion of the contract,

(2) the costs incurred are not significant and the contractor is willing to waive payment,

(3) the contractor can divert all costs including termination inventory to other orders, or

(4) for some other reason the contractor agrees to a no-cost settlement.

h. The "Truth in Negotiations Act" (10 U.S.C. 2306a), and FAR 15.403-4 requiring cost or pricing data, apply to termination actions. For termination settlement proposals exceeding , the contractor must certify that the cost or pricing data submitted was accurate, complete, and current as of the date of agreement on the settlement.

i. A termination proposal submitted under a termination clause is not a claim because it is submitted for the purpose of negotiation. However, a termination proposal becomes a claim under the Contract Disputes Act (CDA) upon the occurrence of one of three events:

(1) the contractor's submission indicates that the contractor desires a final decision and the contracting officer does not accept its proposed terms,

(2) negotiations between the TCO and the contractor are at an impasse, thus implicitly requiring the TCO to issue a final decision, or

(3) the TCO issues a final decision.

Refer to 12-504 for further guidance on CDA claims.

12-102 Contract Modifications Causing Subcontract Terminations

Not all termination settlements result from contract termination. Modification of a contract, according to the changes clause, may require a termination adjustment. A change in specification, for instance, may make unnecessary the particular materials or parts that a prime contractor has on order. As a result, the prime contractor may need to cancel one or more subcontracts. This, in effect, is similar to a termination of the prime contract for the convenience of the Government. The standard subcontract termination clause (FAR 49.502(e)(1)) gives the prime contractor the right to cancel subcontracts for its own convenience. It also defines the rights and obligations of the subcontractor. When modifying a prime contract according to the changes clause of the contract, the contracting office may ask DCAA to audit the prime contractor's proposal for an equitable adjustment in the contract price or the estimated cost and fee. In these instances, follow the procedures set forth in 6-800 to ensure that any subcontract settlements resulting from the change are reasonable.

12-103 Partial Termination

a. A partial termination of a contract may require a separate equitable price adjustment of the continuing portion of the contract as provided in the standard termination clause for fixed-price contracts. The contractor must file the request before settling the terminated portion of the contract. While a request for equitable adjustment may be submitted as a result of a partial termination, it is a separate action from the termination settlement proposal. The request for equitable adjustment is subject to the same requirements, including certification requirements, as equitable adjustment proposals or claims submitted in other circumstances. Refer to 12-500 for further guidance on equitable adjustments. Examples of partial termination situations normally considered acceptable for an equitable adjustment on the continuing portion of the contract follow:

(1) A volume decrease that increases material, labor, or indirect unit costs. The contractor may no longer be able to take advantage of quantity discounts. Direct labor unit costs may increase because the work reduction may prevent the contractor from realizing

labor improvement (learning) curve benefits projected in the negotiated price. Labor unit costs may also increase because there are fewer units over which to distribute setup costs. Indirect cost rates may increase when assigning fixed overhead charges over a lesser volume.

(2) Initial (starting load) costs may not be recovered due to the partial termination.

b. Ensure that equitable adjustment claims do not include costs already covered by the termination settlement or costs not caused by the partial termination.

12-104 Applicable Cost Principles - Termination Audits

a. For fixed-price contracts, the Government settles terminations for convenience using the "termination for convenience" contract clause, other applicable contract clauses, and the contract cost principles contained in FAR Part 31, in effect on the date of the contract. Cost provisions of the subpart of FAR Part 31 referenced in the allowable cost and payment contract clause govern cost-type contract settlements.

b. The auditor may find references to cost principles other than FAR 31, particularly DAR XV. When found, the referenced cost principles and regulations apply and must be used.

12-105 Influence of Cost Accounting Standards

a. CAS 401 requires the contractor to accumulate and report costs in the same way as estimated. Cost estimates used in a prospective contract normally anticipate the contract going to completion. Cost arrangement in a termination claim may differ significantly from the cost presentation contained in the original estimate. A contract termination in essence creates a situation that is totally unlike a contract completion. Therefore, it is not reasonable to extend the consistency requirement to an event not anticipated in the original estimate.

b. While termination procedures usually comply with CAS 401, a contractor would breach the consistency requirement if it had several similar terminations and handled them differently. Audit the contractor's termination procedures for consistency.

c. CAS 402 requires a contractor to classify consistently all like costs in like circumstances as either direct or indirect. Termination claims often include as direct charges costs or functions which would have been charged indirect if the contract had been completed (FAR 31.205-42). Examples are settlement expenses and unexpired lease costs. These circumstances do not breach CAS 402 requirements since the like circumstances referred to in the Standard are lacking.

d. CAS 406 requires that a contractor use its full fiscal year for its cost accounting period.

12-200 Section 2 --- General Audit Guidance For Terminations of Negotiated Contracts

12-201 Introduction

a. This section provides audit guidance for terminations of negotiated contracts which applies regardless of the cause of termination, the type of contract or the type of claim submitted. Terminations of commercial contracts are discussed in 12-101e.

b. FAR 49.107 requires the TCO to submit prime contractor settlement proposals over $100,000 to the contract auditor for audit and recommendations. It also requires the TCO to request audit of certain subcontractor proposals before approving their settlement (see 12-204). The TCO may also request audit for other prime or subcontract proposals at his or her discretion. In certain conditions, the auditor may also initiate an audit, when warranted as provided in 12-205 and 6-802.5.

12-202 Scope of Audit

a. Establishing audit scope depends on various factors including:

(1) the termination proposal or claim amount;

(2) whether the contractor used the inventory or total cost basis;

(3) the condition of the contractor's books and records;

(4) prior experience with the contractor;

(5) effectiveness of the contractor's internal controls, management decisions, and policies;

(6) how effective contractor personnel are in implementing policies before and after the termination;

(7) the expressed desires of the contracting officer; and

(8) the provisions of the termination clauses in the contract.

b. In determining audit scope, evaluate the contractor's accounting and termination policies, practices, and internal controls. Also evaluate whether the costs claimed in the settlement proposal are consistent with the contractor's normal accounting and termination procedures. Review fundamental contract data to initially test the contractor's proposal. Fundamental contract data includes the price proposal, cost estimates, bills of material, production schedules and records, shipping documents, purchase orders, and cost and profit forecasts. Other sources of information useful in determining audit scope are copies of financial statements audited by the contractor's public accountants, tax returns, reports submitted to Government regulatory agencies, and information from Government technical personnel who have a direct interest and knowledge of the various phases of the contractor's operation.

c. A need for extending the audit scope and performing a more detailed examination of the proposal may be indicated when:

(1) the unit cost level of the quantities shown in the inventory or the quantities themselves do not follow the pattern normally experienced by the contractor,

(2) overhead and administrative expense rates used in the proposal are not typical of past or current experience,

(3) previous audits questioned or disapproved significant costs,

(4) the proposal includes substantial amounts for nonrecurring or other unusual costs,

(5) there appear to be procedural differences between the costing of the completed work and the termination claim, or

(6) inconsistencies are noted in the contractor's costing of termination claims.

d. The auditor should address any specific requests contained in a contracting officer's audit request (see 4-103 for guidance on acknowledging the audit request.) However, it is the auditor's responsibility to determine audit scope. In some instances, (for example, where the termination claim consists principally of unprocessed material), a desk review of the required documentation may be adequate. When available informa-

tion suggests that the audit scope should be less than requested, inform the contracting officer and put appropriate comments in the report.

12-203 Auditing Terminated Subcontracts

a. Settling subcontractors' termination claims is a prime contractor responsibility. However, the Government has an interest in these settlements when it affects the cost of a prime contract with the Government. The contracting officer must approve or ratify each subcontract termination settlement. An exception to this occurs when the TCO authorizes the contractor to settle subcontracts under $100,000 without his or her approval or ratification.

b. Before approving or ratifying each subcontract termination settlement of $100,000 or more, the contracting officer must request a DCAA audit or an analysis of the audit performed by the prime contractor or higher-tier subcontractor (see 12-310). He or she may also request audits of smaller settlements (see 6-802.5). Careful planning and close coordination among the prime contractor, the contracting officer, and the auditor are necessary to ensure efficient and timely settlement of subcontract termination proposals. This is particularly important when the termination action involves a large and complex prime contract (such as for a major weapon system).

12-204 Responsibility of DCAA Auditor at Prime Contractor Location

The DCAA auditor of the prime contractor is responsible for ensuring that the prime contractor performs adequate audits of subcontract termination claims. The auditor will inform the contracting officer of instances where the contractor failed to properly consider audit findings in settling subcontract termination claims.

12-205 Preliminary Conference with Contractor

a. The contracting officer usually arranges for an initial conference with the contractor. He or she normally holds this meeting after the termination notice, but before the contractor submits its settlement proposal. When possible, the auditor should attend the conference and determine the basis and method the contractor plans to use in preparing and costing the proposal. Assist the contracting officer by explaining the cost principles that apply and if necessary furnishing the contractor information on preparing a termination claim (see 1-508). Discuss with the contractor during the preliminary conference any specific problems and questions concerning the termination claim.

b. The preliminary conference also provides the auditor an opportunity to:

(1) arrange for access to the contractor's books and records,

(2) determine the contractor's knowledge and experience in preparing termination claims,

(3) discuss the contractor's plans for settling any subcontractor's claims, and

(4) make a preliminary review of the contractor's records to determine whether the contractor can submit a proposal on an inventory basis (see paragraph 12-301.1).

c. Timely planning is essential to ensure that minimal settlement expenses will be incurred and charged to the terminated contract. For example, in large and complex contracts involving a complete or substantial partial termination, the termination contracting officer normally requests the contractor to submit a projected statement of work involved in contract settlement (see FAR 49.105-1). This statement usually identifies personnel requirements to specific work phases and target completion dates for each work phase. If the contracting officer tells the contractor that using separate work orders or codes is necessary to document settlement costs, obtain a copy of the statement.

d. Obtain a copy of any report that the contracting officer prepares as a result of the preliminary conference. If the meeting includes discussions on accounting or auditing matters, the auditor may wish to prepare a supplemental memorandum of the meeting.

e. When the contracting officer does not arrange for a preliminary conference and the auditor considers it appropriate, he or she should arrange for a meeting. Meet with the contractor and other Government representatives as appropriate. Prepare a memorandum of the meeting and retain it in the audit working papers.

12-206 Unadjusted Pricing Actions

The contractor may have other outstanding pricing actions related to a terminated contract. These may be due to specification changes, redetermination, incentive provisions, or escalation provisions not completed at the time of termination. The contractor should not submit pending price adjustments as an integral part of the termination settlement proposal. However, the Government cannot evaluate the settlement proposal without their concurrent consideration. Personnel responsible for negotiating the price adjustment may not be the same as those responsible for negotiating the termination settlement. Bring any unadjusted pricing actions noted to the contracting officer's attention so that he or she may consider them in the termination settlement. Large outstanding actions may prevent the auditor from reaching a conclusion on the contractor's profit or loss potential under the terminated contract. Base the audit report on the contract prices in effect at the time of the audit. Give the contracting officer full particulars on any pending price adjustments. This allows the contracting officer to provide for a recomputation of the profit or loss allowance after settling the outstanding pricing actions.

12-207 Determinations of Settlement Review Boards

For all major termination settlements and other settlements known to contain problems of an unusual nature, obtain information concerning any settlement review board's determinations (see FAR 49.110 and 49.111), which relate to the audit recommendations. While obtaining the review board's decisions may not alter the auditor's position in subsequent reports, this information may assist him or her in presenting findings so future reports will be more useful.

12-300 Section 3 --- Auditing Terminations of Fixed-Price Contracts

12-301 Introduction

a. This section presents guidance on auditing fixed-price contracts terminated for convenience of the Government.

b. Contractors may submit settlement proposals under terminated fixed-price contracts on an inventory basis (Standard Form (SF) 1435) or, when approved in advance by the contracting officer (see FAR 49.206-2), on a total cost basis (Standard Form 1436). Under unusual circumstances, the contracting officer may approve some other basis.

12-301.1 Inventory Basis

The inventory basis requires that the contractor directly associate the costs and profit in the settlement proposal with units or services terminated. It limits the proposal to those items which are residual due to the termination action. Using the inventory basis for submitting settlement proposals is the method preferred by the Government.

12-301.2 Total Cost Basis

a. In contrast, a settlement proposal on a total cost basis is for total costs incurred under the entire contract until termination, by elements such as labor, material, and indirect costs plus settlement expenses and profit, less the contract price of delivered items. The auditor's main interest in the termination inventory is not its value, but whether all inventory items are properly identified and made available to the Government.

b. The Government normally gives approval to use the total cost basis only when the inventory basis is not feasible or would unduly delay the settlement. The following examples are situations where the contracting officer might permit using the total cost basis:

(1) If production has not started and the accumulated costs represent planning and preproduction or "get ready" expenses.

(2) If the contractor's accounting system will not readily lend itself to establishing unit costs for work in process and finished products.

(3) If the contract does not specify unit prices.

(4) If the termination is complete and involves a letter contract.

c. If requested by the contracting officer, furnish an opinion on the feasibility of using the inventory basis. Base the opinion on a limited evaluation of the information obtained during the preliminary conference. If the auditor receives a request to audit a termination settlement proposal prepared on the total cost basis and the contractor presents no evidence of approval, contact the TCO. If the auditor, based on his or her evaluation of the contractor's records, believes the contractor should use the inventory rather than the total cost basis, inform the contracting officer.

d. The contractor should prepare a total cost basis settlement proposal for a partial termination the same way as one prepared for a complete termination. It should include all costs incurred to the completion date of the continued portion of the contract. A total cost claim is therefore not submitted until completion of the continued portion of the contract. Settlement proposals for partial terminations submitted on the inventory basis do not depend on completion of the continuing portion of the contract.

12-302 Preliminary Audit Steps

a. Upon receipt, make a general evaluation of the terminated contract, the termination notice, and the contractor's settlement proposal and supporting schedules. The purpose is to determine whether the proposal contains the information and data needed to plan and perform the audit. A proper initial evaluation of a settlement proposal determines whether:

(1) the proposal generally conforms with requirements,

(2) each cost item claimed is allowable according to contract provisions,

(3) the amount claimed is reasonable considering the contract price of the physical units represented by the claim, including whether the contract would have resulted in a loss, or reduced profit if it had been completed,

(4) there is any duplication of charges,

(5) each subcontractor's claim applies to the Government's termination action and not to changes or cancellations for the contractor's convenience, and

(6) the contractor promptly complied with the termination notice by stopping all in-house contract effort promptly and by immediately notifying subcontractors to stop work (see 12-305.7).

b. The introductory portion and Section I of settlement proposals prepared on the inventory basis or total cost basis, are essentially the same. Section I gives the contract status as of the cut-off point or effective termination date. Comparing this section with the contractor's proposed settlement amount, as shown in Section II, may disclose inequities or areas requiring further evaluation. To verify the accuracy of the data contained in Section I, examine:

(1) the contract to determine the materials or services to be supplied, the prices to be paid, and the delivery schedule,

(2) the termination notice and its effect on the contract,

(3) shipping records and invoices for the delivered items,

(4) specific termination instructions given by the contracting officer,

(5) the contractor actions taken to comply with the termination notice to minimize termination costs, and

(6) the projected profit or loss on the contract.

c. Computing the net claim in Section II of a settlement proposal prepared on an inventory basis (Standard Form 1435) differs substantially from that used on a total cost basis (Standard Form 1436). The main difference is that Standard Form 1435 includes only the cost of residual inventory, plus appropriate "other costs" (12-305). Standard Form 1436 shows total costs incurred in performing the entire terminated contract. To compute these total costs shown on Standard Form 1436 the contractor first adds applicable profits to the total costs. The contractor then reduces the amount by the contract price of delivered (or expected deliveries) finished products.

d. Compare the contractor's costs listed in Section II, plus any subcontract settlements, with the information in Section I. The results may indicate a possible overstatement of the claim or evidence of a loss situation. The contractor should not use the termination settlement proposal as a means to recover losses or expected reduced profit on the contract. Review contract costs and the reasonableness and accuracy of the estimate or budget to complete to determine whether a loss or reduced profit would have been incurred if the contract had not been terminated.

e. Compare Section II amounts with the related totals on the inventory schedules and with Schedules A through H of the proposal. When the proposal is on the total cost basis, confirm that the contractor properly credited the proposal for finished units. A review of the supporting schedules may suggest areas requiring further analysis.

f. Verify that the total amount payable to the contractor for a settlement, before deducting disposal or other credits and exclusive of settlement costs, does not exceed the contract price less payments otherwise made or to be made under the contract (FAR 49.207).

g. Determining whether a loss would have occurred depends, in most cases, on the stage of completion at termination. For contracts with little work completed when terminated, it may be necessary to assume no loss would have occurred unless evidence suggests otherwise. For contracts with substantial effort already completed, verify that the termination proposal includes a cost estimate to complete the contract. The estimate should help the auditor decide if the contract would have resulted in a loss if completed. Make the request for an estimate to complete through the contracting officer. Use the guidance in 9-306 in deciding whether to use technical specialist assistance when evaluating the estimate to complete.

12-303 Preparing the Audit Program

After completing the preliminary review of the settlement proposal, prepare an audit program and begin the audit of amounts contained in Section II. The comments which follow contrast the usual approach to the audit of a proposal prepared on the inventory basis with a proposal prepared on a total cost basis.

12-303.1 Proposals Using the Inventory Basis

The audit effort on an inventory basis proposal mainly deals with reviewing items listed in the inventory schedules supporting the proposal. Make sure the claim includes only items allocable to the terminated portion of the contract. Guidance for the review of the various classes of inventory items follows:

a. Metals, raw materials, and purchased parts included in inventory represent items the contractor has not placed into fabrication or assembly operations. The cost claimed for these items in termination usually should not include amounts for labor or manufacturing overhead. Review the material cost and any material handling charge included by the contractor. Perform tests of the inventory pricing and determine if material quantities apply to the terminated portion of the contract. Make this determination by examining supporting bills of material, cost records, invoices, and purchase orders. Determine whether the contractor screened and removed from inventory all items usable on other work without loss and all items returnable to suppliers (see 12-304.5).

b. Finished components and work-in-process are termination inventory items fabricated, processed, or otherwise changed by the contractor through its manufacturing processes. Work-in-process inventories may present problems in verifying direct material, direct labor, and overhead costs applied to units and components in various stages of production. The contractor may have calculated prices using actual or standard cost or it may have been necessary to use estimated cost (see FAR 49.206-1(c)).

(1) Evaluate extensively statistical type cost data, not controlled by general ledger accounts. Include in this examination available cost data, cost reports, cost standards, engineering and bid estimates, bills of material, and other information influencing the cost. Resolve whether the contractor can retain work-in-process or finished components for use on other work without loss. Also be alert to raw material and purchased parts being improperly classified as work-in-process and finished components due to the greater profit rates allowed on these termination inventory categories. Additionally, the contractor might have overlooked raw material or purchased parts improperly classified when screening items returnable to vendors or diverted to other contracts (see 12-304.5).

(2) Some accounting systems do not provide enough detail on parts or lot costs. In these cases, the use of estimates may become necessary. One acceptable method for developing labor cost is to estimate hours expended on the work-in-process inventory by each labor category at each step in the production process. The estimated hours are then costed at the hourly rates applicable during the performance period. Close liaison with Government technical personnel is required to ensure that the method used and the resultant costs are reasonable.

c. Miscellaneous inventory usually includes items and supplies which do not fit into the above categories. The contractor should limit cost claimed for miscellaneous inventory to material cost, plus handling charges when applicable. Of main concern to the auditor is whether the contractor can use the miscellaneous inventory items without loss or return it to suppliers.

d. Acceptable finished product represent completed end items accepted by the Government but, on instructions from the contracting officer, are not delivered. The contractor may include completed items in the termination schedules. The contractor, however, should list them at the contract price, adjusted for any savings in freight or other charges, together with any credits for their purchase, retention, or sale. Test the adequacy of adjustments made by the contractor. Determine whether completed items are fully acceptable

by referring to the inventory verification report (see 12-304.1) or by requesting assistance from Government technical personnel. When rework is necessary to make otherwise completed items fully acceptable, question the estimated rework costs (see 12-304.7).

12-303.2 Settlement Proposals Using the Total Cost Basis

A total cost proposal eliminates the need to evaluate the cost allocation between the completed and terminated portions of the contract. The audit will usually start by examining the total cost incurred under both the completed and partially completed portions of the contract. Audit objectives are to determine whether:

(1) the totals included in the proposal for material, labor, and overhead have been reliably computed,

(2) the costs are allocable and reasonable, and

(3) acceptable accounting evidence is available to support the charges.

Chapter 6 discusses procedures for auditing incurred cost. These procedures also apply to the audit of costs appearing in Section II of Standard Form 1436.

a. Examining inventory schedules becomes important, not so much for the cost of residual inventory, but in determining if the contractor has scheduled all inventory and made it available to the Government for retention, sale, or other disposition. Under a claim submitted on the inventory basis, the Government only pays for residual inventory when listed and priced on the inventory schedules supporting Standard Form 1435. However, a claim submitted on Standard Form 1436 is for total contract costs; thus, all costs applicable to contract inventory are being claimed. It is important to ensure that the termination inventory schedules show all inventory costs billed to the Government. Comparing these schedules with the most recent physical inventory may help in deciding if inventory quantities reported are reasonable. Evaluate any discrepancies between the two inventories.

b. The contractor's total cost claim should include a credit for any common items which have been diverted to other production and for money received from disposing of nonreworkable rejects.

12-304 Auditing Termination Inventory

a. The comments contained in the following subparagraphs apply whether the contractor prepared the settlement proposal on Standard Form 1435 or 1436.

b. Evaluating termination inventory requires coordination between audit and technical personnel. Objectives are to:

(1) verify the inventory quantities, quality, and usefulness;

(2) examine reasonableness of the cost and price data; and

(3) determine whether the contractor considered common items and material returnable to vendors.

Verifying inventory quantities, quality, and usefulness are primarily the responsibility of technical personnel. Evaluating inventory pricing and contract costing are primarily the responsibility of the auditor. Do not needlessly duplicate the efforts of the technical inspector.

12-304.1 Inventory Verification Report

a. As part of the settlement procedures, the contracting officer usually arranges for technical representatives to review the termination inventory and to submit an inventory verification report. The plant clearance officer or technical inspector prepares the inventory verification report for the contracting officer's use in achieving an equitable settlement. The purpose of the report is to :

(1) verify that the inventory exists;

(2) determine its qualitative and quantitative allocability to the terminated portion of the contract;

(3) make recommendations on its serviceability and quantitative reasonableness compared to contract production lead times, delivery schedules, and material availability; and

(4) determine whether any of the items are the type and quantity reasonably used by the contractor without loss.

b. Obtain a copy of the inventory verification report from the contracting officer when possible since it is normally useful in establishing audit scope. When the inventory verification report is not immediately available but will become available within a reasonably short period, delay issuing the report until receipt of the inventory verification report. When the inventory verification report is not available, state in the audit report that recommendations were made without examining the inventory verification report.

12-304.2 Termination Inventory Schedules

a. When appropriate, evaluate the termination inventory schedules for evidence of nonallocability and make selective physical counts of items listed in the termination inventory schedules. Under the total cost basis it may be appropriate to include usage tests to determine whether the contractor actually used materials charged in production. If material is not completely used in producing delivered units, determine whether the inventory schedules list residual items in the correct quantities.

b. The contractor must list on separate inventory schedules all Government-furnished property included in the termination inventory. The contractor may not withdraw Government-furnished property from the inventory for its own use without contracting officer approval. Examining Government-furnished property and submitting a report to the contracting officer is the responsibility of the property administrator. The auditor's evaluation of Government-furnished property complements rather than duplicates the property administrator's review. When the audit discloses irregularities in Government-furnished property use or in the inventory listing, include appropriate comments in the audit report.

12-304.3 Material Acquired Before the Date of Contract

a. Material acquired before the effective contract date is usually not allocable to the terminated portion of the contract, on the premise the contractor did not acquire the material for the contract. Exceptions occur when the contractor:

(1) acquired the material as a direct result of the negotiation and in anticipation of the contract award to meet the proposed delivery schedules;

(2) properly placed the material into production on the terminated contract and cut, shaped, built-in, or changed in such a way that it cannot be returned to stock or reasonably used on the contractor's other work; or

(3) acquired the material under a previously terminated contract and treated it as a common item in settling that contract for use on the contract now terminated.

b. Under certain circumstances, the contractor may claim that material acquired before the effective contract date was reserved for contract use, that retention of the material prevented the contractor from using it on other work, and, therefore, the Government should accept the material as part of the termination inventory. Review the validity of the contractor's claim in these instances.

12-304.4 Material Acquired or Produced in Anticipation of Delivery Schedule Requirements

a. In general, the quantities acceptable in termination inventories may include net bill of material requirements for the terminated work plus a reasonable amount for scrap loss. Contract provisions or prudent business practice may suggest, however, that although otherwise acceptable, the on-hand quantities included in termination inventory schedules are larger than expected at the termination date. This condition may have been caused by the contractor acquiring or producing items by unreasonably anticipating delivery require-

ments. Excessive materials on-hand resulting from this condition are not allocable to the termination claim. Reviewing the contractor's purchasing policies and practices should assist in determining if this condition exists and in making recommendations to the contracting officer regarding excessive material. In reaching a conclusion, however, consider whether the contractor purchased large quantities of materials due to quantity discounts, favorable market conditions, or the need to have all materials on-hand before starting production. As a pricing factor in quoting the contract price, the contractor may have planned to produce items in large quantities to achieve production economies. Ask for technical personnel assistance when necessary to determine whether procurement or production was unreasonably accelerated.

b. A contract may specify that the Government must approve a preproduction model before delivery of any production units. The contract may also prohibit the contractor from obtaining materials or proceeding with production before the Government can test and approve the preproduction model. When the Government terminates a contract containing these restrictions before preproduction model approval, only allowable design costs and costs incurred for the preproduction model are acceptable as termination costs. The presence of inventory items and costs for making deliverable items may suggest that the contractor unreasonably accelerated production. Ordinarily, these costs would be unallowable.

c. For certain production contracts, the schedule to purchase quantities of basic materials requires contracting officer approval to minimize inventory accumulation. Where these purchasing restrictions exist, determine if the termination inventory quantities agree with the purchasing schedule approved by the contracting officer.

12-304.5 Common Items

a. Common items are material items which are common to both the terminated contract and other work of the contractor. FAR 49.603-1 states that the contractor certifies that all items in the termination inventory do not include any items reasonably usable without loss to the contractor on its other work. Also, FAR 31.205-42(a) states that the cost of items reasonably usable on the contractor's other work shall not be allowable unless the contractor submits evidence that it could not retain the items without suffering a loss.

b. In determining whether common items are reasonably usable by the contractor on other work, review the contractor's plans and orders for current/scheduled production and for current purchases of common items. Also determine whether the contractor properly classified inventory items as common items. Do this by reviewing stock records to see if the items are being used for other work and by reviewing bills of material and procurement scheduled for products similar to those included in the termination inventory. Limit acceptance of common items as part of termination inventory to the quantities on hand, in transit, and on order which exceed reasonable quantities required by the contractor for work on other than the terminated contract. In determining whether the inventory contains common items, the contractor should first assign total available quantity (inventory on-hand, in transit, and on order) to continuing or anticipated Government or commercial production and assign the remainder, if any, to the terminated contract. The contractor, therefore, should assign to the terminated contract:

(1) the least processed inventory, and

(2) those purchase commitments that result in the least cost when terminated.

c. Under certain circumstances, complex or specialized items may qualify as common items. For example, the compressor unit of a military jet engine might qualify as a common item if the contractor also uses the unit in commercial jet engine production. Or the memory unit of a computer might qualify if the contractor also uses the unit in a commercial computer. The test is whether the contractor can divert the item to other work without loss.

d. Common items need not be so classified if the contractor can show that eliminating the item from termination inventory would cause financial hardship. For example, when raw materials are common to the contractor's other work but the amount resulting from the

termination equals a year's supply, or an amount far exceeding the contractor's usual inventory, retaining the material might unfavorably affect the contractor's cash or working capital position and result in a financial hardship. Retaining a large inventory does not in itself, however, permit the contractor to claim an amount for excess inventory. When the contractor can use the inventory within a reasonable period, regardless of size, the excess inventory claim would not be allowable.

e. After submitting the termination settlement proposal, the contractor may receive additional contracts or commercial orders on which it can use the termination inventory items. In these cases, the contractor should withdraw the items it plans to use on the new work, (except for Government property or other items reserved by the contracting officer), adjust the claim accordingly, and notify the contracting officer.

f. Bring to the contracting officer's attention reworkable rejects in the termination inventory which the contractor can divert to other work. The contracting officer may find it in the Government's interest to allow the reworking costs in order to obtain credit for items reworked and diverted.

12-304.6 Production Losses

a. The cost of direct materials for parts, components or end items usually includes the cost of scrap such as trimmings, turnings, clippings or unusable remnants. Other production losses may occur due to testing, obsolescence, or actual physical loss of the components, subassemblies or end items. Depending on which stage in production the loss occurs, the cost involved may be for material or it may include material, labor, and applicable burden. Make sure the contractor credits the value realized from the sale or other disposition of scrap or other production losses either to:

(1) the material cost for the product scrapped or

(2) the overhead allocable to the end product.

b. Review production losses for reasonableness and allocability to the terminated portion of the contract. Allocability is particularly important when the contractor submits the settlement proposal on the inventory basis since a portion of production losses applies to end items completed and shipped. The claim for units terminated should exclude all costs allocable to units shipped. Question unreasonable production losses, evidenced by a significant physical loss of components or subassemblies or by comparison with the loss rate on similar products.

12-304.7 Rejected Items

a. Reworkable Rejects. This type reject includes completed end items that did not meet contract specifications but the contractor would have reworked into acceptable completed articles if not stopped by the termination. The contractor should list these items on termination inventory schedules at their contract prices less the estimated cost to rework them (see 12-304.5f). To avoid possibly duplicating G&A expense and profit, the contractor should not claim reworkable rejects as work-in-process. The auditor normally reviews the estimated cost to rework these rejects to test for proper treatment by the contractor.

b. Nonreworkable Rejects. The contractor usually scraps nonreworkable rejects and does not include them in its inventory schedules. However, the contractor can recover their costs as part of the termination settlement when the costs apply to the terminated portion of the contract. Question any claimed amounts which are allocable to delivered items.

12-304.8 Returning Material to Suppliers

FAR authorizes and encourages contractors to return contractor-acquired termination inventory to suppliers for full credit less the lower of either:

(1) the supplier's normal restocking charge or
(2) the maximum authorized restocking percentage (see FAR 45.605-2).

The contractor may not include the cost of returned property in the settlement proposal but may include the transportation, handling, and restocking charges for the returned property. Except for diversion to other work of the contractor or retention by the Government, this is the preferred method for disposing of termination inventory. Review the termination inventory listing for any items of inventory subject to return. For any items so noted, compute an amount as if the contractor had returned the items to suppliers. Question any resulting differences.

12-304.9 Intracompany Transactions

The cost principles govern allowable charges for materials, services, and supplies sold or transferred between plants, divisions, or organizations under common control. Question any excess charges resulting from the contractor pricing intracompany transactions inconsistently with the provisions of FAR 31.205-26(e).

12-304.10 Termination Inventory Undeliverable to the Government

Termination inventory may not be deliverable to the Government because it was damaged, destroyed, or lost. Treat undeliverable inventory as material purchased and retained by the contractor. Unless the contract provides otherwise or the Government has assumed the risk for loss and damage, deduct the fair value of undeliverable material from the termination settlement proposal.

12-304.11 Completion Stage of Terminated Work

a. As a step in their review of termination inventory, Government technical personnel may determine the overall stage of contract completion at termination. When this is done, compare the relationship between incurred cost and contract price to the physical stage of completion. Although there may not always be a direct correlation between cost incurred and percentage of physical completion, a significant disparity may suggest that a loss-contract situation exists. In these cases, obtain an estimate to complete and compute a loss adjustment (see 12-308).

b. Where the Government terminates only part of the units to be produced under the contract, the contractor should assign the least processed items to the termination inventory. By doing this the contractor keeps its proposal to a minimum (other factors being equal). The contractor might decide, however, to include items in the proposal which are in more advanced stages of production to increase the termination cost and the physical completion percentage of the terminated inventory and thereby earn a higher profit. Make sure the contractor assigns the least processed inventory items to the termination inventory. Two specific test procedures normally used follow:

(1) When termination inventory items are partially complete, determine whether similar items were put into production after the effective termination date, or whether the contractor performed any production steps on similar items preceding the stage of completion of the items included in the termination inventory.

(2) When termination inventory items are complete units or subunits (finished components, subassemblies, etc.), determine whether the contractor worked on them after the effective termination date.

c. A yes answer to either of the above situations would normally suggest the contractor did not assign items which were in the least stage of completion to the termination inventory. Question any excess costs resulting from the contractor's failure to assign the least processed items to the termination inventory.

12-304.12 Obsolete Materials and Tooling

Where the Government made a previous change in the design or specifications of the end products terminated under a contract and the proposed settlement is on an inventory basis, review the termination inventory items to determine whether the inventory includes items that may have become obsolete due to the contract change. Do not accept obsolete materials and tooling costs as part of the termination inventory if the contractor received consideration for costs attributable to obsolescence by negotiating an equitable change in contract price of items delivered. Where the contractor waived adjustment of the contract price because there was enough in the original price for the contractor to absorb the cost of the obsolete material and the Government later terminates the contract, the contractor may not then make claim for the obsolete materials in its termination settlement proposal. The contractor's previous decision to absorb the costs is binding.

12-304.13 Special Tooling

a. Verify that items the contractor claims as special tooling agree with the definition of special tooling in FAR 2.101b. When the contractor can use the tooling on other work, it does not qualify as special tooling, and the costs are not allocable to the terminated portion of the contract. In many cases, obtaining a technical opinion on whether claimed special tooling meets the definition contained in FAR may be appropriate.

b. The contractual intent of the Government and the contractor on reimbursing special tooling costs affects their allowability. The Government may intend to reimburse the contractor as part of the product price or as a separate contract line item.

(1) When there is no indication on the method for reimbursing special tooling costs, assume reimbursement through the product price. Thus, the costs are allocable to both the terminated and nonterminated portions of the contract.

(2) If special tooling represents a separate, nondeliverable contract line item, the contractor may claim tooling costs only if it has not previously received payment for the tooling. In this case, regardless of the amount expended on tooling, the Government would limit recovery in the termination settlement to the line item price less any payments previously received for tooling.

(3) When special tooling is a contract deliverable item, the contractor is paid the contract price only if the tooling is available. If portions of the tooling have been consumed, lost, or are otherwise unavailable, the Government reduces the contract price of the tooling for this as well as for previous payments.

c. Question special tooling costs when:

(1) The contractor acquired the special tooling before the date of the contract, or as a replacement of items so acquired.

(2) The special tooling claimed is actually consumable small tools or items more appropriately classified as capital goods.

(3) The special tooling exceeds the contract requirements. For example, when the contract is for designing and producing a prototype unit and only a few experimental parts are needed, the contractor should normally not purchase special tooling intended for mass production. The contractor may have exceeded requirements based on expected future contracts.

d. The usefulness of the special tooling may have been expended during the production of the finished and delivered units. No part of such tooling costs would be allocable to the terminated portion of the contract. All or a portion of the special tooling required may relate only to the terminated units not entered into production. Therefore, all or a portion of the tooling cost incurred to the termination date would be allocable to the completed portion of the contract.

12-304.14 Special Machinery and Equipment

a. Auditing special machinery and equipment costs included in termination settlement proposals is similar to auditing special tooling costs. Determining that a particular item of machinery or equipment is "special" is usually a technical matter. Also, a legal opinion on the intent of the contracting parties may be needed. To qualify as "special," the equipment or machinery must be of a type rarely used in the contractor's industry (i.e., peculiar to the needs of the Government). Do not consider machinery or equipment special when it is:

(1) ordinary or normal-type equipment in the contractor's industry,

(2) similar to other facilities owned by a contractor, or

(3) usable on other work without loss to the contractor.

b. Allowability of loss on special machinery or equipment depends on the original intentions of the contracting parties. When a contract requires that a contractor purchase certain special machinery or equipment to perform the contract, and the Government considered the cost when setting the contract price, the contractor can recover the loss of useful value of the special equipment at termination. The maximum allowance for loss of useful life, however, should not exceed that portion of the equipment cost considered in establishing the contract price which applies to the terminated units.

c. When the special equipment purchase was not specifically considered during the contract negotiations, reimbursement for loss of its useful value is not automatically discounted, though it may raise a question about the "special" nature of the equipment. A usual consideration in granting a contract is that the contractor has the equipment to do the work required and meet delivery schedules. The auditor may have good reason to question the cost when, for example:

(1) the contractor continues to use the machinery on other work,

(2) the contractor owned the machinery before the contract date, or

(3) the contractor is unwilling to transfer title to the Government if the transfer is required upon honoring the termination claim.

12-304.15 Indirect Costs – Termination Inventory

a. Audit the makeup of the indirect cost pools and how the contractor distributes them to determine the propriety of indirect costs assigned to the termination inventory. Section 6-600 provides the techniques for auditing indirect cost pools and indirect cost allocation. Section 12-309 discusses the application of indirect costs to termination effort. In auditing indirect costs assigned to the termination inventory, determine that the amount does not include allocations for indirect cost items which are the same or similar to those claimed elsewhere in the settlement proposal as direct charges under other direct costs, settlement expenses, material handling charges, or other cost categories. Confirm that the termination inventory excludes indirect costs not properly allocable because of the completion stage of the terminated inventory. For example, packing, shipping, and inspection costs would not apply to undelivered items.

b. In some cases, the contractor may need to deviate from its normal costing practices to properly assign certain indirect costs to the termination inventory. Section 12-105 discusses the influence of Cost Accounting Standards.

c. Contractors may request permission to leave packing and shipping expenses in overhead pools. In return the contractor will pack and ship the termination inventory without any other specific charge. If such arrangements increase the claim, question the additional costs.

12-305 Auditing Other Termination Costs

a. Costs other than settlement expenses applicable to the terminated portion of the contract, which are not claimed in other cost categories, may be claimed under "Other Costs." Other costs (see 6-500) frequently include such items as initial costs, engineering costs,

royalties, severance pay, rental costs under unexpired leases, travel costs, and costs continuing after termination. Perform tests to ensure that the contractor has not claimed other costs on a direct charge basis while treating the same or similar items as indirect charges.

b. One problem facing the auditor in auditing other costs such as severance pay or rental costs under unexpired leases, is determining the reasonableness of the amounts claimed. Since there may not be any direct relationships between the amounts claimed for these types of items with the cost of material, labor, and overhead in the termination inventory, examine the basic agreements under which these costs were incurred. Also evaluate their allocation to the terminated portion of the contract, and determine whether the contractor gave proper consideration to their residual value. A technique used to indicate possible excessive claims for these items is to determine whether including the claimed amounts in the total estimated cost to complete the contract would have resulted in an overall loss. Where the auditor cannot reach a conclusion on the reasonableness of other cost items, classify these costs as unresolved (see 12-313b). Include in the audit report appropriate available information and comments giving your best judgment on their propriety.

c. The ASBCA has ruled (ASBCA No. 16947, Systems Development Corporation (1972)), that when severance pay paid as a mass severance pay per FAR 31.205-6(g)(2)(iii) is determined allowable and allocable to the terminated contract (see 12-305.4), it is a direct cost of the contract even though not attributable to specific work on the contract. Therefore, mass severance pay should be classified as other direct costs.

d. Proper classification between other costs (costs which would have been incurred under the contract if it had not been terminated) and settlement expenses (costs incurred as a direct result of the termination) is essential because profit is not applied to settlement expenses (to classify mass severance pay refer to 12-305c.).

12-305.1 Initial Costs

a. Initial costs include starting load costs and preparatory costs. The allowability criteria for initial costs are in FAR 31.205-42(c).

b. The two major areas considered in the contractor's determination and the auditor's review of initial costs are the (1) identification of total dollars, and (2) allocation of these dollars to the terminated portion of the contract. Regarding identification, FAR 31.205-42(c)(4) provides, "if initial costs are claimed and have not been segregated on the contractor's books, segregation for settlement purposes shall be made from cost reports and schedules which reflect the high unit cost incurred during the early stages of the contract." To be considered, the contractor must submit the claim for initial costs and be able to support it with reliable data taken from formal or informal records. Contractors rarely segregate initial costs in their formal records or books of account, and, therefore, claims normally involve informal records, cost reports, production data, etc., as well as judgmental estimates. In these cases, evaluate the supporting documentation, the reasonableness of the total amount claimed, and the allocation to the terminated work.

c. One area usually identified with initial costs is the rate of production loss during the early production stages. The contractor should have scrap reports, efficiency reports, spoilage tickets, etc., available to develop and support a claim for a high initial production loss. Another initial cost category that is often readily identifiable is initial plant rearrangement and alterations. The contractor usually sets up a work order or service order to perform this work and accumulates costs against the work order. Management and personnel organization and production planning costs may be difficult to evaluate. If claimed, the contractor will probably base these costs on estimates, and help from technical specialists may be necessary.

d. The remaining elements of initial costs are defined in FAR 31.205-42(c)(1). They include items such as idle time, subnormal production, employee training, and unfamiliarity or lack of experience with the product, materials or processes involved. Although the FAR states that these costs are nonrecurring in nature, they may occur periodically

throughout the life of the contract. As production continues and learning takes effect, these costs should lessen. This learning process may be expressed using an improvement curve as discussed in EZ-Quant. Distinguishing between normal production labor and labor due to idle time, subnormal production, employee training, or lack of experience may be difficult. However, many contractors maintain data on these factors in the form of efficiency reports, equivalent units produced, etc. This data is often acceptable for supporting starting load costs.

e. Once identified, the second consideration is that of assigning the initial costs to the terminated and nonterminated portions of the contract. Usually the contractor can assign initial costs to delivered and terminated units in proportion to their respective quantities. Initial costs which cannot be directly identified but which constitute diminishing costs discussed earlier can be assigned by using an improvement curve (see EZ-Quant). For instance, the contractor can use the learning curve technique to project total direct labor hours if the contract had been completed. Average direct labor hours per unit can then be determined and applied to the delivered units. The quantity so assigned would then be deducted from the total labor hours required to produce the delivered items. The difference can then be costed using historical labor and indirect cost rates, to determine the initial costs allocable to the terminated portion of the contract.

f. Determining if initial costs are reasonable usually involves analyzing the causes of initial costs as well as comparing these costs to those experienced on similar programs. High initial costs may indicate that a loss would have occurred had the contract gone to completion.

12-305.2 Engineering Costs

a. Engineering costs may be claimed as other costs that apply to the terminated portion of the contract. The allocability of engineering costs to a termination claim depends on why they were incurred, whether the contract was completely or partially terminated, and whether the engineering work had been completed by the termination date. Allocability may also be influenced by the type of engineering involved; i.e., whether it was:

(1) for designing and developing the end products,
(2) for preparing drawings or technical manuals,
(3) for production planning or plant rearrangement, or
(4) for designing and developing special tooling, special machinery, or equipment.

b. When the contractor's claim for engineering costs applies to designing and developing the end product, find out whether engineering costs were included in the end product price, or whether the design work is covered by a separate item in the current contract or by another contract. If the costs were included in the end product price and the engineering work is complete, the engineering costs may partially be properly allocable to the terminated portion of the contract. In this case, recommend acceptance of the properly allocable portion of engineering cost provided the Government's interests and rights to the design are properly protected. If the engineering work is not complete, and there is a continuing portion of the contract to which it pertains, the contractor should not allocate engineering costs to the terminated portion of the contract. As compensation for unrecovered engineering cost, the contractor should apply for an equitable adjustment of the price of the continued items. This latter procedure was adopted to simplify the Government's consideration of these costs.

c. Costs for drawing or technical manuals are usually priced separately from other contract items. Engineering costs for these items are therefore not allocable to the partial termination of other end products.

d. Allocable engineering costs for plant rearrangement and production planning usually are acceptable in a complete termination. However, if the work is not complete at the partial termination date, the contractor's claim should be for an equitable adjustment of the contract price of the continued portion of the contract, rather than against the terminated portion of the contract.

e. When the engineering work is for designing special tooling, machinery, or equipment, consider the costs as allocable to or part of the special tooling or equipment, rather than to the end product. When the contract contains a separate item for special tooling or equipment, or when there are diverse end products, considering the design costs as applying to the tooling or equipment rather than to the end products can result in a significantly different allocation to the terminated portion of the contract.

f. The contractor's accounting records may not show the engineering time spent on the contract. The contractor may, therefore, base its claim for engineering performed on estimates. A method to test the accuracy of these estimates is the "rate of effort" technique. In applying this technique, divide the contractor's total claim for engineering cost by the contractor's average staff-month wage cost for engineering to determine a comparative number of full-time engineers depicted by the contractor's claim. For example, if engineering costs claimed are $18 thousand and the contractor's average engineering wage cost is $1 thousand per staff-month, the claim would represent 18 staff-months of engineering effort. If the period between the contract date and the termination date was three months, the claim would represent the full-time services of six engineers ($18 thousand divided by $1 thousand equals 18; divided by 3 equals 6). This technique may suggest that the contractor's claim represents several times the effort that available engineering personnel were capable of performing. Whenever possible, state in the audit report whether the claimed estimate approximates the "rate of effort" required to achieve the engineering work actually performed.

12-305.3 Royalties and Other Costs for Using Patents

a. Contract terms and the FAR provisions incorporated in the contract determine the allowability of royalties, license fees, patent or license amortization costs. These costs are usually allowable if necessary for contract performance unless:

(1) the Government has a license or the rights to free use of the patent,
(2) the patent has been ruled invalid,
(3) the patent is considered to be unenforceable, or
(4) the patent has expired.

b. The contractor's right to use a patent may benefit the terminated contract only or the terminated contract and other work. Determine whether there is benefit to other work, and whether costs are properly allocated between the terminated contract and the other benefiting work. For a claim prepared on the inventory basis, determine that the cost or fee claimed is properly allocable to the terminated portion of the contract.

c. Where the agreement for patent use provides for royalties or fees only on delivered contract end items, no payments are allocable to the terminated portion of the contract.

12-305.4 Severance Pay

a. Severance pay is payment in addition to regular salaries and wages to employees whose services are being terminated. Such costs are allowable only when payment is required by:

(1) law,
(2) employer-employee agreement,
(3) established policy that is, in effect, an implied agreement on the contractor's part, or
(4) circumstance of the particular employment.

Normal severance pay relates to recurring, partial layoffs, cutbacks, and involuntary separations and is an allowable cost when properly allocated. A termination, however, may result in a significant employee layoff and the resultant severance pay amount may be substantial. FAR 31.205-6(g)(2)(iii) provides that periodic or annual accruals for abnormal or mass severance pay are not allowable, but the costs are considered on a case-by-case basis when incurred.

b. In considering the allowability and allocability of mass severance pay, determine:

(1) The impact of termination on the contractor's work force. A termination claim should not be a way to recover severance pay generated by an employee layoff resulting from other conditions.

(2) The rights of employees and whether the contractor can use the employees on other work.

(3) The Government's share of the contractor's business during the period the severance pay was earned. Employees may have earned the right to severance pay over an extended period during which the contractor's business was commercial rather than Government. Allocating total severance pay to Government work, in such a case, would not be equitable.

(4) The method by which the contractor computed severance pay and the proposed payment method. The contractor's plan may provide for severance payments over an extended period, but payments stop if the employees obtain other positions.

(5) The effect of mass severance on existing reserves for normal severance, supplemental unemployment benefits, and pension funds. Substantial credits may result from nonvested rights in pension funds or other sources which the contractor may not have considered.

c. The conditions under which terminated employees will receive severance pay vary from one contractor to another. Depending on the contractor's policy or employer-employee agreement, the contractor may tie the liability for severance pay to the supplemental unemployment benefits plan. In this event, the final liability is unknown for an extended period. When some part of mass severance pay appears allocable but the total amount is unknown when audited, report the amount as unresolved. Furnish pertinent details and recommend that the contracting officer put an appropriate reservation in the settlement pending the subsequent determination of the actual amount (see 12-313b).

d. Exclude mass severance pay amounts from any computations made to determine whether the contractor would have suffered a loss had the contract run to completion, unless the contractor would have experienced the layoffs anyway.

12-305.5 Rental Costs Under Unexpired Leases

a. Rental costs under unexpired leases are usually allowable where supporting records show that the lease was reasonably necessary to perform the terminated contract if:

(1) the rental amount claimed does not exceed the reasonable value of the property leased for the period of the contract and any future period as may be reasonable, and

(2) the contractor makes reasonable efforts to terminate, assign, settle, or otherwise reduce the cost of the lease.

b. The cost of leased property alterations necessary to perform the contract and the cost of reasonable restoration required by the lease provisions are also allowable. Adjust unexpired lease costs by any residual value of the lease due to the termination, assignment, or settlement of the lease agreement.

c. Verify that the length of the lease was not significantly longer than the anticipated contract performance period, and that the lease cost was not significantly higher than comparable space in the same general area. FAR 31.205-36(b) limits lease costs between organizations under common control to the normal ownership costs such as depreciation, taxes, insurance, and maintenance.

d. Where a terminated contract effects only a part of the effort at a leased facility, the contractor might submit a claim because other work will now have to absorb lease cost otherwise absorbed by the terminated contract had it run to completion. In this case, determine whether the contractor leased the space due to receiving the contract now terminated, or if the contractor leased the facility before receiving the contract. If the former condition exists, the allocable portion of the cost may be acceptable if it otherwise meets

the above criteria. If the latter is true, the premises are a part of the contractor's normal plant facilities and no amount for unexpired rental cost would be acceptable.

12-305.6 Travel Costs

Reasonable travel costs allocable to the terminated portion of the contract are allowable. When a settlement proposal includes travel costs, determine whether they benefit the entire contract or only items completed and delivered. For example, if travel cost relates directly to installing or interfacing end items, no travel cost would be allocable to the terminated portion of the contract. Normally the auditor would question any amount so claimed. Reasonable travel costs incurred in termination activities are settlement expenses. If included as Other Costs, reclassify them.

12-305.7 Costs Continuing After Termination

a. Costs continuing after the effective termination date due to the contractor's negligent or willful failure to discontinue them are unallowable. The effective termination date is the date the termination notice first requires the contractor to stop performance, or the date the contractor receives the notice, if the contractor receives the termination notice after the date fixed for termination.

(1) Reasonable costs associated with termination activities are allowable. FAR 31.205-42(b) recognizes there may be instances where costs incurred after termination may be allowable. For example, the contractor may have contract personnel at a remote or foreign location or there may be personnel in transit to or from these sites. The cost of their salaries or wages would be allocable to the terminated contract for a reasonable period required to transfer the personnel to sites for termination or use on the contractor's other work. In another example, components or end items may be in a heat-treating or electroplating process when termination occurs and the contractor may elect to complete rather than disrupt the process and risk complete loss of the items.

(2) In cases such as the above example, make sure that the contractor's decision did not increase the Government's costs. Also make sure these costs (i) are classified as costs of contract performance rather than settlement expenses (see 12-305(c)), and (ii) do not represent efforts by the contractor to convert raw materials and purchased parts to work-in-process, or to convert work-in-process to finished items solely to advance the completion stage to increase costs and/or profit recoverable by the claim.

(3) After receiving the termination notice, the prime contractor may decide not to immediately terminate its subcontracts. The prime may first have to determine the scope of the termination, review the completion stage of subcontracts, and determine requirements on other contracts to consider diverting components to other work. This may take time during which subcontractors are continuing to work. Overall, however, the efforts of the prime contractor may result in subcontract claims far less than would otherwise have occurred. Work closely with knowledgeable technical personnel when reviewing the reasons why the prime contractor failed to immediately terminate its subcontracts.

(4) Floor checks and plant perambulations performed immediately following a contract termination in the physical area(s) affected will usually show whether the contractor is taking necessary steps to stop work and to divert personnel to other assignments. Where appropriate, request technical help from Government personnel familiar with the production areas and processes.

b. Question amounts claimed as unabsorbed overhead, under whatever name, representing expected overhead or parts of it absorbed by the contract if not terminated (see FAR 31.205-42).

The Armed Services Board of Contract Appeals (ASBCA) has issued decisions stating that post-termination unabsorbed overhead is not recoverable in a termination claim. In Technology, Inc., ASBCA No. 14083, 71-2 BCA 8956 and 72-1 BCA 9281, the Board held that unabsorbed overhead relates to the contractor's existence as an ongoing organization and

is not a continuing cost of a terminated contract. Further, the Government is not a guarantor of the contractor's continuing overhead nor is this intended by the language in the termination clause. In Chamberlain Manufacturing Corp., ASBCA No. 16877, 73-2 BCA 10,139, the Board affirmed the previous decision using similar reasoning. The Board stated further that a loss of business, whether in the guise of post-termination G&A expense or otherwise, is not recoverable in a termination claim. The decision also reads that the continuing costs to which FAR 31.205-42 refers clearly are only those costs directly related to the terminated contract and if the drafters of the regulation had intended to allow unabsorbed overhead they could have done so simply and clearly as they did for rental costs.

c. While unabsorbed overhead is not allowable as part of a termination settlement, it may be appropriate for an equitable adjustment resulting from a partial termination.

12-306 Auditing General and Administrative Expenses

a. Determine whether:

(1) the individual items in the G&A pool are allowable,

(2) the allocation base is equitable, and

(3) the amount allocated to the termination claim is reasonable.

In auditing this area, use the appropriate FAR Part 31 cost principles, and the audit guidance in 6-600.

b. Including the subcontract settlement amounts in the allocation base for G&A is acceptable if including them otherwise satisfies the allocability criteria in FAR 31.201-4, 31.203, and 31.205-42(h).

c. Contractors often direct charge G&A type expenses as part of settlement expenses in addition to the G&A allocated to the rest of the claim. When the contractor uses this procedure, ensure that any G&A allocated to the rest of the claim does not include costs charged directly as settlement expenses and that these direct charges are excluded from the G&A allocated to continuing contracts. As an alternate procedure, the contractor may choose to recover G&A type settlement expenses by applying normal G&A. This procedure is acceptable provided the method does not result in an inequitable allocation to other contracts (also see 12-309).

d. Sometimes applying a full G&A expense rate to the amounts included in a termination claim is not appropriate. The contractor should limit developing a special (less than full) G&A rate to those rare situations where the termination inventory is significant and its cost pattern is clearly different from that of any other contracts or work segments in the normal allocation base. For example, a contractor's normal allocation base for G&A expenses may be cost input, but the settlement proposal includes only unprocessed material costs. In this case, it may be appropriate to develop a special G&A expense rate based on eliminating from the expense pool those items which relate exclusively to labor, overhead, and finished items.

12-307 Evaluating Profit or Loss

a. Profit is allowed for preparations made and work done by the contractor on the terminated portion of the contract. Profit is not allowed (1) on work not performed due to the termination, (2) subcontract material and services that have not been delivered to the prime contractor as of the effective date of the termination, or (3) settlement expenses. The contracting officer will consider the contractor's settlement efforts and the character and difficulty of subcontracting in arriving at a profit objective (see FAR 49.202).

(1) The auditor should determine whether a terminated contract would have resulted in a loss if it had gone to completion. Determining this is important because (a) no profit is allowable if it appears that the contractor would have incurred a loss had the contract been completed, and (b) termination claims are reduced by an amount equal to the pro rata share of any reduced profit that would have occurred had the contract been completed.

(2) An auditor can usually determine the anticipated profit rate with reasonable accuracy if the contract was substantially complete at the time of termination. For a partial

termination, if cost information is available on the continued portion of the contract, determine the anticipated profit rate. Request the contractor, through the contracting officer, to furnish an estimate of the cost required to complete the terminated portion of the contract. Review the estimate with necessary help from technical representatives (see 12-302g). The contractor's estimate to complete may be conservative and show that no loss would have occurred. Make a concerted effort to evaluate the contractor's projected profit.

(3) There is no contractual requirement for the contractor to furnish an estimate to complete. If the contractor declines to submit an estimate to complete or states that a cursory review found that no loss would have occurred, technical personnel with auditor assistance can prepare the estimate to complete. Developing data that shows a loss in this situation may place the burden on the contractor to submit data regarding its profit or loss position.

b. When evaluating a contractor's projected profit rate, consider what allowable costs would have been incurred without the termination. In cases where common items may have been diverted from the terminated portion of a contract to the contractor's other work or if the contractor has not claimed all costs that would be allowable under a contract, include them in projections of costs to complete the contract.

c. Where there is no reasonable basis for the contractor to determine the profit rate had the contract gone to completion or the auditor cannot make a realistic evaluation of the contractor's projection, include in the audit report information and comments that may prove helpful to the negotiator. This might include comments such as:

(1) the profit rate realized on the end products completed to date of termination,
(2) the contractor's average experienced profit rate on similar products,
(3) the profit rate both parties intended when the contract was negotiated, and
(4) the profit amount the contractor would receive under a formula settlement if the contract termination clause provides for its use.

d. Quantitative methods are useful tools when auditing termination settlement proposals. For example, applying statistical sampling to inventory costing or to incurred costs can save considerable time. Also, an understanding of improvement (learning) curve techniques (see EZ-Quant) is essential, particularly when evaluating contractors' and subcontractors' estimates to complete the contract. While most auditors normally associate using an improvement curve with evaluating direct labor hour estimates, auditors may also use it in evaluating the estimated prices of direct material parts and components. Factors considered when evaluating the cost estimate to complete include:

(1) cost experience data available before the Government terminated the contract,
(2) directly applicable experience for an entire product line previously produced, or
(3) other similar experience from other products or components.

When applying improvement curve techniques, follow the audit guidance in EZ-Quant.

12-308 Adjusting for Loss Contracts

a. For terminated "loss" contracts, FAR 49.203(b) and (c) state the methods for determining the maximum to be paid on inventory and total cost settlements. Fundamentally, these methods are intended to adjust the contractor's termination claim. The Government does this by applying to the amount claimed a percentage calculated using the total contract price compared to the total estimated cost incurred had the contract been completed. The following examples illustrate the loss adjustment under the inventory basis and the total cost basis.

(1) Assume a termination having the following conditions:	
Total contract price (50 units @ $2,400 each)	$120,000
Total amount invoiced for completed units (35 units @ $2,400 each)	$84,000
Total costs incurred under the contract	$135,000
Settlement with subcontractor	5,000

Estimate of cost to complete contract ($10,000 + subcontract - settled for $5,000)			$ 15,000
Settlement expenses			$ 1,000
Disposal credits			$ 5,000
Units completed and delivered prior to termination			35
Units completed and on hand and not to be delivered			5
Units terminated			10
(2) Assume also that the contractor submitted a settlement proposal on the inventory basis as follows:			
Finished components	$7,000		
Work in progress	3,250		
Dies, jigs, fixtures, and special tools	2,000		
General and administrative expenses	1,000		
Other costs	3,000	$16,250	
Profit		2,000	
Settlement expenses		1,000	
Settlements with subcontractors		5,000	
Acceptable finished product (adjusted for freight and packaging savings)		11,000	
Less disposal credit		(5,000)	
Net payment requested		$30,250	
The amount recommended for settlement, assuming all claimed costs are otherwise acceptable, would be computed as follows based on FAR 49.203:			
Settlement expenses		$ 1,000	
Contract price, as adjusted, for acceptable completed end item		11,000	
Total settlement amount otherwise agreed to or determined, adjusted for estimated loss		17,000*	
Less disposal credit		(5,000)	
Recommended settlement amount		$24,000	

*Computed by multiplying the sum of the contractor's own costs of $16,250 plus settlements with subcontractors of $5,000 by the ratio of the total contract price of $120,000 to the total indicated cost of $150,000. Total indicated cost is composed of the total cost of $135,000 incurred prior to termination plus the estimated cost of $15,000 to complete the entire contract:

$$\$21{,}250 \text{ X } \frac{\$120{,}000}{\$150{,}000} \text{ or } \$21{,}250 \text{ X } 80\% = \$17{,}000$$

(3) Assume that the contractor submitted a proposal on the total cost basis as follows:			
Direct material	$24,000		
Direct labor	30,000		
Indirect factory expense	50,000		
Dies, jigs, fixtures, and special tools	10,000		
Other costs	15,000		
General and administrative expenses	6,000	$135,000	
Less finished product invoiced or to be invoiced		(84,000)	$51,000
Profit			0
Settlement expenses			1,000
Settlement with subcontractors			5,000
Disposal and other credits			(5,000)

Advance, progress and partial payments	(0)
Net payment requested	$52.000
The amount recommended for settlement, assuming all claimed costs are otherwise acceptable, would be computed as follows based on FAR 49.203:	
Settlement expenses	$ 1,000
The total settlement amount otherwise agreed to or determined, adjusted for estimated loss	112,000
Less disposal credit	(5,000)
Less amount previously paid contractor	(84,000)
Recommended settlement amount	$ 24,000

[1] No claim for profit made by contractor because the contract price has been exceeded.

[2] Computed by multiplying the sum of the contractor's own costs of $135,000 plus settlements with subcontractors of $5,000 by the ratio of the total contract price of $120,000 to the total indicated costs of $150,000. Total indicated cost is composed of the total costs of $135,000 incurred prior to termination plus the estimated cost of $15,000 to complete the entire contract:

$$\$140{,}000 \text{ X } \frac{\$120{,}000}{\$150{,}000} \text{ or } \$140{,}000 \text{ X } 80\% = \$112{,}000$$

b. When there are unpriced changes existing at the time of the audit, inform the contracting officer that the loss adjustment is tentative and will require recomputation if the changes result in upward or downward revisions of the total contract price. Similarly, where the contractor uses estimates for subcontract settlement amounts, advise the contracting officer that the loss adjustment will require recomputation if negotiated settlements differ from the estimated amounts.

12-309 Auditing Termination Settlement Expenses

a. For ease in settling a termination proposal, the contractor should establish a separate job order or code to which settlement expenses can be directly charged. Allowable settlement expenses in a termination claim, listed in FAR 31.205-42(g), may include but are not limited to the following:

(1) Accounting, legal, clerical, and similar costs reasonably necessary for the preparation and presentation of settlement claims and supporting data and for the termination and settlement of subcontracts.

(2) Reasonable costs for the storage, transportation, protection, and disposition of property and inventory acquired or produced for the contract.

b. Methods of accumulating settlement expenses vary. Contractors may charge only for the costs of direct labor and material expended, or the labor charges may include an amount for related overhead costs such as supervision, space, fringe benefits, and other costs. When a contractor has established a special termination department, all direct costs on termination activities may be accumulated and overhead burden added to cover other costs of the termination department. Costs may then be equitably distributed to specific settlements. Auditing settlement expenses requires a decision on the accuracy, reliability, and reasonableness of the claimed amounts. Audit procedures outlined for examining the contractor's other costs equally apply to verifying settlement expenses.

c. When the contractor accounts for settlement expenses as direct charges, it should maintain labor time cards and distribute labor costs to the terminated work. Confirm that the contractor has not assigned highly paid personnel to routine work. When possible, contractor's employee time records covering settlement activities should describe the par-

ticular work performed. Perform tests to ensure that indirect allocations do not duplicate other claimed costs.

d. FAR 31.205-42(g)(1)(iii) lists some of the indirect costs applicable to termination efforts. These are normally limited to those types of costs that are applied to indirect labor. However, a full burden of indirect costs is appropriate when the contractor's established practice is to charge such labor effort direct to contracts. This concept is also applicable to termination efforts that are not specifically listed in FAR 31.205-42; i.e., the application of indirect costs should be consistent with the established practice for any effort that would have been charged direct had the effort been incurred under ongoing contracts. When termination functions include costs which are usually charged direct and are included in the G&A base in accordance with the contractor's established accounting practices, it would be appropriate to allocate normal overhead and G&A to the termination settlement expenses. In contrast, when a contractor's usual practice is to charge the types of costs included in termination functions to G&A, it would be inappropriate to allocate G&A to such expenses because they are not a part of the G&A base.

e. When the contractor improperly burdens termination effort, the auditor should question the improper burden on the basis of allocability. In addition, if the contractor burdens termination effort differently based solely on the status of the submission (proposal versus claim), the auditor should cite the contractor for noncompliance with CAS 402.

f. Determine whether personnel compensation cost directly included in the settlement expenses reasonably relates to the time required for termination activities. This is particularly important when settlement expenses include the time of officers and executive personnel. The contractor should normally have records to support the amounts claimed.

g. When the contractor identifies and charges settlement expenses directly to termination claims, the contractor should absorb settlement expenses applicable to no-cost settlements.

h. Question costs beyond those considered reasonably appropriate for the termination settlement such as for unnecessary work, unrealistic professional fees, etc. Where the auditor cannot resolve the reasonableness of an amount, refer the amount to the contracting officer as unresolved cost, furnishing factual information and comments which may be useful to the contracting officer in deciding if the costs are acceptable (see 12-313b).

i. A contractor may decide to obtain professional accounting services to help settlement proceedings. Reasonable costs of these services, including preparing the settlement proposal, may be reimbursed to the contractor. Evaluate the reasonableness of accounting service charges by considering the complexity of the proposal compared to the number of staff-days represented by the fee amount.

j. Where the contractor claims legal expenses, evaluate their reasonableness considering the time charged, the nature of the services provided, and the relationship of the legal expenses to the total termination settlement amount. Include appropriate comments in the report. For contingent fee arrangements, i.e. where the legal fee is based on the negotiated settlement amount, clearly describe this arrangement in the report.

k. Settlement expenses may include reasonable storage costs incurred in protecting termination inventory, but these are allowable as settlement expenses only during the plant clearance period as defined in FAR 45.601. Allowable storage costs should not exceed the cost that would normally be incurred to care for and protect the inventory and should represent an equitable allocation of the contractor's total storage costs. As discussed in FAR 45.612-2, 45.612-3, and DFARS 245.612-3, when a contractor stores termination inventory in a special warehouse or other special storage location, on or off its own premises, it must absorb the additional (above normal) storage expense, including any related removal expenses. This is unless the contracting officer has determined that such removal or storage is for the convenience of the Government. Undue delay by the contractor in submitting acceptable inventory schedules or prolonging the plant clearance period should not increase storage charges to the Government. Following the plant clearance period, the contractor may request

the contracting officer to remove the inventory items, or to enter into a separate storage agreement covering them.

l. As noted above, settlement costs may include, as a direct charge to the termination settlement, costs the contractor has disclosed or established as indirect costs. At contractors where there is continuing auditable work ensure that the contractor credits expense pools for the costs allowed as a part of settlement expenses before developing rates to be applied to other contract effort.

m. When a termination settlement proposal becomes a Contract Disputes Act claim (see 12-101i), legal and consultants' costs incurred in the prosecution of the claim are unallowable. Refer to 12-606 for guidance. However, legal and consultants' costs reasonably necessary to prepare and support a termination settlement proposal for negotiation (discussed in a.(1) above) are generally allowable as contract administration function costs (see FAR 31.205-42(g)).

12-310 Auditing Subcontractor Settlements

a. Termination settlements with subcontractors follow, in general, the principles on prime contract settlements. A subcontractor does not have contractual rights against the Government when its subcontract is terminated. A subcontractor's rights are against the prime contractor or higher-tier subcontractor with which it has contracted. The prime contractor and each subcontractor is responsible for settling termination proposals of its immediate subcontractors based upon the contract terms and applicable regulations (see also 12-204).

b. When DCAA did not perform the audit of a subcontractor's termination claim, the auditor at the prime location will evaluate the review done by the prime contractor. The auditor should particularly evaluate, on a selective basis, settlements made by the contractor without contracting officer approval or ratification using the authority granted to the contractor under FAR 49.108-4. The auditor should have available the prime contractor's complete case file. The file should contain, as a minimum, a complete copy of the subcontract; a copy of the subcontractor's settlement proposal, with any amendments or revisions; audit and technical evaluations; minutes of all settlement negotiations; and related correspondence.

c. Where deficiencies exist, discuss them with the contractor and explain them in the report issued on the prime contract termination settlement proposal. If additional independent verification is required, send a request for an assist audit to the cognizant auditor. The request should fully explain the areas of apparent deficiencies to prevent duplication of effort. Call the contracting officer's attention to any pattern of settlements which appear questionable or which suggest that the contracting officer should restrict or withdraw settlement authority granted.

d. The Government and subcontractors can make direct settlements under unusual circumstances by having the prime contractor assign the subcontract to the Government. The standard prime contract termination clause allows subcontract assignment. Direct settlements with subcontractors, however, are only done when the contracting officer determines that they are in the best interest of the Government.

12-311 Auditing Disposal and Other Credits

Credit amounts included in a settlement proposal normally represent:
(1) an offer by the contractor to purchase inventory at less than cost,
(2) the proceeds from the sale of termination inventory, or
(3) a combination of (1) and (2).

A contractor's offer to purchase inventory at less than cost is subject to review by plant clearance personnel and to negotiation between the contractor and the contracting officer. When the offer is to purchase for a percentage of cost, verify that the contractor has considered the full cost of the material including any applicable labor and burden rather than just the purchase cost of the material. Also verify that the contractor made all sales of ter-

mination inventory at prices not less than those approved by the plant clearance officer (FAR 45.610).

12-312 Auditing Advance, Progress, or Partial Payments

a. Advance, progress, and partial payments are amounts paid to the contractor before, during or after contract performance/termination. The amounts do not represent payments for completed items invoiced at the contract price. Any unliquidated amounts paid to the contractor under advance, progress, or partial payments must be offset against the final settlement proposal. Final accounting for all advance, progress, and partial payments is part of the final settlement and is verified by the finance or disbursing officer before final payment. The audit report should note any inaccuracies in the amount reported by the contractor to prevent unnecessary complications in the final accounting for termination payments.

b. The contracting officer may request an audit of interim settlement proposals submitted to support requests for partial payments on terminated contracts. The auditor should honor these requests. However, since an audit will typically be performed on the final settlement proposal, an examination of interim proposals usually need not be done. Make sure that the claimed costs have been incurred and that the accumulated partial payment amount does not exceed the total amount the contractor is expected to receive in final settlement of the termination claim.

12-313 Format, Content, and Distribution of Audit Reports

a. Use the guidance in 10-700 for preparing and issuing audit reports on termination settlement proposals.

b. Use the criteria and guidance in 10-304.8 in determining questioned costs. Section 10-304.8 provides the criteria for unresolved costs. However, because of the particular nature of termination actions, the unresolved costs category is extended to include amounts applicable to those types of items on which the auditor is unable to reach a conclusion because the contractor's net cost or liability will not be firmly established until a later date. Examples of these items are severance pay and the cost of unexpired leases.

12-400 Section 4 --- Auditing Terminations of Cost-Type Contracts

12-401 Introduction

a. The purpose of this section is to furnish guidance for auditing terminated cost-type contracts.

b. The contract cost principles relevant to the contract involved still govern the allowability of costs if the contract is terminated. Under terminated cost-type contracts, the contractor has various options for claiming costs after the termination date. Paragraphs 12-402 and 12-404 below discuss these options. These paragraphs also advise whether only a contract audit closing statement is necessary or whether a contract audit closing statement and an audit report are required.

12-402 Options Available

a. When the Government has completely terminated a cost-type contract, the contractor is given the option of either vouchering out costs incurred both before and after the contract termination date (continuing to request reimbursement for incurred costs on standard public voucher forms) or submitting a settlement proposal. The Government limits the option to voucher out costs to six months, after which the contractor must claim unvouchered costs associated with the terminated contract on Standard Form (SF) 1437, Settlement Proposal for Cost-Reimbursement Type Contracts. The contractor's exercise of its option to claim costs on SF 1437 is irrevocable. Once selected, all unvouchered costs must be submitted on the settlement proposal form. The last voucher submitted under the vouchering out procedure is considered the "completion voucher." The contractor should specifically identify it as such, even though there may be unvouchered costs which the contractor plans to submit in the settlement proposal. Process this voucher as set forth in 10-900. The contractor must submit its proposal to determine the final fee amount under the contract by letter or by SF 1437.

b. When the Government partially terminates a cost-type contract, FAR 49.304 limits with certain minor exceptions, the settlement to a fee adjustment, if any. The contractor shall submit a settlement proposal covering this adjustment. The contractor shall continue to submit an SF 1034 (“Cost Voucher” in Wide Area Workflow) for all reimbursable costs requested under the contract, including:

(1) its own costs allocable to the terminated portion of the contract,

(2) settlement costs for subcontractors, and

(3) applicable settlement expenses (see 12-402.1a).

c. Normally, a selection to voucher out means the auditor will issue a contract audit closing statement (using the guidance in 10-900) once he or she has completed the audit. A selection to submit a settlement proposal usually means the auditor will also issue an audit report (in addition to the closing statement) using the guidance in 10-700. Further comments on this are in 12-404.

12-402.1 Costs and Fee Vouchered Out

a. When the contractor decides to continue vouchering out, it submits contract costs in the usual manner on Standard Form 1034 (“Cost Voucher” in Wide Area Workflow). Costs submitted on vouchers may include all contract costs, including settlement expenses and settlements with subcontractors. For terminated contracts under the cognizance of DLA, contractors must submit separate properly identified vouchers for subcontract settlements and for settlement expenses. Such contractors must also submit all subcontract termination settlements to the TCO for prior approval and ratification, except those settlements under FAR 49.108-4. The contractor must furnish evidence of the approval with the SF 1034 voucher (“Cost Voucher” in Wide Area Workflow). When the contractor has vouchered out all costs within the six month period, it may submit its claim for fee, if any, on SF 1437 or by letter appropriately certified.

b. Disapprove costs submitted on SF 1034 (“Cost Voucher” in Wide Area Workflow) that are similar to those covered by a GAO formal exception or presented on a "reclaim voucher."

12-402.2 Costs and Fee Submitted in a Settlement Proposal

The contractor should submit settlement proposals to the contracting officer within 1 year from the effective termination date unless contract terms or agreement extends the period. The auditor's function in auditing the settlement proposal is advisory and is primarily to help the contracting officer negotiate an equitable settlement. Perform the audit of costs included in the settlement proposal under a cost-type contract using the guidance contained in Chapter 6 and 12-300, as appropriate. Verify that the contractor has excluded previously reimbursed costs from the proposal. When the contractor includes costs previously disapproved by a DCAA Form 1, or costs disapproved under a GAO exception (or are of a similar nature), question the amount. When the settlement proposal covers a contract termination for default, question costs incurred in preparing the proposal.

12-403 Fee

a. The termination clause of the contract governs the adjusted fee, unless there are other contract clauses that exempt the determination of the fee from the clause. The adjusted fee shall be based on the percentage of completion of the contract, but should not include an allowance for fee for subcontract effort included in subcontractors’ settlement proposals (FAR 49.305-1). In determining the contract completion percentage, the Government gives consideration to the work done by the contractor in handling the termination notice, settling subcontractors' claims, and disposing of the termination inventory. To help the contracting officer adjust the fee, provide comments on the total estimated cost to complete the contract. Also provide comments on the relationship between the physical percentage of completion and the percentage of costs incurred to the total estimated cost of performing the contract. The auditor should also comment if the contractor incorrectly applied fee to subcontract costs.

b. When specific contract provisions exempt the determination of the fee from the termination clause, the provisions of such clauses govern. For example, a cost-plus-award fee contract usually specifies that the amount of the fee is determined by the fee determining official (FDO). Accordingly, the award fee clause may stipulate that the award fee is not subject to the Allowable Cost and Payment or Termination (Cost Reimbursement) clauses of the contract. Review the contract for a restrictive fee payment clause and provide comments to the contracting officer on any relevant cost data.

12-404 Contract Audit Closing Statements on Vouchered Costs and Fee

Auditors must prepare a contract audit closing statement or final audit report, showing the costs and fee billed on public vouchers (Standard Form 1034) for each terminated cost-type contract. Follow the procedures contained in Chapters 6 and 10 to prepare and distribute contract audit closing statements. Closing statements should address:

(1) any disapproved costs the contractor intends to appeal,
(2) the fixed fee amount paid through the last voucher, and
(3) whether the fee is subject to a final settlement adjustment.

When all costs incurred under the terminated contract have been vouchered out, the contractor should submit all enclosures that regularly accompany contract audit closing statements. Also follow this procedure when the contractor has stopped using vouchers and the settlement proposal includes other unvouchered costs, except the "Assignment of Refunds, Rebates and Other Credits" is not required. The Government will incorporate this document into the settlement agreement after negotiations.

12-405 Terminated Cost-Type Subcontracts

A prime contractor or upper-tier subcontractor may terminate cost-type subcontracts. Termination may be for convenience of the Government or for default. Audit concerns for a terminated subcontract are similar to a terminated prime contract. When auditing subcontract settlement proposals, follow the guidance provided for auditing terminated prime contracts. Unless the auditor receives a specific request through Government channels, he or she should not normally audit and report on settlement proposals prepared by subcontractors since this is a prime contractor responsibility. Be alert, however, to situations where an audit may be desirable and where the interested procurement activity should be informed (see 12-204 and 12-406).

12-406 Termination of Subcontracts for the Convenience of the Contractor Under Cost-Type Contracts

The contractor or the Government may find it necessary to adopt changes in the manufacturing or engineering effort or in material requirements while performing a cost-type contract. After receiving a contract change, the prime or upper-tier subcontractor must terminate orders or subcontracts that become unnecessary due to the contract change. The contractor should carry this out by using the termination clause in the subcontract. It should base settlements on the cost principles incorporated in the terminated subcontract. In some instances, the Government may allow an equitable adjustment of the prime contract price under the changes clause in the contract. The auditor of the prime contractor involved in such adjustments is responsible for ensuring that subcontracts terminated under these circumstances are settled in the Government's interest since the settlement amount becomes part of the prime contractor's claim for an equitable adjustment. The auditor should therefore establish a means for the contractor to notify the audit activity of such subcontract terminations. When a terminated subcontract settlement appears to have been based on inadequate review by the prime contractor, the DCAA auditor at the prime or upper-tier subcontractor should request an audit of the subcontractor's termination proposal.

12-407 Expediting Indirect Costs Settlement

a. Final settlement of a terminated cost-type contract may be unduly delayed if settlement is withheld until indirect cost rates are established using FAR 42.705 for the final period in which the contract was performed. To prevent these delays, FAR 49.303-4(a) permits the contracting officer, after receiving the audit recommendations, to negotiate an indirect cost amount for the final period of contract performance and thus promptly produce a final settlement of the contract (see 6-711.2).

b. Normally, the auditor provides final determined indirect cost rates for the entire contract performance period. If prompt final determination is not possible, authority to expedite indirect cost settlement and contract close out is discussed in 6-711.1 and 6-1010. As a further factor, note that FAR 49.303-4(b) requires the contractor to prepare its indirect cost proposal for other contracts completed during the period by eliminating from the total pools and allocation bases the corresponding indirect costs and related direct costs applied to the terminated contract.

12-408 Impact of Limitation of Cost or Funds Clause on Termination Settlements

a. When a contract that includes the Limitation of Cost (FAR 52.232-20) or Limitation of Funds (FAR 52.232-22) clause is terminated, the contractor’s recovery of settlement proposal costs (proposed contract costs plus proposed settlement expenses) may be limited because of the total amount allotted by the Government to the contract. Allowable and

reasonable settlement expenses are subject to the Limitation of Cost or Funds clause. Refer to 12-309 for guidance on the audit of settlement expenses.

b. Under FAR 52.232-20 and 52.232-22, the Government is not obligated to reimburse the contractor for costs incurred in excess of cost or funding limitations. Similarly, the contractor is not obligated to continue performance under the contract or otherwise incur costs in excess of the limitation or, if the contract is cost sharing, the amount then allotted by the Government to the contract plus the contractor's corresponding share. Refer to 11-102 for further details.

c. To determine questioned costs under a termination settlement proposal, the auditor should:

(1) Evaluate the settlement proposal costs (proposed contract costs plus proposed settlement expenses) per 12-309 and 12-401 - 406. Question any unallowable costs.

(2) Quantify the allowable proposed contract costs and the allowable settlement expenses.

(3) Determine prior allowable contract costs not included in the termination settlement proposal.

(4) Add the allowable proposed contract costs and settlement expenses (Step 2) and prior allowable contract costs (Step 3) to determine the total allowable costs.

(5) Ascertain the total amount of funds allotted to the contract including any revisions to the original contract funding.

(6) Compare the total allowable costs (Step 4) to the total funds allotted to the contract (Step 5). Question any allowable costs that exceed the funding limitation.

(7) Total questioned costs are the sum of unallowable proposed contract costs and unallowable settlement expenses (Step 1) and costs in excess of the funding limitation (Step 6).

12-500 Section 5 --- Price Adjustment and Contract Settlement Proposals or Claims - Overview

12-501 Introduction

This section provides general information and guidance for auditing contractor price adjustment and contract settlement proposals or claims.

12-502 Price Adjustments and Contract Settlements

a. Equitable adjustments are a large subset of the universe of price and settlement actions. Equitable price adjustments result from changes made by the Contracting Officer that are within the general scope of the contract. When changes made within the general scope of the contract cause an increase or decrease in the contractor's costs or the period of performance, there is an equitable adjustment in the contract price including costs and profit and the contract is modified. Requests for equitable adjustment submissions include both proposals and claims (see 12-504(b)).

b. Delay/disruption represents a unique type of equitable adjustment. Delay/disruption proposals or claims are requests to recoup costs as a result of Government caused delay/disruption. Depending upon the type of contract and the circumstances underlying the delay/disruption, such requests may be made under FAR 52.243 (standard change clauses), FAR 52.242-15 (stop-work order clause for supply and service contracts), or 52.236-2 (differing site conditions for fixed price construction and demolition contracts). However, adjustments under the suspension of work clause for construction contracts (FAR 52.242-14), and the Government delay clause (FAR 52.242-17) do not include profit and therefore are not equitable adjustments. Auditors should contact the CO to determine the clause under which the claim was submitted.

c. A termination for convenience settlement proposal is a contract settlement action under a termination clause. A termination settlement proposal is a contractor’s submission for costs incurred because the Government terminated or partially terminated the contract for convenience. A termination settlement agreement amends the contract to incorporate all mutually agreed upon terms arising from negotiation of a settlement proposal. However, in the case of a partial termination for convenience, the contractor is authorized to request an equitable adjustment in the prices of the undelivered unterminated items of the contract. While a request for equitable adjustment may be submitted as a result of a partial termination, it is a separate action from the termination settlement proposal. The request for equitable adjustment is subject to the same requirements, including certification requirements, as equitable adjustment proposals or claims submitted in other circumstances. Refer to 12-100 for further guidance on termination for convenience settlement proposals.

d. Extraordinary relief requests represent contract price adjustments submitted pursuant to the provisions of 50 U.S.C. 1431-1435. (See 12-900)

12-503 Audit Adequacy of Proposals or Claims

Determine whether proposals or claims are adequate for audit (i.e., submitted in substantially the same format and containing the same data as required in FAR 15.408, Table 15-2; compliant with applicable regulatory and contractual requirements) before beginning the audit. Immediately notify the contracting officer of inadequate proposals or claims to facilitate the decision on acceptability. The written notification should describe the specific inadequacies, the cost impact of the inadequacies, and the data needed to correct the deficiencies. If, after FAO Manager and/or RAM involvement with contract administration management, the contracting officer insists that an audit be performed on the inadequate proposal or claim, confirm this in writing and advise the contracting officer that an audit cannot be performed on unsupported items, and, as a result, all unsupported items will be

questioned and an adverse audit opinion will be expressed on the proposal or claim. Use the checklist provided in the standard audit programs for delay claims and equitable adjustment proposals or claims to determine if the proposal or claim is adequate for audit. The following are some items to consider when determining adequacy of a proposal or claim.

a. When a price adjustment proposal or claim applies to work completed or substantially complete, allowable costs should be determined based on actual cost data reflected in the accounting and performance records.

b. While circumstances may require judgmental estimates, contractors must fully disclose all data used to prepare estimates, including any cost data that is factual and verifiable. In the case of a contractor that was not required to have a suitable cost accounting system because the contract was awarded based on price competition, obtain, at a minimum, a summary of the requested price adjustments and provide specific reference to the source accounting documents.

c. Cost or pricing data is required when price adjustment proposals exceed the FAR 15.403-4(a)(1) threshold ( ) unless it meets one of the exceptions in FAR 15.403-1. The CO may also require that the proposal include the cost or pricing data in the format indicated in Table 15-2 of FAR 15.408. In such circumstances, contractors are required to comply with the supporting documentation requirements of Table 15-2. If contractor proposals exceeding the thresholds do not include cost or pricing data in the Table 15-2 format, they are considered inadequate for audit. Coordinate with the requestor or the contractor to obtain the data in the Table 15-2 format. If the cost or pricing data is not then provided in the Table 15-2 format, the proposal should be returned.

d. For claims, and for price adjustment proposals when cost or pricing data are not required, the contractor is not required to provide data in the Table 15-2 format. However, the contractor is required to certify that the supporting data included in the claim is accurate and complete (see 12-505(a)). To be complete (and adequate for audit), the data must be in substantially the same format as the supporting data required in FAR 15-408, Table 15-2. If contractor claims or proposals do not include supporting data in a format that is substantially the same as that required in Table 15-2, they are considered inadequate for audit. Coordinate promptly with the requestor or the contractor to obtain the necessary data. If timely and complete data is not obtained, the claim or proposal should be returned to the contracting officer with a request that the contractor provide the necessary support so that the audit can proceed. If the contracting officer insists that the audit be performed on the inadequate claim or proposal, follow the guidance in the lead-in paragraph to this section.

e. Amounts requested in a claim could be unsupported because the underlying accounting records were not provided to the auditor. When contracts contain the Audit and Records--Sealed Bidding clause, FAR 52.214-26, or the Audit and Records--Negotiation clause, FAR 52.215-2, contractors are required to make available to the Government all records that relate to the "litigation or the settlement of claims."

f. If a contractor appeals a contracting officer's decision on a claim to the appropriate Board of Contract Appeals or the Court of Federal Claims, the trial attorney may request an audit of the claim prior to a hearing before the organization. Under these circumstances, the rules of the Board of Contract Appeals or the Court of Federal Claims for obtaining evidence (contractor records) may take precedence. Prior to a hearing, "discovery," the procedures for exchanging information related to the claim between both parties (the contractor and the Government), may be voluntary or mandatory. Coordinate with the trial attorney to obtain data necessary to perform the audit.

g. In all instances, question costs in claims that are unsupported due to lack of access to records. Also question amounts in proposals that are not supported because the contractor has not provided access to the underlying accounting records (refer to 1-504.6a Impact of Contractor Denial of Access).

12-504 Contract Disputes Act

a. The Contract Disputes Act (CDA) of 1978 (41 U.S.C. 601-613), effective March 1, 1979, provides a comprehensive statutory procedure for resolving claims. FAR 52.233-1 provides the definition of a CDA claim. FAR Part 33 provides the policies and procedures for processing contract disputes and appeals under the CDA. A valid CDA claim, as defined in FAR 52.233-1, requires three elements: (1) a written demand or assertion by one of the parties (2) seeking as a matter of right (3) payment of money in a sum certain, an adjustment or interpretation of the contract terms, or other relief arising under or relating to the contract. All CDA claims exceeding $100,000, including those submitted for alternate dispute resolution (ADR), must be certified per FAR 33.207 (see 12-505). The CDA requires that all claims against the Government be first submitted to the contracting officer (CO) for decision. A contractor may appeal the CO's decision on the claim to an agency board of contract appeals or the Court of Federal Claims. The decision of an agency board of contract appeals or the Court of Federal Claims can be appealed to the U.S. Court of Appeals for the Federal Circuit. By mutual consent, the Contracting Officer and the contractor may agree to use ADR. ADR is defined in FAR 33.201 as "any type of procedure or combination of procedures voluntarily used to resolve issues in controversy." FAR 33.201 further provides that "these procedures may include, but are not limited to, conciliation, facilitation, mediation, fact-finding, mini-trials, arbitration, and use of ombudsmen."

b. The Court of Appeals for the Federal Circuit has interpreted FAR 33.201 to require a pre-existing dispute before a contractor can submit a valid CDA claim to the contracting officer in certain circumstances. The court ruled that FAR 33.201 requires that a "routine" request for payment (e.g., a voucher or an invoice) must be in dispute before it may be submitted as a CDA claim. "Non-routine" requests need not be in dispute before submission. Non-routine requests for payment are requests for a price adjustment for unforeseen or unintended circumstances that cause an increase in contract performance costs. Events that give rise to requests for price adjustments include: Government modification of the contract (Changes clause); differing site conditions (Differing Site Conditions clause); defective or late-delivered Government property (Changes clause); or issuance of a stop work order (Suspension of Work clause or Stop Work Order clause). In addition, termination for convenience settlement proposals are also non-routine and may qualify as a CDA claim (see below).

c. CDA claims include:

- requests for price adjustments for work already performed, containing all three CDA elements, that are submitted to the CO for a decision
- price adjustment proposals, containing the three CDA elements, for work that has been performed. However, the contractor did not invoke CDA procedures (mandatory contracting officer's decision) when initially submitting the proposal, but subsequently requests a CO's decision.
- termination settlement proposals where either (1) the CO is implicitly required to issue a final decision because negotiations are at an impasse, (2) the CO unilaterally issued a final decision, or (3) are submitted to the CO for a decision (refer to 12-101i)
- routine requests for payment, such as progress payments or public vouchers, when entitlement or quantum is in dispute that are submitted to the CO for a final decision.

d. The validation of a contractor's claim to CDA requirements is the responsibility of the CO. Therefore before proceeding with the audit, the auditor should consult with the CO on the determination as to whether: (1) a price adjustment is a proposal or a claim, (2) a routine request for payment is a claim, or (3) a termination settlement proposal is a claim. The audit report should indicate that the results of audit are based on the CO's determination as to the conformity of the request to CDA requirements.

e. It is important to know whether a submittal is a proposal or a claim because of the effect on certain audit issues. These audit issues include:

(1) accurate terminology in reporting (refer to 10-1102);

(2) proper type of certification (refer to 12-505 and 12-506);
(3) allowability of claim preparation legal and consulting costs (refer to 12-606); and
(4) allowability of interest (refer to f.).

f. The Contract Disputes Act requires that the Government pay interest on amounts found due on the claim at the rate established by the Secretary of Treasury. Thus, the rates used for computing interest on contract claims are the same as the cost of money rates listed in 8-414.2. Interest on contract claims accumulates from the date the contracting officer receives a valid claim until the payment date. Although not part of the audit of a claim, contracting officers may request assistance in computing the interest on a claim once it has been settled. Accordingly, it is critical to provide timely audits of claims. When the contractor submits an inadequate claim, the auditor should immediately coordinate with the CO using the procedures in 12-503.

12-505 Claim Certification Requirement

a. For contractor demands for immediate payment of money exceeding $100,000, the Contract Disputes Act (CDA) requires the prime contractor to certify that the claim is made in good faith, the supporting data are accurate and complete to the best of its knowledge and belief, the amount requested accurately reflects the contract adjustment for which the contractor believes the Government is liable, and the person signing the certificate is authorized to bind the contractor. Claims submitted under the CDA must be certified even when placed into alternative disputes resolution (ADR).

b. A contracting officer must issue his or her final decision on a certified claim of over $100,000 within 60 days of receipt or notify the contractor when the decision will be issued. A claim received but not evaluated for adequacy and/or audited in a timely manner could cause a contracting officer to fail to comply with the statutory time limit. Thus, a delay in the audit of a certified claim may force the Government into unnecessary litigation.

12-506 Proposal Certification Requirement

a. Under DoD contracts, the prime contractor must certify requests for equitable adjustment proposals that exceed the $100,000 simplified acquisition threshold (DFARS 243.204-71). A request may not be paid unless the proposal was certified. Per DFARS 252.243-7002, a prime contractor representative is required to certify at the time of submission that the request is made in good faith and that the supporting data are accurate and complete to the best of his/her knowledge and belief. The certification of a proposal does not substitute for the certification required under the Contract Disputes Act (see 12-505) for a claim.

b. The certification also requires the contractor to make full disclosure of all relevant facts, including cost or pricing data if required and actual cost data and data to support any estimates even if cost or pricing data is not required.

c. If a proposal lacks a required certification, the auditor should contact the CO to determine if a certification was provided.

12-507 Exit Conferences on Price Adjustment Proposals or Claims

a. Upon completion of the field work of a price adjustment proposal or claim, hold an exit conference per 4-304.1. Prior to holding the exit conference, coordinate with the contracting officer or Government trial attorney. If an audit is performed on a claim that is in litigation and is performed at the request of a Government trial attorney, the attorney may state in writing that the audit working papers and report will be covered by the attorney work product privilege and therefore should not be provided to the contractor without the attorney's written consent (See 4-304.7). In any case, non-DCAA personnel do not have the authority to overrule or to influence the auditor's judgment as to the appropriate con-

tent of the audit report. No information should be excluded from the audit report that is a material part of the audit conclusions (see 2-203).

b. Price adjustment proposals and claims may include estimates for work not yet completed and incurred costs or estimates based on incurred costs. Considering any restrictions outlined above, discuss at the exit conference with the contractor any factual differences found during the audit for estimates of future work included in the proposal or claim. For incurred costs or estimates based on incurred costs included in the proposal, discuss all audit conclusions with the contractor's designated official and try to obtain the contractor's reaction for inclusion in the audit report.

12-508 Auditor Participation in Alternative Dispute Resolution (ADR)

a. DoD has directed the use of ADR techniques as an alternative to litigation or formal administrative proceedings whenever appropriate (DoD Directive 5145.5). ADR refers to an array of dispute resolution methods that involve the use of third-party neutrals to aid the parties in resolving contract controversies using a structured settlement process. Often, auditors are asked to participate in ADR processes to assist in resolving equitable adjustment proposals or Contract Disputes Act (CDA) claims. Ordinarily, the auditor's participation in ADR should not differ from the role of an advisor to the contracting officer when resolving equitable adjustments through administrative proceedings, or the Government trial attorney litigating a CDA claim (1-403.1, 1-406, and 15-500).

b. Auditors may learn more about ADR by studying the Electronic Guide to Federal Procurement ADR, available on the Internet at http://www.adr.af.mil/iadrwg. The Guide was developed and published by the Interagency Alternative Dispute Resolution Working Group, including representatives from DoD and other Federal agencies. In Section III, Administering the ADR Process, Item D, Role of the Auditor, the guide explains the importance of obtaining audit input on financial matters as part of ADR.

12-600 Section 6 --- Price Adjustment Proposals or Claims - General Audit Guidance

12-601 Introduction

This section provides guidance that applies to contractor proposals and claims for price adjustments under the delay/disruption or the standard changes clauses of the FAR.

12-602 Scope of Audit and Special Audit Considerations

a. Depending upon when the request for price adjustment was prepared, contractor proposals may contain forecasted costs, actual costs, or a combination of both. For example, proposals that result from a Government-directed change and are submitted prior to implementation of that change would be based on estimated costs. Price adjustment requests (proposals or claims) that result from alleged abnormal conditions, such as delay/disruption, are usually submitted after the work is complete and therefore should be based on costs incurred. Guidance for auditing forecasted costs is contained in Chapter 9, while guidance for incurred costs is in Chapter 6. Coordination and acknowledgment of the audit request in accordance with 4-103 is critical to ensure the customer's needs will be met.

b. When proposals or claims relate to multiple contract issues, contractors often summarize their proposed or claimed costs by contract issue instead of by cost element. In these cases, auditors should perform additional procedures to ensure costs are not overstated or duplicated. Auditors should compare the total costs claimed for each significant cost element for all issues to the job cost ledger and/or bid/budget for each cost element. The auditor should discuss any significant differences with the contractor to determine the cause of the difference.

12-603 Extended Overhead versus Unabsorbed Overhead

Many courts have used the terms "extended overhead" and "unabsorbed overhead" interchangeably, but careful examination and comparison of their meanings reveal their difference. Unabsorbed overhead occurs if increased costs are allocated to other contracts because of work stoppage occurring on a delayed contract. Guidance for auditing a request to recover unabsorbed overhead is contained in 12-803. Extended overhead applies to contract changes that usually extend the period of performance. Overhead on increased direct costs related to the change is recovered through an indirect rate computed in accordance with the contractor's established accounting practices.

12-604 Prior Contract Briefing

a. Prior contract modifications may contain provisions that waive contractor rights to future price adjustments that arise from the same facts and circumstances. Whether or not a contractor has waived its rights is a legal question; however, the auditor should provide the requestor with any meaningful observations regarding prior contract-modification waivers. Therefore, the auditor should brief prior contract modifications to determine if any such waivers exist.

b. Auditors should also brief prior contract modifications to ensure current claimed/proposed costs have not been previously included under prior contract modifications. Whether or not prior contract modifications relating to the same facts and circumstances contain a contractor's waiver (see 12-604a) the auditor should question any costs in the current claim that are duplicative of costs reimbursed under prior contract modifications.

12-605 Subcontractor Equitable Price Adjustment Proposals or Claims

a. The prime contractor has the responsibility to review the subcontractor's proposal when cost or pricing data are obtained and the amount of the prime proposal exceeds the threshold per FAR 15.403-4(a)(1). The prime contractor should include the results of that review in its proposal when the subcontract exceeds the pertinent threshold in FAR 15.403-4(a)(1) or (2). The guidance contained in 9-104 applies to these subcontracts.

b. Subcontractors may not file a claim directly against the Government under the Contract Disputes Act of 1978 under their own name because they do not have privity with the Government. However, they may file a claim against the Government under the sponsorship rule. Under this rule, the subcontractor either (1) has the permission of the prime contractor to file a claim in the prime contractor's name or (2) has the prime contractor file the claim directly. Since the prime is the party to the Government contract with privity, the prime contractor (not the subcontractor) must submit a certification under the CDA of 1978 when the claim exceeds $100,000 (see 12-505). If the subcontractor submits a claim without the proper certification by the prime contractor, the submission is considered inadequate. See 12-503 for further guidance. In submitting the CDA certification, the prime contractor does not vouch for the accuracy of the subcontractor's claim. Instead, the prime is only required to conduct an inquiry into the claim sufficient to know there is a reasonable basis for the subcontractor's claim and that it is not frivolous or a sham. The submission of the CDA certification establishes a legal presumption that the prime contractor has met this requirement. Absent evidence to the contrary, boards and courts will not look beyond the certification.

12-606 Costs of Preparing and Supporting Equitable Adjustment Proposals or Claims

a. Costs incurred in the preparation and support of a request for equitable adjustment (REA) proposal, and in negotiations with the contracting officer are allowable. However, refer to 7-2105 for further guidance on the allowability of professional and consultant costs.

b. Costs incurred in the prosecution of a claim or appeal against the Federal Government are unallowable per FAR 31.205-47(f)(1). The use of the alternative disputes resolution (ADR) process does not make the costs allowable. Costs incurred in the prosecution of a claim include:

- legal, accounting, and consultant fees relating to the preparation and submission of a CDA claim
- costs incurred supporting negotiations subsequent to claim filing
- costs incurred in providing information to the contracting officer in support of claimed costs
- costs incurred in the appeal of the contracting officer's decision to an agency board of contract appeals, the Court of Federal Claims, the Court of Appeals for the Federal Circuit, or ADR procedures.

c. While there is a strong legal presumption that costs incurred prior to the filing of a CDA claim are not unallowable claim prosecution costs, if factual evidence clearly and directly relates the costs to the submission of a CDA claim, the auditor should question those costs. Claim prosecution costs incurred after the submission of the CDA claim to the contracting officer are unallowable even if incurred in support of negotiations. In addition,

costs associated with an ADR process (FAR 33.214) on a CDA claim upon which a final contracting officer decision has been issued and appealed are unallowable claim prosecution costs.

12-607 Chronology of Significant Events

Prepare a chronology of significant events to highlight potential key issues (an example is shown in Figure 10-11-1). Such a chronology enhances understanding of significant events leading up to or having a bearing on the proposal or claim. The contracting officer is required to provide a list of significant events when requesting an audit of a request for price adjustment per FAR 43.204(b)(5). If a list is not provided with the request for audit, contact the contracting officer and request that the list be provided. The list of significant events from the contracting officer should include:

a. Date(s) of contract award and/or modifications and dollar amounts;

b. Date of initial contract proposal and dollar amount;

c. Date(s) of each cited alleged delay or disruption;

d. Key performance dates (deliveries or other major milestones) scheduled at date of award and/or modification;

e. Actual performance dates;

f. Date entitlement to a price adjustment was determined or contracting officer decision was rendered, if applicable;

g. Date of certification of request for adjustment if certification is required;

h. Dates of any pertinent Government actions or other key events during contract performance which may have an impact on the contractor’s request for price adjustment.

12-608 Format, Content, and Distribution of Audit Report

a. Use the guidance in 10-1100, and Figure 10-11-1 of Chapter 10 in preparing and issuing audit reports on price adjustment proposals or claims. Sufficient narrative information should be included to provide the reader with a comprehensive understanding of the basis of the contractor's proposal or claim and the audit results. Include the contractor's reaction on all factual differences and the related auditor comments.

b. Despite the need to provide a basis for settlement, qualify the report (or render an adverse opinion) whenever the contractor's supporting documentation is not sufficient to support a conclusion on the acceptability of the submitted costs, and question the costs. Include a description of the documentation required to remove the report qualification.

12-700 Section 7 --- Auditing Submissions Under the Changes Clause

12-701 Introduction

FAR 52.243 provides the basis for price adjustments resulting from contract changes. Entitlement is a legal question; however, the auditor should provide the requestor with any meaningful observations regarding the question of entitlement. These observations may be provided in the audit report explanatory notes or in an appendix on other matters to be reported. Audit conclusions should be based on audit evidence related to quantum issues (refer to 12-802.1).

12-702 Special Audit Considerations

a. Auditors should evaluate the effort required by the contract and related modifications to determine if costs included in the submission are not already provided for under existing contract provisions. The auditor should also similarly evaluate proposals submitted for the contract which have not yet been negotiated.

b. For construction-type contractors, there are unique types of records that need to be considered, such as job site diaries, equipment utilization and maintenance records, and project status reports. These records include important information that should help substantiate the submitted costs.

12-703 Profit on Equitable Adjustment Claims

a. FAR 52.243, Contract Modifications, provisions and clauses, does not specifically exclude profit from requests for equitable adjustment under the provisions of the changes clauses (see 12-802.7 for delay/disruption clauses that exclude profit).

b. Contracting officers are responsible for determining profit rates and amounts for equitable adjustment proposals or claims. In those cases where submitted costs are questioned, do not question profit. However, to assist the contracting officer, compute the potential questioned profit using the proposed or claimed rate and show it in an explanatory note along with advisory comments such as evidence of underbidding. Identifying the rates as “proposed” or “claimed” will avoid any misunderstanding that the auditor is recommending a specific profit rate.

12-704 Equitable Adjustment Proposals or Claims - - Total Cost Method

12-704.1 Introduction

a. This section provides guidance for the audit of increased costs allegedly caused by Government action or inaction in proposals or claims which were computed using the total cost method.

b. The total cost method is sometimes used by contractors as a basis for calculating damages for an equitable adjustment. Under this method, the estimated cost of the work (the negotiated price net of profit or the contractor’s bid plus any modifications) is subtracted from the total cost of the work performed to determine the claimed amount. For example, a contractor had a firm-fixed-price contract for $1,980,000 to construct a building. Three months into the contract performance, the Government issued one change order to the contract that significantly changed the design of the building. The contractor’s total costs incurred on this contract at completion were $2,800,000. The contractor was able to show from bid cost sheets that the original cost estimate was $1,800,000 with a $180,000 profit. The contractor, therefore, claims that as a result of the Government’s change, it is entitled to an equitable adjustment of $1,100,000 ($2,800,000 - $1,800,000 costs bid = $1,000,000 + $100,000 profit). The total cost

method presents a considerable risk that the Government will pay for costs that are not related to the change. The courts (WRB Corporation v. United States, 183 Ct. Cl. 409 (1968) and Servidone v. United States, 931 F.2d 860 (Fed. Cir. 1991)) have identified four criteria of proof that the contractor must meet for the method to be accepted as a basis for pricing a claim. The boards of contract appeals and the courts have mostly rejected the method when the contractor is unable to meet the criteria. The criteria are:

- the nature of the change(s) makes it impossible or impracticable to directly determine actual related increased costs with a reasonable degree of accuracy;
- the contractor's bid was realistic;
- the actual incurred costs were reasonable; and
- the Government was responsible for all the differences between the bid and incurred costs.

c. Total cost method calculations are often modified to eliminate some of the inherent inaccuracies found in this method. This is then referred to as the modified total cost method. See 12-704.5 for guidance on the modified total cost method.

d. The contractor's computation of damages using the total cost method should be of last resort and should be used only in extraordinary circumstances when no other way to compute damages is feasible. Discrete proposal or claim pricing (that is, detailed pricing of specific additions and deletions) is the preferred method. The courts expect the contractor to make a reasonable attempt to use other methods. The fact that a contractor incurred more costs in excess of the bid or contract price does not necessarily indicate that there were changes, delays, acceleration, changed conditions, or disruption caused by the Government. A contractor who underestimates its bid or incurs unanticipated costs or costs due to inefficiencies may not use an equitable adjustment proposal or claim as a means to shift the risks or losses to the Government (see 12-703).

e. Proposals or claims are often based on several methods of pricing to include elements based on the total cost method, modified total cost method, estimates, estimates based on actuals, actual (segregated) discrete costs, and projected costs for future work. When a contractor computes damages using both total cost method and discrete costs, this may indicate that its accounting system was capable of segregating costs incurred specially on alleged change(s) but the contractor chose not to utilize the system's capabilities. Such information should be disclosed in the audit report.

12-704.2 Audit Objectives

Determine if proposed or claimed costs are acceptable as a basis for negotiation or settlement. In particular, the audit should determine whether the contractor has met the four criteria for applying the total cost method or modified cost method. Failure to meet the four criteria indicates that the contractor's proposal or claim for increased costs is not adequately supported and therefore should not be the basis for determining damages. Unsupported costs should be questioned. All findings related to the contractor's ability or inability to meet the criteria for using the total cost method should be provided in the audit report.

12-704.3 Audit Considerations

a. In some instances, contractors have applied the total cost method or modified total cost method to only certain elements of the proposal or claim. Contractors do not always indicate that a cost element is priced using the total cost method or the modified total cost method. In the audit report, auditors should indicate those elements where the contractor applied the total cost or modified total cost method. For example, in a claim for lost productivity, a contractor compared actual labor hours incurred on a contract to those estimated in its bid and labeled the computation a "productivity analysis." Nevertheless, the methodology was the total cost method. Therefore, auditors should evaluate all proposals

or claims to determine those elements that are priced using the total cost method or modified total cost method and apply the guidance in this section to those elements.

b. Brief the contract for clauses unique to the service component or agency that may limit costs. Auditors should analyze each change requested for limitations. For production contracts, determine if the contract contains First Article Testing provisions (FAR 52-209-4(c)), that may limit the costs for retests. Prior modifications to the contract should be reviewed for duplication of costs in the claim. Also the contractor may have submitted Engineering Change Proposals for relaxation of technical requirements that were included in the proposal or claim.

c. Technical assistance is critical in a total cost method audit. The determinations of the reasonableness of bid and incurred labor hours or material types and quantities are some of the technical aspects of the claim. Include in the request sufficient details of the issues that the technical specialist should address to ensure that when the technical report is written, the findings can be readily incorporated into the DCAA audit. A meeting with the technical specialist will help to ensure that there is a mutual understanding of the audit requirements.

12-704.4 Analysis of Criteria

The auditor should consider the following issues, if relevant to the circumstances, to determine if the contractor meets the criteria to use the total or modified total cost method for pricing its proposal or claim.

a. **Impossible to determine actual related increased costs.**
When the contractor has the opportunity and ability to segregate claimed costs but fails to do so, the Government should place less reliance on the claimed amounts. The contractor is expected to take reasonable steps to determine the actual costs with a reasonable degree of accuracy if:

- the contractor is, or should have been aware of changed work and/or informs the Government as it starts;
- the contractor's accounting system is capable of recording increased costs related to the changed work;
- the nature of the changed work lends itself to segregation and separate accumulation; and
- the contractor has demonstrated the ability to segregate and accumulate specific costs incurred under a contract.

Under the circumstances listed above there would appear to be no justification for not making a reasonable attempt to segregate the costs. Audit procedures include:

(1) Evaluating the contractor's accounting system to determine the capability and requirements to separately account for increased costs caused by the asserted changes. Determine if the contractor's policy and procedures require separate accounting for changed work. Review prior audit reports related to the period of contract performance on the adequacy of the contractor's accounting system. Determine if there were any accounting system deficiencies that would have impacted the contractor's ability to segregate the costs of the changed work.

(2) Determining if the contract included the Change Order Accounting clause. FAR 52.243-6 requires the contractor to have the capability to segregate the costs of changes if so directed by the contracting officer. Determine if the CO issued any directives requiring the contractor to establish separate cost accounts for activities related to changed work and if the contractor complied with the directive.

(3) Reviewing the disclosure statement for statements regarding the capability of the accounting system to segregate costs when necessary, if the contractor is CAS covered. For major manufacturing concerns, the accounting system should have the capability to collect and process cost data within a work breakdown structure and to expand work packages to a detail level. Determine if the contractor followed its disclosed practices and if not, why.

b. **Bid was realistic**.
A contractor who underestimates its bid may not use an equitable adjustment proposal or claim as a means to shift the risks or losses to the Government. Perform the following analytical procedures:

(1) Compare the bid with Request for Proposal (RFP) requirements. Normally the bid price is the contract price and is ascertainable from the contract, CO or the contractor. For example, a contractor bid a shorter delivery schedule than required by the RFP. A delivery schedule that is significantly shorter than that of the RFP may indicate an unrealistic bid. Also review the bid to ensure that the contractor bid all normal overhead rates or essential tasks or labor categories. If the contractor failed to bid significant elements of cost, it is likely that the bid is unrealistic. For example, the Government changed the contract specifications and drawings three weeks after the contract was signed. After contract completion, the contractor showed the auditor various contract cost records. These records showed that a private technical consultant had provided substantial aid to the contractor in assisting with the changed specifications. The accumulated cost of the consultant's services was $100,000 which the contractor claimed in an equitable adjustment. The contractor pointed out that the bid did not include any costs for this consultant and his work was caused by the Government's changing of the specifications. However, when reviewing the CO's contract documentation, the auditor found that the consultant had attended a post-award conference four days after the contract was signed (and prior to any notification to the contractor of changed specifications). The documents recorded that the consultant was expected to spend 300 hours working on the contract as originally planned at $125 per hour. Thus, $37,500 would have been spent on the consultant even without the change in specifications. Therefore, only $62,500 ($100,000 - $37,500) would be accepted as part of the equitable adjustment.

(2) Compare the contractor's bid with other contractors' bids for the same acquisition, if available from the contracting officer. Compare the proposed price to recent historical data of similar work. If the bid is significantly less, there is a risk that the contractor underbid and therefore the estimate was not realistic. Compare the contractor's bid delivery schedule with those of unsuccessful bidders. Technical assistance may be needed to determine the realism of the bid delivery schedule.

(3) Compare bid cost elements to incurred cost elements. Those elements where the bid and incurred costs are reasonably close would indicate a realistic bid. Those elements where the bid and the incurred costs are significantly different should be examined to determine the cause of the difference.

(4) Review prior audit reports on the contractor's estimating system for deficiencies that may have impacted the reasonableness of the bid. For example, does the contractor fail to consider similar experience on other contracts when bidding labor hours? Such a deficiency may indicate that the bid labor hours were excessively high because prior experience was not considered. Technical assistance may be required to determine if the bid hours were overstated.

c. **Incurred costs were reasonable.**
The contractor is expected to base the claim on incurred costs related to the changed work. Two acceptable pricing techniques used in determining the actual costs to the contract are:

- estimates made prior to the performance of the effort subject to equitable adjustment, and
- retroactive techniques using actual cost data.

Evaluation techniques include:

(1) Reconciling the claimed costs to the contractor's books and records. Question those costs proposed or claimed that were not incurred or would not be incurred. Determine if the incurred costs were allocable, allowable and reasonable in nature.

(2) Obtaining technical assistance to determine the cost realism of the estimate to complete if the contract is not yet complete and the proposal or claim includes an estimate to complete.

(3) Determining if the contractor used estimates based on incurred costs. Because of the failure to segregate actual costs related to the changed work, contractors may not use actual cost data. For instance, a contractor may estimate labor hours although actual hours are available. Any add-on factors increase the risk to the Government of paying for costs not related to the alleged extra contract work. Estimates have no presumption of reasonableness.

(4) Evaluating changed methodology, such as changed labor mix or revised make-or-buy decisions. If the contractor substituted one type of labor for another after the contract was awarded, there is a possibility that some increased costs are attributable to the substitution rather than to a claimable activity. If after bidding, the contractor decides to make rather than buy a part, some of the cost growth in a labor account could be due to a post-bid decision to make the part rather than buy it. Also, the contractor could decide to buy a part rather than make it after bidding. Therefore, the cause of cost growth in the material account could be attributable to that decision.

d. **Government is clearly responsible for the increased costs.**
There should be a cause and effect to show the Government's responsibility for the increased costs.

(1) Review the contract budgets for the period of performance and the contractor's policies and procedures for comparing actual performance to the budget. Identify and analyze variances the contractor should have identified as work was accomplished. Gather information on contractor-caused increased costs and increased costs due to the alleged changed work. For example, a contractor had the task of manufacturing six engines under a fixed price contract. The bid cost of each engine was $100,000. After the contractor had manufactured the first engine, the Government decided that the design should be changed. The newly designed engine cost $225,000 to manufacture. The contractor asked for an equitable adjustment of $125,000 per engine. The auditor, however, discovered that the first engine manufactured by the contractor, using the original design, actually had cost $150,000 and if the contractor had made all six engines using its own design, it would have experienced a $50,000 overrun on each engine. For this reason, the equitable adjustment per engine would only be $75,000 per engine ($225,000 - $150,000) rather than the $125,000 per engine claimed by the contractor.

(2) Determine if the contractor implemented any accounting changes having impacts that were not considered in the claim.

(3) Determine if the contractor recognized any increased costs attributable to its own mismanagement in scheduling or materials procurement. Also review correspondence between the contractor and subcontractors for indications of subcontractor failures to perform according to schedule, or other issues that would cause increased subcontract costs.

(4) Determine if there were extraordinary equipment repairs or delayed material ordering or deliveries that were charged to the contract and not the responsibility of the Government. Higher than normal material scrap costs may indicate contractor-caused cost growth. Bad weather during the performance period may have caused delays in performance or damages to construction sites that were not Government-caused.

(5) Evaluate increased incurred overhead costs that may have been caused by loss of planned contract awards, contractor-caused delays, or contract terminations that are not the responsibility of the Government under this contract. For example, the contract price used the contractor's indirect bid rate of 115% applied to labor, or $11,500 per unit for a 200 unit contract, a total of $2,300,000. After a Government-caused delay, the actual indirect rate was 130% of labor, or $2,600,000. The contractor submitted a claim for the $300,000 difference. However, during the audit of the claim, the auditor found that at the time of award, two of the contractor's major contracts had ended and were not replaced. Had the contractor taken this into consideration in the bid, the indirect bid rate would have been 125% of labor, or $2,500,000 for 200 units. Therefore, the auditor questioned $200,000 of the claim and requested a technical review of the remaining $100,000.

(6) Determine if the prime contractor proposed or claimed hours that were actually performed by a subcontractor. If the subcontract was firm-fixed-price and there was no

change to a cost reimbursable subcontract, any claimed hours would not be related to a liability of the prime contractor. Therefore the contractor would be requesting the Government to pay for costs not incurred.

12-704.5 Modified Total Cost Method

The modified total cost method is the most frequently used costing approach for equitable adjustments. The method starts with the total cost method calculations, as described in 12-704.1b, total costs incurred on the contract less the total bid or estimated costs. The results of this computation are then adjusted for admitted underbidding or contractor inefficiencies. The contractor may adjust the original bid costs to remove inaccurate bid costs or add in costs explicitly excluded from the original bid. Also, costs that are the responsibility of the contractor (contractor-caused delays) or are not the responsibility of the Government are removed from the actual costs. For example, a contractor's total cost on a firm-fixed-price contract was $1 million. The bid costs were $600,000. There was a change order three months after the award of the contract. The contractor's "cost growth" was $400,000 ($1,000,000 - $600,000 = $400,000). The contractor identified $100,000 of costs incurred because of its own inefficiencies. The contractor attributed the remainder of the cost growth, $300,000 ($400,000 - $100,000 = $300,000), to the Government change. However, there is a risk that the contractor did not eliminate all costs that are not the responsibility of the Government. Most of the objections to the total cost method remain. However, the courts have granted recovery under the modified total cost method (Servidone Construction Corporation v. United States, 931 F.3d 860 (Fed. Cir. 1991). The same criteria that are applied to the total cost method should be applied to the modified total cost method. Refer to 12-704.1-5 for further guidance.

12-705 Unrelated Costs

Except as permitted under 50 U.S.C. 1431-1435 (see 12-900), an equitable adjustment should not be used to increase or decrease a contractor's profit or loss position for reasons unrelated to the change (Pacific Architects and Engineers Inc. and Advanced Maintenance Corp. v. U.S., 491 F.2d 734, 203 Ct. Cl. 499 (1974)). Therefore, a contractor that underestimates its bid (refer to FAR 3.501-1) or incurs unanticipated costs or inefficiencies may not use the occasion of a price adjustment for new or modified (changed) work as a means to shift those already-priced risks or losses to the Government. The auditor should ensure that the contractor is not proposing or claiming costs unrelated to the changed work. Such unrelated costs may include labor rates, labor hours, indirect costs, direct material, and other direct costs. For example, a contractor may have experienced an unanticipated increase in labor costs prior to performing the change effort. Any attempt to reprice the labor on the entire or unchanged work should be questioned because it represents the contractor's assumed risk at contract formation. However, the contractor undertakes a new and unpriced risk when performing additional or changed work which was not anticipated at the time of award and which it is obligated to perform under the Changes Clause (Appeal of Stewart and Stevenson Services, Inc., ASBCA No. 43631, 97-2 BCA 29,252). Therefore, the change order effort can properly include the cost of performance including the increased labor costs for the changed effort. Technical assistance may be required to evaluate labor hours or material quantity costs. Question those costs included in the proposal or claim that represent increased costs unrelated to the change.

12-800 Section 8 --- Auditing Delay/Disruption Proposals or Claims

12-801 Introduction

a. A proposal or claim for delay/disruption is an assertion by a contractor that its costs were increased because of a Government-caused delay/disruption of its contract performance. The delay/disruption may extend contract performance within the same accounting period or to a subsequent accounting period(s).

b. Delay/disruption can cause the contractor to slow down or stop work, or perform work in an uneconomical manner. For example, some reasons for Government-caused delay/disruption include late delivery of or defects in Government-furnished material, equipment, or plans, or unusual conditions not known or anticipated when establishing the contract price. Also, changes in a Government contract resulting from defects in Government-furnished specifications or drawings can result in delays.

c. Use the standard audit programs, under activity code 17200, for performing price adjustment delay/disruption proposal or claim audits. These programs are included on the DCAA Intranet and the APPS.

12-802 Special Audit Considerations

Because of the unique nature of delay/disruption proposals or claims, it is important to closely coordinate in writing with Government technical personnel, using 4-103 and Appendix D for guidance. Request technical assistance as needed to understand the nature of the alleged abnormal condition (e.g., the causes, particularly the Government's participation, the duration, and the impact on work performance).

12-802.1 Entitlement and Quantum

a. Entitlement. Entitlement relates to whether the contractor has been impaired by Government action and therefore has a right to a monetary adjustment. Entitlement is a legal question; however, the auditor should provide the requestor with any meaningful observations regarding the question of the contractor's entitlement to recover delay damages (refer to 12-804c). These observations may be provided in the audit report explanatory notes or in an appendix on other matters to be reported.

b. Quantum. The purpose of the audit of a delay/disruption proposal or claim is to evaluate the quantum to determine if the proposed or claimed costs are acceptable as a basis for negotiation or settlement. Quantum is the amount of the monetary adjustment, assuming that the contractor’s assertion of entitlement is proven valid. The audit effort should be directed toward examining the contractor’s proposed or claimed costs (quantum) to determine if they are acceptable if the contractor were entitled to recover. For example, the auditor should, at a minimum, evaluate:

- If the amount proposed or claimed was incurred or estimated;
- If the contractor has source documents that establish that it incurred the costs at issue;
- If the costs submitted have been correctly allocated or charged to the contract or claim and
- If the costs submitted are allowable, pursuant to FAR 31.205 and the provisions of the contract.

12-802.2 Bonding Costs

a. The Miller Act requires performance and payment bonds for any construction contract exceeding $100,000 (FAR 28.102-1(a)) or when necessary to protect the Government's interest. Costs of bonding required pursuant to the terms of the contract are allowable.

b. Bond premiums are based on the total value of the contract including modifications. Bonding costs may be computed based on the payment rate applicable to the increased cost resulting from the delay. For example, a bonding formula may require payment at a rate of $10 per thousand for the first $500,000 of total contract costs, and a payment of $7 per thousand when total contract costs exceed $500,000. In such a case, if the original contract award is $525,000, the proper payment rate for the delay costs would be $7 per thousand, since the contractor has already exceeded the threshold for applying the $10 per thousand payment rate.

12-802.3 Labor

Some examples of reasons for adjustments to labor costs resulting from delay/disruption include (1) changes in labor rates because scheduled work was performed in another period or by different personnel than proposed, (2) changes in the number of hours required for maintenance or standby labor and/or changes in efficiency or learning, and (3) changes in required hours because of slow down or stoppage of work or work performed in an uneconomical manner. Changes in rates can normally be verified to the contractor's payroll records. The auditor should consider the use of improvement curve analysis to evaluate proposed adjustments in labor costs. Technical assistance may be particularly helpful in this area.

12-802.4 Indirect Costs – General

a. General. Indirect costs allocable to direct costs incurred as a result of the delay are allowable when computed in accordance with the contractor's established accounting practices (see 6-600). Any indirect cost (including unabsorbed overhead) that was submitted as direct cost must be excluded from the computation of rates allocable to the delay/suspension proposal or claim. In addition, for purposes of determining overhead rates for flexibly priced contracts, the applicable indirect cost pool should be reduced by the amount of indirect costs charged as direct costs under this delay/disruption proposal or claim. Failure to make these adjustments will result in a duplicate recovery of costs.

b. Construction Job Site/Field Overhead. Job site/field overhead consists of expenses required to support a construction contract that are not identifiable with any specific work or task within the contract. Job site/field overhead includes salaries for project managers, superintendents, guards, mechanics, and engineers; rental or ownership costs for offices, storage trailers, office equipment and supplies; temporary utilities (electricity and water); trucks; and automobiles. Contractors propose or claim recovery of job site/field overhead on change orders that increase work and/or extend the performance period of a contract. When the Pricing of Contract Modifications clause (DFARS 252.243-7001) is contained in the contract, evaluate the costs per FAR 31 cost principles. Evaluate the proposed or claimed job site/field overhead costs to ensure that costs associated with the overall operation of the business (home office overhead) are not included. Job site/field overhead costs are allowable as direct or indirect costs provided the costs are charged in accordance with the contractor’s established accounting system and consistently applied for all contracts (FAR 31.105(d)(3)). In M. A. Mortenson Co., ASBCA Nos. 40750, 40751, 40752, 98-1 BCA ¶29,658, the Senior Deciding Group of the board ruled that FAR 31.203, when applicable, prohibits a contractor from using more than one allocation method for recovery of job site/field overhead. In this case, the contractor used a per diem method (daily field overhead rate) when claiming job site overhead for changes and delays that increased the contract performance period but used a percentage markup method for changes that did not affect contract performance period. The latter approach was rejected since it was a departure from the contractor’s normal per diem method and violated the FAR requirement for a single distribution base for allocating a given overhead pool. In Caddell Construction Co, ASBCA No. 49333, 99-1 BCA, the board found irrelevant a contractor’s assertion that by deducting field overhead received as a percentage markup from the field

overhead pool used to calculate the per diem rate, recovery of excess field overhead would be avoided. Despite this assurance, the contractor would have been in violation of FAR 31.203(b) as interpreted in Mortenson.

12-802.5 Equipment Costs On Construction Contract Proposals or Claims

a. Contractors may claim increased costs because the equipment used in the performance of the contract sat idle during the asserted period of delay. Increased equipment costs on construction claims are allowable, but are subject to specific FAR provisions regarding their measurement. FAR 31.105(d)(2)(i)(A) states that actual equipment cost data should be used when it is available, both for equipment ownership costs (generally including depreciation and cost of facilities capital) and equipment operating costs (including such items as repair costs, fuel costs, and equipment rental costs). FAR 31.105(d)(2)(i)(B) gives additional examples of equipment operating costs. This FAR section states that in order to use actual cost data, it must be available for each piece of equipment, or for groups of similar series or serial equipment. However, when equipment is idle, it is not appropriate to charge rates or actual costs reflecting operating costs, such as gas, fuel, and operators, that are incurred only when the equipment is operating.

b. If actual cost data is not available, FAR 31.105(d)(2)(i)(A) permits the contracting agency to specify the use of predetermined rate schedules to compute equipment costs. Such schedules are developed by various Government and industry organizations and utilize various methodologies to develop cost rates for construction equipment. In the event actual cost data is not available, the auditor should examine the contract to see if a specific rate schedule is mandated. If the contract does not mandate a specific schedule, the choice of an appropriate rate schedule is subject to technical considerations.

c. The U.S. Army Corps of Engineers publishes an Equipment Ownership and Operating Expense Schedule (listed as an example of predetermined rate schedules in FAR 31.105(d)(2)(i)(B). This schedule lists different rates for average and standby usage. The Army Corps of Engineers Schedule also computes rates for average and severe conditions. Analysis of such designations is a technical area. The Corps of Engineers schedule also provides a worksheet to compute hourly equipment cost of equipment not specifically identified, taking into account a number of factors related to cost and usage. The basic methodology by which this or other schedules develop cost rates is also a technical area.

d. FAR 31.105(d)(2)(i)(C) states that when a schedule of predetermined use rates for construction equipment is used to determine direct costs, all costs of equipment that are included in the cost allowances provided by the schedule shall be identified and eliminated from the contractor's other direct and indirect costs charged to the contract. The auditor should examine contract direct and indirect costs charged to ensure that such costs have been removed. If the contractor's submitted equipment costs include costs contained in non-equipment cost categories at the time of bid, or in the contractor's overall accounting records, the auditor should gain an understanding of the reasons for reclassification of these items as equipment costs.

e. The contractor's submitted equipment costs should also be evaluated to ensure that the capitalization policy used to develop equipment rates is in accordance with the contractor's normal capitalization policy for the project. Items not customarily capitalized as equipment should not be submitted in the contractor's equipment costs. For example, if the contractor normally expenses the cost of wheelbarrows or small tools, they should be omitted from equipment calculations.

f. While rate schedules can produce equitable results, they may also produce results significantly different from the actual costs incurred. If contractors use such rate schedules, the auditor should ensure that the FAR criteria permitting the use of the schedules are met, and that the contractor's accounting system is not capable of identifying the equipment contract costs based on the applicable FAR criteria. If such data can be obtained (see a.), however, the schedules should not be used. Even if FAR does not permit

a contractor to use actual cost data, however, auditors should comment on any instances coming to their attention where the rate schedules appear to produce inequitable results.

g. The auditor should evaluate the contractor's submitted equipment costs to ensure that the equipment items contained in them can be traced to the contractor's books and records. The auditor should also analyze the accounting assumptions used in the computation of equipment cost. For example, data concerning equipment life, and year entered into service should be reconciled with other job records and companywide financial accounting data. To the extent that assumptions about salvage value are used in the contractor's submitted equipment cost calculations, they should also be verified. Any evidence found that demonstrates that the claimed equipment was used for other work should be reported to the contracting office. When a contractor has several jobs in the same geographical locality, audit risk may exist in this area.

12-802.6 Costs of Preparing and Supporting Proposals or Claims

Costs incurred to prepare a claim against the Government are unallowable (see FAR 31.205-47(f)). However, the costs incurred to prepare a request for price adjustment proposal (see 12-502) are allowable. Refer to 12-606 for further guidance.

12-802.7 Profit

Profit is specifically excluded under the provisions of FAR 52.242-14 and -17. Profit is not specifically excluded for requests submitted under FAR 52.242-15, FAR 52.243, or FAR 52.236-2. Delay/disruption proposals and claims may be submitted under various contract clauses with differing provisions for profit. Therefore, the auditor should evaluate the contractor's support for the proposed profit, including identification of the contract clause under which the contractor's delay/disruption proposal or claim is being made. See 12-703 for further guidance.

12-803 Auditing Unabsorbed Overhead

a. Unabsorbed Overhead. Unabsorbed overhead damages are often asserted in a delay/suspension price adjustment proposal or claim. They represent fixed overhead costs whose allocation to the contract has been impacted by the reduction in the stream of direct costs caused by the delay/suspension. Unabsorbed overhead is recoverable only if the delay or suspension of work caused the contractor to stand ready to perform to the exclusion of other potential work for an indefinite period (on "standby") (Safeco Credit and Fraley Associates Inc. v. U.S., 44 Fed. Cl. 406 (July 1999).)

The term "unabsorbed overhead" is actually a misnomer because all overhead costs are allocated to, and absorbed by, contracts in process. The term refers to the reallocation of fixed overhead costs among contracts because of the delay/suspension. The delay/suspension results in a contract being allocated less fixed overhead costs than it would have been allocated absent the interruption (the contract underabsorbs). At the same time, other contract(s) are allocated a greater amount of fixed overhead costs than they would have been allocated absent the interruption (these contracts overabsorb). When unabsorbed overhead costs are allocated to other contracts, the cost of performing the remaining work on these contracts (work that was not delayed/suspended) increases. Without compensating upward contract price adjustments, the company's profitability is decreased.

b. Adjustment to Flexibly Priced Contracts. Unabsorbed overhead costs recovered under a delay/suspension submission should be removed from the pool used to determine overhead rates for flexibly priced contracts. If unabsorbed overhead is significant, the auditor should not render closeout reports on contracts for periods in which an equitable adjustment submission is pending. After the submission is settled, the amounts collected for unabsorbed overhead should be subtracted from the expense pool(s) to preclude duplicate recovery.

12-804 Eichleay Method to Measure Unabsorbed Overhead

a. Eichleay Formula the Proper Method. The question of the proper method to measure unabsorbed overhead has been addressed in numerous board and court cases. The Court of Appeals for the Federal Circuit has specifically ruled that the Eichleay formula is the exclusive means for calculating unabsorbed overhead in cases arising out of construction contracts (Wickham Contracting Co., Inc. v. Fischer, 12 F.3d 1574, (Fed. Cir. 1994). The ASBCA has supported the application of the Eichleay formula for the recovery of unabsorbed overhead on manufacturing/supply contracts (Libby Corporation, ASBCA Nos. 40765 and 42553, 96-1 BCA 28,255, affirmed without opinion CAFC 96-1351 (Fed. Cir. 1997)).

b. Entitlement to Unabsorbed Overhead Damages. The U.S. Court of Appeals of the Federal Circuit (CAFC) (West v. All State Boiler, 146 F.3d 1368 (Fed. Cir. 1998) "All State") ruled that the elements of the claim (legal tests) that a contractor must show to recover unabsorbed overhead include:

(1)The delay/suspension was Government caused [when a Government caused disruption results in a delay of contract performance, Eichleay damages may be appropriate].

(2) The Government required the contractor to standby during the delay/suspension period.

(3) It was impractical for the contractor to take on other work.

(4) The delay/suspension caused the contractor to be unable to complete the contract within the original contract performance period, as extended by any modifications.

c. Prima Facie Case. Once the contractor has met these prerequisites, it has established a prime facie case for recovery of Eichleay damages. However, the Government can rebut the contractor's prime facie case by showing that:

(1) It was not impractical for the contractor to obtain a replacement contract(s) during the delay/suspension period;

(2) The contractor's inability to take on other work was not caused by the Government delay/suspension; or;

(3) The contractor was able to reduce fixed overhead expenses during the period of delay/suspension.

All State involved a construction contract. Its rulings on standby and replacement contract(s) have yet to be shown to apply in a manufacturing/supply contract environment. This guidance provides for circumstances involving a manufacturing/supply contract and the application of the Eichleay formula.

d. Report Observations on Entitlement. Report any meaningful observations regarding the question of the contractor's entitlement to recover unabsorbed overhead damages to assist Government officials in determining entitlement issues. Facts or circumstances that could assist the contracting officer in determining entitlement, may include:

- Evidence that the asserted Government delay/suspension did not cause any extension in the actual time of performance beyond the original or previously revised contract performance date.
- Evidence that the contractor was or was not able to begin work on the next new contract in the extension period because of continuing work on the delayed/suspended contract.
- Evidence that the contractor did or did not secure a replacement contract(s) or other substituted work between the start of the delay/suspension period and the end of the period of extension beyond the original or previously revised contract performance date.
- Evidence of contractor-caused delays that were concurrent with the alleged Government delay or suspension.
- Evidence that the contractor was aware of differing site conditions or other causes of the asserted Government-caused delay prior to the original bid submission.
- Evidence that the contractor was unable to obtain replacement work because its bonding capacity was limited due to circumstances unrelated to the Government-caused delay/suspension.

Provide observations on any evidence as discussed above in the audit report explanatory notes or in an appendix on other matters to be reported. See 12-802.1

12-804.1 Eichleay Steps

The three step Eichleay formula and a detailed explanation of each step follows:

Step 1. Fixed overhead allocable to the contract =

Contract billings Total billings for contract period	x	Total (fixed)* overhead for contract period

Step 2. Daily contract (fixed)* overhead rate =

(Fixed)* overhead allocable to contract
Days of performance

Step 3. Unabsorbed overhead =

Daily contract (fixed)* overhead rate	x	Number of delay days

* The term "fixed" has been added for clarity, although the courts do not include the term "fixed" when stating the Eichleay formula (see 12-804.3).

a. Step 1. The first step computes the total fixed overhead allocable to the delayed contract. Divide the total contract billings (see 12-804.2) for the delayed contract's actual performance period by the total company billings for all contracts performed during the delayed contract performance period (this is referred to as the allocation ratio), and multiply this result by the company's total fixed overhead (see 12-804.3) for the delayed contract's actual performance period. The actual contract performance period represents the actual days of performance (including the extension period) . It is the period from the start date of the contract until the date of contract completion. Note that the contract billings, total billings, the total fixed overhead and the performance days should be for the same time interval, i.e., the delayed contract's actual total performance period.

Price adjustment proposals or claims are sometimes submitted before the completion of the contract. The basic Eichleay formula does not preclude prospective billings from the computations, if they and other formula components including extension beyond original completion date can be reasonably estimated. In such cases, the associated formula components: contract billings, total billings for the contract period, total fixed overhead for contract period, and days of performance should also be extended to cover the entire time interval from the date of award to the date of expected substantial completion.

If the contractor includes additional unsubmitted or unsettled proposals or claims on the subject contract in the computations of contract billings and total billings for the contract period, question these amounts unless entitlement and agreement as to the appropriate amounts have been determined. Amounts for estimated unabsorbed overhead that are included in the claim should be removed from the contract billings component of the Eichleay formula, Step 1, because they represent duplicate recovery. The unabsorbed overhead amount would be included in the same formula used to compute the very same unabsorbed overhead amount.

Advise the contracting officer that unabsorbed overhead should, if possible, be computed and negotiated after all other items of the claim on the subject contract have been settled. This will ensure an equitable settlement is based on established costs.

b. Step 2. The second step computes the daily contract fixed overhead rate. Divide the fixed overhead allocable to the contract by the actual contract performance days. The ac-

tual performance days include the original or revised completion date and the extension period.

c. Step 3. Compute the total amount of unabsorbed overhead for the delayed/suspended contract by multiplying the daily contract overhead rate, which is determined in Step 2, by the number of delay days (the number of days of extended performance associated with the Government-caused delay/suspension beyond the original or previously revised completion date). Refer to 12-804.4 for further guidance.

12-804.2 Billings Data

Contract billings, as expressed in the Eichleay formula, are contract revenues recognized for the period of actual contract performance. Total billings are revenues for all contracts (including Government and commercial) recognized for the period of actual contract performance including the delay/suspension and extended performance periods and any previous modifications to the completion date. Contract progress billings do not always represent the recognition of contract revenue and therefore would not be a consistent measure in the formula. Long term contracts often contain complex formulas for progress measurement and payment, which may vary greatly among contracts. Contract revenues include contract costs plus profit.

a. Methods for recognizing long-term contract revenues. There are two generally accepted methods for recognizing long-term contract revenues: completed-contract method and the percentage-of-completion method, including units-of-delivery method. The AICPA Audit and Accounting Guide, Audits of Federal Government Contractors, provides the following description of the two revenue recognition methods:

- Completed-contract method. This method of accounting defers recognition of revenues while a contract is in process. On completion or substantial completion of a contract, aggregate revenues and costs associated with the contract are recognized.
- Percentage-of-completion method. An accounting method that recognizes contract revenues and income on work as a contract progresses. It provides for recognition on a periodic basis rather than on a completed-contract basis.
- Billing data should be available in the contractor's financial statements and schedules summarizing contract cost and revenue data from the contractor's books and records. The completed-contract and the percentage-of-completion methods are mutually exclusive.

b. Consistent revenue recognition methodology. The revenue recognition methodology should be consistent by contract type for contract billings and total billings. The AICPA states in Audits of Federal Government Contractors:

> An entity using the percentage-of-completion method as its basic accounting policy should use the completed-contract method for a single contract or a group of contracts for which reasonably dependable estimates cannot be made or for which inherent hazards make estimates doubtful. Such a departure from the basic policy should be disclosed.

12-804.3 Overhead

The Eichleay formula properly includes only fixed overhead costs (home office overhead for construction contracts) (see Step 1, 12-804.1) in the unabsorbed overhead calculations (Satellite Electric Company v. John H. Dalton, 105 F.3d 1418 (Fed Cir. 1997)). In a manufacturing/supply contract environment, for regular or normal levels of production, certain costs are fixed. These costs include costs for plant capacity or other long-term assets or obligations. These fixed costs also include operating costs that do not vary with business volume, at least within a broad range of activity. Examples of fixed costs include depreciation (unless a units-of-production method is used); property taxes; support staff salaries such as secretaries, accountants, and executives of the company; other home office

expenses; insurance; and basic maintenance. For normal fluctuations in a business, fixed cost levels remain relatively constant year after year (see 9-703.2b). On construction contracts, home office overhead costs should include only fixed costs that benefit all contracts and are thus prorated to all contracts. Thus job site overhead costs (12-802.4b) charged direct to the contract are not included in the fixed overhead element of the Eichleay formula and the computed damages.

a. Variable overhead costs. Variable overhead costs should not be included in the unabsorbed overhead calculation. Variable overhead costs are those that fluctuate either directly or proportionately with some appropriate measure of direct costs, such as direct production labor hours, machine time or direct materials (see 9-703.2b). If direct production labor costs (or other comparable base costs) occur, variable overhead costs will arise from that direct labor (or other comparable base) cost. Small tools, production shop supplies, and certain types of fringe benefits will be in the overhead pool because the production labor occurs. If direct production labor costs are not incurred, then these overhead costs will not be incurred. The shifting of production labor effort to subsequent periods changes the size of the allocation base and thus affects the amount of variable costs. If the delayed contract effort were being performed as planned, variable costs would have increased due to the existence of variable effort associated with that contract. During a stop-work order (delay), the remaining variable overhead costs would still be associated with other work. Thus, the stop-work order does not change the allocability of these costs to other work, as they are still associated with other production. The delayed work, if performed as planned, would have generated additional costs - more shop supplies, more small tools, or other variable costs in the period when performed.

For example, a contractor, with Contract Y being performed as planned, had $1 million of variable overhead costs and a direct cost base of $5,000,000. The variable rate is 20% ($1,000,000/$5,000,000 = 20%). If $1 million of Contract Y's base costs are eliminated (delayed for a year) the 20% variable costs associated with that contract would not be incurred. Instead of having $1 million of variable costs, there would only be $800,000. The variable rate on other work would not increase ($800,000/$4,000,000 = 20%).

b. Semi-variable costs. Semi-variable costs are those that are a combination of variable and fixed costs. For example, electricity costs include a line charge, which is fixed, and usage charges that are primarily variable. The variable portion of these costs should be excluded from the fixed overhead pool used in the Eichleay formula.

c. Fixed or Variable. To determine if a cost is variable or fixed, consider what would happen to those costs if the size of the performance base changed. Those costs related to laid off labor (for example, social security taxes and health insurance) would cease. They would not be incurred nor be allocated to other contracts. During a period of delay, the social security taxes and health insurance in the pool are associated with other contracts and not to the delayed contract.

d. Relevant range. The concept of "relevant range" refers to the range of operations activity within which assumptions relative to fixed or variable costs are valid. For example, the total of a fixed cost is constant for the relevant range of production of 1 to 30,000 units of production. However, the total of a variable cost increases as the units of production increases from 1 to 30,000.

12-804.4 Delay Days

In All State, the court ruled that contractors may recover "Eichleay damages" for the period by which the overall performance of the contract is extended because of the Government-caused delay/suspension. Therefore, "delay days" for the purpose of computing unabsorbed overhead using the Eichleay formula are:

The additional days of performance because of a Government-caused delay added to the original or previously revised contract performance completion date. For example, the original contract performance period was 70 days but after the first 50 days of performance, the Government caused an indefinite delay that turned out to be 20 days. The ex-

tended period, beyond the scheduled completion date, that occurred due to the delayed work was 15 days, and the total actual performance period was 85 days. Therefore, "delay days" for computing the Eichleay formula would be 15 days (85 days – 70 days), the period of extended performance of the delayed work after the original contract performance completion period (there were no modifications to the completion date).

- Only the extension days resulting from a Government-caused delay/suspension. A contractor who was delayed and on indefinite standby for 15 days may, because of other factors such as inefficiency, finish the contract 20 days after the contract completion date. Fifteen of the extension days were due to a Government-caused delay and 5 days were caused by the contractor's inefficiency. In such a case, the 15 extension days caused by the Government delay are those that are used in the Eichleay formula as "delay days."
- Zero if the delayed/suspended contract work is completed within the original or revised performance period for purposes of computing Eichleay damages. There is one exception. If the contractor can show that, from the inception of the contract, it (1) intended to complete the contract early, (2) had the capability to do so; and (3) actually would have completed early but for the Government's actions, then unabsorbed overhead can be recovered for the delay period.

12-804.5 Eichleay Formula Example

The following example computes unabsorbed overhead using the Eichleay formula (12-804.1). Assume that a contractor has three contracts over a two-year period. Contract Y was scheduled to be performed in its entirety during the 365 days in calendar year 20X1, but was delayed 365 days, and the performance period extended to the end of 20X2. Contract Z was performed in 20X1, and Contract M was performed during the 365 days of 20X2. Also, assume that:

- Fixed overhead was $110,000 per year.
- Contract Y total billings (revenues) were $598,400.
- Total Billings (revenues) for 20X1 totaled $726,000 and $671,000 for 20X2.

Eichleay Formula Computations
Step 1. (Fixed) Overhead Allocable to the Contract:
$598,400/$1,397,000* = 43% x $220,000** = $94,600 *(20X1 Billings $726,000+ 20X2 Billings $671,000 = $1,397,000) ** (Fixed) Overhead Per Year = $110,000 x 2 Years Total Performance Period of Contract Y = $220,000
Step 2. Daily Contract (Fixed) Overhead Rate:
$94,600/730 days*** = $130 *** Total Performance Days of Contract Y= 365 x 2 = 730
Step 3. Unabsorbed Overhead
$130 x 365 days = $47,450

12-805 Audit Approach to the Eichleay Formula

The contractor's computation of unabsorbed overhead damages using the Eichleay formula should be audited. Objectives of the audit of proposed or claimed Eichleay formula damages include:

(1) providing financial analysis concerning the contractor's computed Eichleay damages and

(2) identifying information potentially useful to the contracting officer in making entitlement determinations.

The following steps should be completed:

- Perform audit of Eichleay formula components (12-805.1).
- Identify contractor modifications to basic Eichleay formula (12-805.2).
- Determine credits to formula results (12-805.3).
- Assess the impact of replacement contract(s) or other substitute work (12-805.4)

12-805.1 Audit of Eichleay Components

Audit the contractor's submitted Eichleay formula damages. The audit of Eichleay formula components consists of examining:

(1) contract billings and total contract (company) billings,

(2) total fixed overhead incurred during the period of performance,

(3) total performance days,

(4) the "delay days," and recomputing the Eichleay formula based on the results of (1) – (4).

These components are the basis of the computations contained in the three steps of the Eichleay formula, as shown in 12-804.1. In addition, see 12-805.2, for guidance on contractors' modification of the basic Eichleay formula.

a. Contract and Total Billings. Evaluate the contract and total billings in the contractor's Eichleay formula computation using the following audit procedures:

(1)Verify that the billings data used in the allocation ratio are accurate and appropriate. Be alert for modifications of the Eichleay formula as discussed in 12-805.2. If the contractor uses an allocation base other than contract billings to develop an allocation ratio (see Step 1, 12-804.1) e.g., contract labor/total labor, compare this ratio with the Eichleay formula's billings allocation ratio.

(2) Recompute the proposed Eichleay formula using the billings ratio unless the impact of a different measurement allocation base is immaterial, or unless the contractor can demonstrate that the established Eichleay allocation ratio would lead to inequitable results. Show the computations in the audit report and explain how the contractor's allocation base is materially different and results in an inequitable recovery of damages.

(3) Evaluate the contractor's method for recognizing revenue (billings). Determine if it results in an inequitable allocation of unabsorbed overhead. When the percentage-of-completion method is used, consider the acceptability of the assumptions used to measure the extent of progress towards completion. Overstatement of the percentage of completion of the delayed contract (contract billings) or understating the percentage of completion of the other contracts (total billings for the contract period) in the Eichleay formula (refer to Step 1, 12-804.1) can result in overrecovery of unabsorbed overhead. If the allocation ratio (contract billings/total billings) is overstated, the computation overstates fixed overhead allocated to the delayed contract. The delayed/suspended contract and total billings may also be overstated by including deleted or terminated work or unexercised options pertaining to other work in the total billings denominator of Step 1. The delayed contract and total billings may be understated by excluding settled claims and reasonable estimates of undefinitized work and modifications.

b. Total Fixed Overhead Incurred During Contract Performance Period. Examine the overhead costs in the contractor's Eichleay computation and remove all variable cost items in Step 1 of the Eichleay formula (R. G. Beer Corp, ENGBCA No. 4885, 86-3 BCA 19,012) (see 12-804.1) using the following audit procedures.

(1) For construction contracts, the fixed overhead costs included in the Eichleay formula are home office overhead costs for the entire contract performance period. Site indirect costs are not included. For manufacturing/supply contracts, analyze the overhead accounts comprising the total overhead incurred during the contract performance period

including general and administrative and other indirect overhead costs. Overhead accounts identified as containing potentially variable costs may initially be selected based on the nomenclature or account description. However, such a basis for selection is often insufficient to make a final determination. The auditor should examine the costs in the account and supporting invoices as necessary to determine their variability in relation to some operations activity or measure of production, such as direct labor or direct materials. Also consider the "behavior" of the cost items over the selected relevant range of operations activities (refer to 12-804.3). The auditor may consider the use of graphic analyses and computational techniques to gain insight into the behavior of costs as fixed, semi-variable, or variable. Techniques of graphic and computational analyses are discussed in Appendix E. The audit report should explain the basis for proper classification.

(2) The following are examples of manufacturing/supply contractor overhead accounts selected on a nomenclature basis as potentially variable, along with comments on what to evaluate to ensure that the costs are correctly determined to be either fixed or variable. The audit report should include a discussion of the categories of overhead costs determined to be variable and the basis for that determination.

Account Title	Comments
Payroll taxes, vacation and holiday pay	Determine the amount allocable to variable labor.
401 K pension plans and group insurance	Determine the amount allocable to variable labor. Administrative fees would be considered fixed costs.
Equipment rental	The costs would be fixed if rental agreements are long term. For short-term leases, determine type and use of equipment as related to efforts of variable labor.
Uniforms	Determine if the costs are related to variable labor. Uniforms for maintenance workers or security guards are usually fixed.
Vehicles	For vehicles used by variable labor, gas and oil are operating costs that would be classified as variable costs. To the extent that gas and oil are used for work that is of a fixed nature, they are fixed costs. Maintenance and repairs are normally semi-variable. If the vehicles were leased, long-term leases would be fixed.
Shop supplies and welding supplies	Determine the types of costs in the accounts. Usually these costs are variable because usage depends on variable labor. The fact that there are stock-up purchases does not detract from variability.

(3) Ensure that unallowable costs per FAR 31are removed from the fixed overhead pool as required by applicable contract provisions. Refer to CAM Appendix A.

c. Performance Days. Ensure that the entire performance period is used in the Eichleay formula, including the original performance days, previous time extension modifications, and extended performance days. See 12-804.1 for further discussion.

d. Delay Days. Determine how the contractor computed the "delay days" used in its Eichleay formula computation. All proposed or claimed "delay days" must be attributable to Government-caused suspension and not include any contractor-caused delay days. Request technical assistance to determine the appropriate delay days. The existence and the impact of issues such as contract modifications, contractor-caused delays and early completion on the appropriate delay days can be complex and therefore re-

quire technical expertise. To assist the CO in addressing entitlement issues, include any evidence relevant to the appropriate delay days in the audit report notes on the audit of the Eichleay formula. See 12-804.4 for further guidance.

e. Recompute the Eichleay Formula. Recompute the Eichleay formula using the results of a. – d. Question the difference between the contractor's computation and the results of audit. Provide the contractor's computations and the audit computations of the Eichleay formula in the audit report with explanations for the questioned costs.

12-805.2 Contractors' Modifications to the Basic Formula

a. Modifications to Eichleay Formula. Identify contractor modifications to the components of the basic Eichleay formula (refer to the results of the audit of the formula in 12-804.1). Often these modifications result in excessive recovery of unabsorbed overhead and duplicate recovery of the claimed costs or contract performance costs included in the original contract price. Modification of the Eichleay formula does not conform to the court-established formula (Satellite Electric Co. vs. Dalton, 105 F.3d 1418 (Fed Cir. 1997)) (see 12-804.1). The auditor should determine if the modification results in significant excess costs over that computed using the basic Eichleay formula. Be aware that a contractor may use a modified Eichleay formula in a proposal or claim but fail to label it as "modified."

b. Common Modifications. Some of the most common modifications encountered include:

- Use of original contract price as opposed to actual contract billings (revenues) in the numerator of Step 1 of the basic Eichleay formula (see 12-804.1).
- Original (or planned) days of performance as opposed to complete performance period in the denominator of Step 2 (see 12-804.1). Other formula components, total billings and fixed overhead should also be for the complete time interval (see 12-804.1).
- Actual delay or suspension days rather than extension days beyond the original or revised completion date (see 12-804.4).

c. Effects of Modifications. Modifications to the components of the formula as discussed in b. distort the premises underlying the basic Eichleay formula. For example, substituting original contract price in place of contract billings, or original performance periods in place of the entire period of performance, prevent the formula's basic logic of allocation to performance and delay periods from operating properly (see 12-805.1a).

12-805.3 Credits to Eichleay Results

Adjust the Eichleay formula computed damages when the contractor has been reimbursed for or has proposed or claimed fixed overhead applied to proposed or claimed direct costs or any change order work or out-of-sequence work on the delayed/suspended contract performed during the same period (suspension and extension periods) covered in the Eichleay formula (R. G. Beer Corporation, ENGBCA No. 4885, 86-3 BCA 19,012 and Excavation Construction Inc., ENGBCA No. 3851, 84-3) (see 12-805.4 for additional guidance on additional change order or out-of-sequence work on the delayed contract). Otherwise, there would be duplicative recovery of the same fixed overhead. Credit the Eichleay formula results for any fixed overhead that the prime contractor applied to a subcontractor's proposed or claimed unabsorbed overhead.

12-805.4 Assess the Impact of Replacement Contract(s) or Other Substitute Work

a. Replacement or Substituted Work. Examine the contractor's records to determine if the contractor performed any replacement contract(s) or other substitute work during the period from the start of the alleged delay/suspension period through to the end of the ex-

tension period. In Melka Marine v. U.S., 187 F.3d 1370 (Fed. Cir. 1999), the court held that if replacement work absorbed the same amount of overhead as the delayed/suspended contract would have absorbed had there been no delay, all Eichleay damages would be precluded. Nonetheless, the auditor should compute the impact of the replacement contract as discussed below. If the replacement work did not fully absorb all of the overhead that the delayed/suspended contract would have absorbed had there been no delay, Eichleay damages would be limited to that amount of overhead not absorbed by the replacement contract. Therefore, assess the amount of overhead actually allocated to any replacement contract(s) or other substituted work (accelerated work on other contracts) performed and adjust the results of the Eichleay formula damages. Evidence of the contractor's efforts to reduce or eliminate delay/suspension damages can assist the contracting officer in addressing whether it was practicable for the contractor to take on any replacement work during the delay/suspension period and rebutting the contractor's entitlement to Eichleay damages (see 12-804b).

The argument is sometimes made that the Eichleay formula already reflects the impact of replacement contract work in the results of the formula computations because it is included in the denominator of the billings ratio (see 12-804.1a). This contention, however, is generally not correct. The Eichleay formula recognizes only a fractional portion of most types of replacement work or other substitute work that would absorb a portion or all of the fixed overhead normally allocated to the delayed contract labor or other costs. For example, if the contractor replaced all of the delayed work, the Eichleay formula (if computed) would still show unabsorbed overhead even though the replacement work was included in the denominator (total billings) of the allocation ratio (see Step 1, 12-804.1). This is because the numerator of the allocation ratio (contract billings) does not decrease, regardless of the size of the replacement contract or substituted work. The numerator would have to decrease to zero for 100 percent replacement to be adequately reflected in the Eichleay formula. The replacement work or other substitute work included in the denominator of the allocation ratio (total contract billings) only fractionally affects the formula results.

b. Replacement Contract. If a contractor is able to obtain a replacement contract(s), such work absorbs a portion of the fixed overhead that otherwise would have been allocated to the delayed work. Replacement contracts (Government and commercial) are contracts with work that would not have been obtained and performed had there been no delay. In Melka Marine, Inc. v. U.S., 187 F.3d 1370 (Fed Cir. 1999), the court described a replacement contract as work different in either size, duration, or type from the delayed/suspended contract. For example, a construction contractor may obtain a replacement contract for performing repairs (different type) in contrast with the delayed/suspended construction contracts. Also a contractor may obtain a replacement contract for a smaller scope of work than the delayed/suspended contract. All contracts obtained and performed during the delay/suspension and/or extension periods should be evaluated as potential replacement contracts. Replacement contracts should be specifically identified in the audit report. This identification should include the date of award, contract number, performance period, amount of the contract, the type of effort, duration or size (contrasted with that of the delay/suspended contract), and location. Information on all contracts performed during the delay/suspension and extension periods should be available, as part of the contractor's evidence for showing that it was impractical to obtain replacement work.

c. Other Substitute Work. Other substituted work includes significant work performed out-of-sequence on the delayed contract (All Seasons Construction & Roofing, Inc., ASBCA No. 45583, 98-2 BCA ¶30,061), substantial additional or change order work on the delayed contract (Safeco Credit and Fraley Associates v. U.S., 44 Fed. Cl. 406 (Fed. Cl. 1999)); or acceleration of other contract work (manufacturing/supply contracts) (Libby Corporation, ASBCA Nos. 40765 and 42553, 96-1 BCA ¶28255, affirmed without opinion CAFC 96-1351 (1997)). Evidence of other substituted work should be specifically identified in the audit report. The discussion of out-of-sequence work performed on the delayed contract should include the percentage of the out-of-sequence work to the total dollar

amount of work, a performance schedule of out-of sequence tasks as planned, a schedule of the tasks as actually performed, and a general description of the work performed. The discussion of additional or change order work on the delayed contract should include the date and number of the change order/ modification, the type of work performed, the dollar amount of the work, and the date(s) that the work was performed. The discussion of accelerated work should include the date of award, contract number, a schedule of work as planned, a schedule of work as actually performed, total amount of the contract, and the type of accelerated work.

d. Indications of Replacement or Other Substitute Work. Several indicators can suggest the possibility of replacement contract(s) or other substituted work. The auditor may observe from analyzing labor registers that personnel from the delayed/suspended contract were assigned to other contracts during the delay/suspension period. An analysis of fixed overhead rates during the delay/suspension and extended performance period may show that these rates decreased, or were unchanged. New contracts for work not normally performed by the contractor might be added during the delay/suspension and extension periods. Also, a construction contractor may perform a significant number of tasks out-of-sequence from the performance schedule as planned. A review of the work schedule as planned or the critical path schedule may provide evidence of such changes.

In such circumstances, the auditor should ascertain whether this work would still have been performed had the delay/suspension not taken place. For a manufacturing concern, plantwide production schedules from time periods preceding the delay can be compared with actual production schedules. If the other work is not on the earlier production schedule, the auditor should examine the circumstances under which such work was obtained, and whether the acquisition or acceleration of the work preceded the delay. Correspondence files of the other work may indicate a cause-and-effect relationship between its acquisition or performance, and the delay/suspension on the subject contract. In a manufacturing environment, the auditor can also meet with production personnel, and examine production floor notes and records to obtain a better understanding of the other work and the circumstances under which it was acquired. Technical assistance may be required to ensure correct interpretation of the work schedule data.

e. Assess the Impact. When there is evidence of replacement contracts or accelerated work on other contracts, out-of-sequence and/or additional work on the delayed contract, the Eichleay formula damages must be adjusted. For additional work or out-of-sequence work on the delayed contract, perform Steps (1) – (3) as shown below and adjust the results of the audited Eichleay formula per 12-805.3. For replacement contracts and/or accelerated work on other contracts perform Steps 1-9 as shown below to assess the impact.

The following is an example for assessing the impact of a replacement contract:

Home office (fixed) overhead costs were approximately $600,000 per annum for XYZ Construction Inc. Contract A with a $500,000 fixed cost allocation base including site overhead was scheduled to be performed from 1/1/1997 through 12/31/1997. However, the Government delayed the contract for 365 days (delay period 1/1/1997 – 12/31/1997). The contractor was able to start working on the contract on 1/1/1998 and completed the work on 12/31/1998 (extended performance period). Other contracts scheduled to be performed during the period included:

Contract B with a $450,000 cost allocation base (including job site overhead) was scheduled to be performed 1/1-12/31/98. However, because of the delay in the performance of Contract A, Contract B could not be started until 1/1/1999. Contract C with an allocation base of $550,000 (including job site overhead) was performed as scheduled 7/1/97 – 6/30/98. Contract D with an allocation base of $80,000 (including job site overhead) was a replacement contract for Contract A and was performed 11/1/97 – 1/15/98. All contracts were firm-fixed-priced.

Perform the following steps:

(1) Determine the contractor's actual fiscal year fixed cost allocation base(s) for the entire performance period of the delayed contract including the period when the replacement work or other substituted work was performed (the applicable delay/suspension and/or extension periods). Also, determine the fixed cost allocation base of the replacement contract(s) or other substituted work.

Actual 1/1/1997 – 12/31/98

	Contract A	Contract B	Contract C	Contract D	Total
Actual Fixed Cost Overhead Allocation Base	$500,000	$0	$550,000	$80,000	$1,130,000

(2) Compute the actual fixed overhead costs allocated to the fiscal year fixed cost allocation base(s) for the entire performance period of the delayed contract including the period when the replacement contract(s) or other substituted work was performed.

The fixed overhead costs are computed as follows:

	Actual	
	1997	1998
Contract A Allocation Base	$0	$500,000
Contract B Allocation Base	$0	$0
Contract C Allocation Base	$275,000	$275,000
Contract D Allocation Base (Replacement Contract)	$64,000	$16,000
Total (a)	$339,000	$791,000
Total Fixed Overhead (b)	$600,000	$600,000
Actual Fixed Overhead Rates (b)/(a)	176.99%	75.85%

Contract fixed overhead per fiscal year = Base x fiscal year fixed overhead rate.

	Actual		
	1997	1998	Total
Contract A Fixed Overhead	$0	$379,250	$379,250
Contract B Fixed Overhead	$0	$0	$0
Contract C Fixed Overhead	$486,723	$208,588	$695,311
Contract D Fixed Overhead (Replacement Contract)	$113,274	$12,136	$125,410
Total Fixed overhead (b)	$599,997	$599,974	$1,199,971*

*Difference due to rounding.

(3) Determine the amount of actual fixed overhead applicable to the replacement contract(s) or other substituted work.

Actual Fixed Overhead Allocated to the Replacement Contract D = $125,410

(4) Use the audited Eichleay formula damages (see 12-805.1).

The following represents the audited Eichleay formula based on the example discussed above.

Eichleay Formula Computations
Step 1. (Fixed) Overhead Allocable to the Contract: $ 967,175/$2,563,000* = 38% x $1,200,000 = $456,000
Step 2. Daily Contract (Fixed) Overhead Rate: $456,000/730 days** = $625
Step 3. Unabsorbed Overhead $625 x 365 days*** = $228,125

*Contract A billings: $500,000 Overhead Allocation Base + $379,250 Fixed Overhead + $87,925 10% profit = $967,175
Total billings: $1,130,000 total overhead cost allocation base + $1,200,000 fixed overhead +$233,000 10% profit = $2,563,000
** Total Performance Days of Contract A= 730
*** Period of extended performance beyond the original completion date of 12/31/97, 1/1/98 – 12/31/98 = 365 days.

(5) Determine the billings of the replacement work from the total billings element of Step (4).

	Actual		
Replacement Contract D Billings	1997	1998	Total
Fixed Cost Allocation Base	$64,000	$16,000	$80,000
Allocated Fixed Overhead (Step 2)	$113,274	$12,136	$125,410
Subtotal	$177,274	$28,136	$205,410
Profit @ 10% (Step 4)	$17,727	$2,814	$20,541
Billings	$195,001	$30,950	$225,951

(6) Remove the replacement contract billings from the total contract billings element of the Eichleay formula and recompute the formula damages.

Eichleay Formula Computation without Replacement Contract
Step 1. (Fixed) Overhead Allocable to the Contract: $ 967,175/$2,337,049* = 41% x $1,200,000 = $492,000
Step 2. Daily Contract (Fixed) Overhead Rate: $492,000/730 days** = $674
Step 3. Unabsorbed Overhead $674 x 365 days*** = $246,010

*Contract A billings: $500,000 Overhead Allocation Base + $379,250 Fixed Overhead + $87,925 10% profit = $967,175
Total billings: $1,130,000 total overhead cost allocation base + $1,200,000 fixed overhead +$233,000 10% profit = $2,563,000 less replacement contract D billings $225,951 (Step 5) = $2,337,049
** Total Performance Days of Contract A= 730
*** Period of extended performance beyond the original completion date of 12/31/97, 1/1/98 – 12/31/98 = 365 days.

(7) Compute the impact of the replacement work on Eichleay formula damages.

Eichleay formula computed without replacement work (Step 6)	$246,010
Eichleay formula damages (as audited) (Step 4)	-$228,125
Impact of replacement work reflected in the Eichleay formula computed damages	$17,885

(8) Compare the actual fixed overhead allocated to the replacement contract or other substituted work (Step 3) to the impact of replacement work reflected in the Eichleay formula computed damages (Step (7). Question any significant differences between the Eichleay formula damages and the amount of the fixed overhead applicable to the replacement contract(s) and other substituted work.

Comparison:

Actual fixed overhead allocated to the replacement contract (Step 3)	$125,410
Impact of replacement work reflected in the Eichleay formula computed damages (Step 7)	-$17,885
Impact of replacement work not reflected in the Eichleay formula damages	$107,525

(9) Question the impact of replacement work or other substituted work not reflected in the Eichleay formula damages.

Eichleay formula damages as audited (Step 4)	$228,125
Questioned costs: Impact of replacement work not reflected in the Eichleay formula damages (Step (8)	$107,525
Difference	$120,600

12-806 Presenting the Results of Audit of the Eichleay Computations

The audit report presentation of the results of audit of the Eichleay formula should include the contractor's computations, the audit computations and a discussion of the basis for the differences by each element of the formula. In addition, the report should include an assessment of the delay damages that separately analyzes the net impact of replacement work or other substituted work.

The following is a suggested format for showing the results of audit of the contractor's Eichleay formula computations, the determination of credits and replacement work.

		Questioned Costs Notes
Contractor's proposed Eichleay damages	$XXXX	
Audit computed Eichleay damages (after adjusting for formula errors) (12-805.1 - 2)	XXXX	
Questioned costs due to errors in contractor's computation of Eichleay damages		$XXX
Credit for fixed overhead on proposed or claimed direct costs or additional work (12-805.3)		X
Net impact of the replacement contract(s) not reflected in the Eichleay formula computed		XX

damages (12-805.4)		
Total questioned costs		$XXX

The notes should show all computations and the rationale for the adjustment to the contractor's price adjustment proposal or claim.

12-807 Total Cost Method for Pricing Equitable Adjustments

a. The total cost method is sometimes used by contractors as a basis for determining the cost of an equitable adjustment. Under the total cost method, a price adjustment represents the difference between the total cost upon which the contract price was based and the costs actually incurred in contract performance. This method does not consider that the bid may have been too low or that the additional costs may have been for reasons which are the responsibility of the contractor. To use this method, the contractor should prove that (1) the nature of the delay/disruption makes it impossible or highly impracticable to directly determine actual delay costs with a reasonable degree of accuracy, (2) the bid was realistic, (3) the actual incurred costs were reasonable, and (4) the Government was responsible for the differences between bid and incurred costs.

b. Total cost method calculations are often modified to eliminate some of the inherent inaccuracies found in the total cost method. This is the modified total cost method. The contractor may adjust the original bid and the actual performance costs to remove inaccurate bid costs or add in costs explicitly excluded in the original bid. Also, costs that are the responsibility of the contractor (contractor-caused delays) or are not the responsibility of the Government are removed from the actual costs. However, there is a risk that the contractor did not eliminate all costs that are not the responsibility of the Government. Most of the objections of the total cost method remain. See 12-704 for further guidance on the audit of the total cost method or the modified total cost method.

12-808 Loss of Efficiency

a. A contractor's request for damages for loss of efficiency or productivity relates to additional direct costs for material, equipment usage, and labor productivity and the associated indirect costs caused by actions or inactions of the Government. The loss of efficiency can be caused by acceleration of work, the addition of unscheduled work, or the disruption or delay of contract performance as scheduled. When there is a loss of efficiency caused by a delay in completion of the contract, the entitlement and quantum for the loss of efficiency are a separate element from the additional direct costs and unabsorbed overhead delay damages. However, auditors should be alert to any duplication of recovery of the same costs for loss of efficiency and delay damages.

b. The following are some of the causes of loss of efficiency that relate mainly to construction contracts but which may also relate to production contracts:

- Adverse weather conditions
- Adverse job site conditions
- Restricted access to a jobsite
- Excessive safety inspections
- Excessive change orders
- Overtime on an extended basis
- Out of sequence work
- Out of scope work

When a contractor is forced to perform work incompatible with adverse weather conditions due to Government actions or inactions (for example, performing welding tasks out-of-doors during winter weather), the contractor's costs for loss of labor efficiency may be recoverable. Also, adverse job site conditions such as unexpected water seepage on a con-

struction site, may cause loss of labor and equipment efficiency in performing certain operations. Assessment of the contractor's asserted damages under these circumstances and others will require a technical evaluation. Auditors should review the contractor's insurance policies for possible coverage of the damages to preclude duplicate recovery.

c. The contract clauses generally used as the basis of the equitable adjustment include the Changes Clause (FAR 52.243-1), Changed Conditions (FAR 52.243-5), Suspension of Work (FAR 52.242-14), and Differing Site Conditions (FAR 52.236-2). Review the contract to determine whether it contains a clause that denies the contractor any right to recover damages because of a hindrance or delay in the progress of the contract work.

d. Methods of computing the quantum basis of recovery include:

- Total cost or modified cost (see 12-704)
- Factors applied to direct labor, materials or equipment
- Should cost analysis compared to actual costs

Contractors may compute their damages by applying factors based on industry-wide studies or standards, expert opinions, or should cost analysis compared to direct labor hours, material quantities or equipment usage that require technical evaluation. When the proposal or claim consists exclusively of damages for loss of efficiency, the auditor should propose to the contracting officer that the engagement be conducted as an agreed-upon procedures evaluation. For example, under an agreed-upon procedures evaluation, the auditor can verify the direct labor rates applied to additional labor hours estimated using a factor(s) that is evaluated by a technical specialist. Any adjustments (potential offsets) to the proposed or claimed amounts that are based on the procedures applied should be shown in the audit report (refer to 10-1101b).

12-900 Section 9 --- Claims for Extraordinary Relief

This section discusses claims seeking extraordinary relief under 50 U.S.C. 1431-1435 (Public Law 85-804, as amended).

a. The provisions of 50 U.S.C. 1431-1435 give the President power to authorize Government departments and agencies to enter into, amend, or modify contracts, without regard to other laws related to making, performing, amending, or modifying contracts, whenever such action would facilitate the national defense.

b. Executive Order 10789, November 14, 1958, authorizes Government departments and agencies to exercise the contracting authority given by 50 U.S.C. 1431-1435.

c. FAR Part 50 sets forth the policies and procedures for contract adjustments under 50 U.S.C. 1431-1435.

d. Examples of contract adjustments previously made under 50 U.S.C. 1431-1435 include:

(1) When loss under a contract impairs the contractor's ability to perform or act as a source of supply under a contract that is essential to the national defense, there may be an amendment without consideration.

(2) Amendment or modification to correct or mitigate a mistake.

(3) Amendment to formalize informal commitments to a person who took action without a formal contract.

e. In addition to the specific cost information required for individual submissions, consider the following for use in the audit and/or report, particularly for claims brought under 50 U.S.C. 1431-1435:

(1) The contractor's financial position based on the most current information available, and the potential effect on that position if contract performance continued to completion.

(2) Net working capital changes and changes in financial position since starting the contract.

(3) A comparative statement of costs experienced under the contract and other similar production.

(4) The estimated costs to complete the contract.

(5) The compensation paid to the contractor's key personnel.

(6) The extent of financial assistance furnished by the Government (such as V-loans, advances, progress payments, and facilities).

(7) Segregation of the profit-and-loss statement between commercial and Government business.

(8) Any legal proceedings pending against the contractor.

(9) Any unusual factors which may impair the contractor's ability (financial or other) to perform the contract.

(10) Contract inventories and their value in case of default.

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CHAPTER 13

13-000 Audits at Educational Institutions, Nonprofit Organizations, and Federally Funded Research and Development Centers (FFRDCs)

13-001 Scope of Chapter

This chapter provides auditors with an overview of their audit and reporting responsibilities at educational institutions, nonprofit organizations, and Federally Funded Research and Development Centers (FFRDCs). Sections 1 through 7 provide an overview of Office of Management and Budget (OMB) Circular No. A-133, "Audits of States, Local Governments, and Nonprofit Organizations." Section 8 provides guidance for audits at nonprofit organizations. Section 9 provides guidance for audits at DoD sponsored FFRDCs. Auditors may electronically access and/or download sections of the OMB Circulars from the OMB web site at http://www.whitehouse.gov/omb/circulars/ or through DCAA's Intranet under Reference Materials, Useful Audit Links.

13-100 Section 1 --- Cognizance of Cost Negotiation and Audit at Educational Institutions and Nonprofit Organizations

13-101 Introduction

a. This section describes how cost negotiation and audit cognizance at educational institutions and nonprofit organizations is assigned to federal agencies under OMB Circulars A-21, A-122, and A-133.

b. This section also explains the effects of the Single Audit Act of 1984 and the Single Audit Act Amendments of 1996 on audit responsibilities and audit cognizance.

13-102 Assignment of Cognizance to Federal Agencies

a. The Office of Management and Budget (OMB), in the Executive Office of the President, controls interagency arrangements for cognizant agency assignments at educational institutions and nonprofit organizations.

b. The criteria for determining cost negotiation cognizance at an educational institution are contained in OMB Circular A-21; similar criteria for a nonprofit organization are contained in OMB Circular A-122. The criteria for determining audit cognizance at both educational institutions and nonprofit organizations are contained in OMB Circular A-133.

13-102.1 Cost Negotiation Cognizance at Educational Institutions

a. See OMB Circular A-21, Section G.11. Cost negotiation cognizance is assigned either to the Department of Health and Human Services (DHHS) or to DoD, normally depending on which department (Agency) provides more funds to the educational institution. If neither DHHS nor DoD provides funds (i.e., another federal agency is providing the funding), assignment will default to DHHS. Other arrangements for cognizance may be made based on mutual agreement between DHHS and DoD. The cognizant agency assignment period is five years. At five year intervals the funding pattern from federal agencies will be revisited, and if appropriate, cognizant agency reassignments will be made.

b. The federal agency assigned cost negotiation cognizance is responsible for negotiating and approving facilities and administrative (F&A) rates at an educational institution on behalf of all federal agencies. (At educational institutions the term "F&A rates" is used in

place of "indirect cost rates." F&A is used in OMB Circular A-21 to more accurately describe the type of cost pools that exist at educational institutions). The responsibilities of the cognizant agency also include: resolving questioned costs; overseeing changes needed to correct contractor system deficiencies; and addressing concerns of other federal agencies.

c. Within DoD, the Office of Naval Research (ONR) is responsible for cost negotiation at educational institutions. ONR furnishes results of negotiations to other federal organizations which have awarded grants or contracts to the institutions for which ONR has cognizance.

13-102.2 Cost Negotiation Cognizance at Nonprofit Organizations

See OMB Circular A-122, Attachment A, Section E. As with educational institutions, the cognizant agency for negotiations at nonprofit organizations is the federal agency which provides the most funding. However, cognizance is not limited to DHHS and DoD, and there is no requirement to revisit the cognizant agency assignment at five year intervals. Cognizance over a nonprofit organization will not be changed unless there is a major shift in the dollar volume of the federal awards to the nonprofit organization. The responsibilities of the cognizant agency at nonprofit organizations are similar to those at educational institutions.

13-102.3 Audit Cognizance at Educational Institutions and Nonprofit Organizations

a. See OMB Circular A-133, Subpart D. OMB will assign a single federal agency as the cognizant agency for audit to each entity receiving federal awards totaling more than $50 million a year. The cognizant agency for audit is ordinarily the Inspector General (IG). A determination of the cognizant agency for audit is made every five years. Entities to which OMB has not assigned a cognizant agency will be under the general oversight of the federal agency providing the predominant amount of funding.

b. When OMB assigns cognizance, the responsibilities of the cognizant agency for audit include:

(1) ensuring that audits are timely and otherwise in accordance with the requirements of OMB Circular A-133;

(2) providing technical audit advice and liaison to auditees and auditors;

(3) conducting quality control evaluations of selected non-federal audits;

(4) advising the non-federal auditor and/or auditee of any audit findings;

(5) ensuring resolution of audit findings and recommendations that affect agency programs; and

(6) coordinating resolution of findings that affect more than one federal agency.

13-102.4 Special Audit Procedures When DoD is Not the Cognizant Agency for Audit

a. See 1-300 for guidance related to federal audit cognizance. When a non-DoD agency has federal audit cognizance over an auditee subject to OMB Circular A-133 audits, DCAA generally has no audit role at that auditee, unless cross-servicing arrangements (15-100) have been made with the non-DoD agency.

b. OMB Circular A-133 Audit Services for NASA. As part of providing OMB Circular A-133 audit services to NASA, DCAA will furnish the NASA Office of Inspector General staff access to Agency working papers at all locations where NASA is the cognizant audit or oversight agency as determined by Section .400(a) of OMB Circular A-133. As part of its responsibilities as the cognizant audit or oversight agency, the NASA IG staff will coordinate with DCAA on any draft desk review or quality control evaluation recommendations impacting DCAA, prior to communicating the results to the auditee. Issues pertaining to contract audit policy identified by NASA will be forwarded to the DoDIG for consideration in carrying out its overall responsibilities of overseeing DCAA's audit work.

c. Other Audit Services for Non-DoD Organizations. If HHS or other non-DoD agency declines or is unable to provide the audit services DoD requires, DCAA can provide the services if:

- A DoD contracting officer specifically requests DCAA audit services in writing, and
- The cognizant HHS office or other non-DoD audit office provides written approval of DCAA performance of the requested audit services.

Ordinarily, DCAA audit services in such instances will be limited to audits of price proposals, public vouchers, or specific DoD program costs. When performing these services, the auditor should coordinate with cognizant federal auditors and the auditee's independent public accountant to the maximum extent possible.

13-200 Section 2 --- OMB Circulars and Other Federal Regulations Applicable to Educational Institutions, Nonprofit Organizations, and Federally Funded Research and Development Centers (FFRDCs)

13-201 Introduction

This section (i) describes the common types of federal awards and (ii) introduces the principal Office of Management and Budget (OMB) Circulars and other regulations applicable to educational institutions, nonprofit organizations, and FFRDCs.

13-202 Types of Federal Awards

a. "Federal awards" as defined by OMB Circular A-133 means (i) federal financial assistance and (ii) federal cost-reimbursement contracts that auditees receive directly from federal awarding agencies or indirectly from pass-through entities. A pass-through entity is a non-federal entity that provides federal awards to a subrecipient to carry out a federal program. Federal financial assistance is assistance that auditees receive in the form of cooperative agreements, grants, loans, loan guarantees, property (including donated surplus property), interest subsidies, food commodities and other assistance.

b. The federal awarding agency typically uses a grant or cooperative agreement when the principal purpose of the transaction is to stimulate or support research and development for a public purpose. Contracts are typically used when the principal purpose of the instrument is to acquire property or services for the direct benefit or use of the Federal Government.

c. Coordination and correspondence for requested and self initiated audits at educational and nonprofit organizations are critical for the effective use of audit resources. See 4-103 for guidance.

13-203 OMB Circular A-21 - "Cost Principles for Educational Institutions"

OMB Circular A-21 establishes principles for determining allowable costs of grants, contracts, and other agreements with educational institutions. The OMB Circular A-21 cost principles are incorporated by reference at FAR Subpart 31.3, and the allowability of costs on contracts for which FAR Subpart 31.3 is applicable will by determined by OMB Circular A-21. DCAA audit reports and correspondence covering non-DoD awards should cite the cost principles provided for in the agreement as the authoritative regulation.

13-204 OMB Circular A-110 - "Uniform Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations"

a. OMB Circular A-110 establishes, among other pertinent financial management requirements guidelines for the uniform administration of grants and other agreements awarded to educational institutions, hospitals, and other nonprofit organizations. OMB Circular A-110 does not apply to the administration of contracts, which is covered by the FAR.

b. Auditors shall consider the applicable administrative requirements of OMB Circular A-110 in single audits conducted in accordance with OMB Circular A-133 (see 13-207). Examples of OMB Circular A-110 administrative requirements include:

(1) cost sharing (OMB Circular A-110, Section .23) - this section provides standards for the auditee to satisfy when requirements related to cost sharing or matching and level of effort are contained in grants and other agreements; and

(2) property standards (OMB Circular A-110, Section .30) - this section provides standards governing management and disposition of Government property.

13-205 OMB Circular A-122 - "Cost Principles for Nonprofit Organizations"

OMB Circular A-122 establishes principles for determining allowable costs of grants, contracts and other agreements with nonprofit organizations as defined by the circular (see 13-800). The OMB Circular A-122 cost principles are incorporated by reference at FAR Subpart 31.7, and the allowability of costs under contracts to which FAR Subpart 31.7 applies will be determined by OMB Circular A-122.

13-206 OMB Circular A-87 - "Cost Principles for State, Local, and Indian Tribal Governments"

OMB Circular A-87 establishes principles and standards for determining costs for Federal awards carried out through grants, cost reimbursement contracts, and other agreements with state and local governments and federally-recognized Indian tribal governments (governmental units).

13-207 OMB Circular A-133 - "Audits of States, Local Governments, and Nonprofit Organizations"

OMB Circular A-133 sets forth standards for obtaining consistency and uniformity among Federal agencies for the audit of states, local governments, and non-profit organizations expending Federal awards. OMB Circular A-133 defines the term "nonprofit organizations" to include educational institutions and hospitals. Indian tribes are included within the definition of "State" under OMB Circular A-133. The circular applies to FFRDCs, but excludes contracts to operate Government-owned, contractor operated facilities (GOCOs).

13-207.1 Effective Date and Audit Threshold

a. OMB Circular A-133 dated June 24, 1997 implements the Single Audit Act Amendments of 1996), supersedes the prior versions of OMB Circular A-133 dated March 1990 and April 1996, and rescinds OMB Circular A-128. The 1997 version is effective for audits of fiscal years beginning after June 30, 1996.

b. OMB Circular A-133 requires auditees that expend $500,000 or more in federal awards in a year to have a single or program-specific audit. Section 105 of OMB Circular A-133 defines "single audit" as an audit which includes both the entity's financial statements and the federal awards. Section 105 also defines "program-specific audit" as an audit of one federal program as provided for in sections .200(c) and .235. A program-specific audit cannot be performed as part of the A-133 audit unless certain conditions are satisfied (Subpart B, section .200(c)).

13-207.2 Audit Reporting and Due Dates

a. OMB Circular A-133 requires auditors to issue reports on three parts of an auditee's operation:

(1) financial statements,
(2) internal control, and
(3) compliance with laws and regulations.

b. The auditee must submit a "reporting package" to a designated federal clearinghouse. The due date for submitting the reporting package is nine months after the end of the period audited. However, the nine month reporting requirement is not effective until audits of fiscal years beginning after June 30, 1998. This allows entities to continue to submit their reporting package under the previous requirement i.e., 13 months after the end of the period to be audited. It is imperative that FAOs work with the cognizant agency for audit (see 13-102.3) to ensure DCAA receives timely submissions.

13-208 OMB Circular A-133 Compliance Supplement

a. The Compliance Supplement to OMB Circular A-133 identifies federal requirements and suggests procedures for auditing internal control and testing compliance with laws and regulations. The compliance supplement is published annually. Auditors should use the supplement in effect for the recipient's fiscal year being audited. To ensure the supplement keeps pace with changing federal requirements, federal agencies are required to inform OMB annually of any updates that are needed to the supplement. As the compliance supplement is updated and reissued by OMB, Headquarters (PPD) will disseminate the document to the field, typically in the spring of each year. However, auditors may also electronically access and/or download sections of the compliance supplement from the following address: http://www.whitehouse.gov/OMB.

b. The supplement identifies compliance requirements that the Federal Government expects to be considered as part of an audit in accordance with OMB Circular A-133. The supplement provides the auditor with audit objectives and procedures for the Federal programs listed in the supplement. Auditors are required to follow the provisions of OMB Circular A-133, and shall consider the compliance supplement, and the various laws and regulations impacting auditees, in determining the compliance requirements that could have a direct and material impact on the Federal programs subject to audit (see 13-706).

c. In developing audit procedures to test compliance with the requirements of Federal programs, the auditor should refer to Part 2 of the supplement, "Matrix of Compliance Requirements," to identify which of the 14 types of compliance requirements described in Part 3 of the supplement, "Compliance Requirements," are applicable. For the audit of programs not included in the supplement, auditors should refer to Part 7 of the supplement for guidance.

d. When planning the audit, OMB Circular A-133 requires the auditor to apply the concept of materiality to each major program rather than to all the major programs combined. Once the applicable compliance requirements are identified, the auditor must then determine which compliance requirements will be tested and reported on. Using professional judgment, the auditor will determine which compliance requirements have a direct and material effect on each major Federal program to be tested. Also, the auditor must consider the possibility that an auditee may not have any activity subject to a specific type of compliance requirement.

e. Part 3 of the supplement lists and describes the 14 types of compliance requirements and the related audit objectives that the auditor should consider in every OMB Circular A-133 audit. The suggested audit procedures in the supplement are broadly written to apply to many different Federal programs administered by many different auditees. Auditor judgment is necessary to determine whether the generally stated audit procedures are sufficient to achieve the audit objectives of a particular audit assignment or whether additional or alternative audit procedures are necessary for that assignment.

13-209 Cost Accounting Standards at Educational Institutions

The CAS Board's rules, regulations, and standards at 48 CFR 9905 apply to educational institutions receiving a negotiated federal contract or subcontract award in excess of $650,000. 48 CFR 9905 does not apply to contracts awarded for the operation of Federally Funded Research and Development Centers (FFRDCs), since they are already subject to the standards at 48 CFR 9904.

13-209.1 Applicable Cost Accounting Standards at Educational Institutions

a. 48 CFR 9905 contains the following four standards that apply to educational institutions receiving negotiated contracts in excess of $650,000 (These standards contain essentially the same requirements prescribed in CAS 401, 402, 405, and 406):

(1) CAS 501, Consistency in estimating, accumulating and reporting costs
(2) CAS 502, Consistency in allocating costs incurred for the same purpose
(3) CAS 505, Accounting for unallowable costs
(4) CAS 506, Cost accounting period

b. CAS 501, 502, and 505 are applicable upon receipt of a CAS-covered contract. CAS 506 is applicable beginning with the first full fiscal year after receipt of a covered contract.

13-209.2 Disclosure Statement - Basic Requirements at Educational Institutions

a. A Disclosure Statement Form CASB DS-2 must be submitted before contract award, if the institution receives:

(1) A single CAS-covered award of $25 million or more, or

(2) $25 million in CAS-covered net awards during the most recent cost accounting period, provided that at least one award exceeded $1 million, or

(3) A CAS-covered award in excess of $650,000 if the institution is one of the top 99 recipients of federal awards listed in Exhibit A of OMB Circular A-21; and in its most recently completed year received $25 million or more in federal contract and financial assistance awards (i.e., contracts, grants, and cooperative agreements)

b. FFRDC CAS-covered contracts are not included when determining the educational institution's prior year awards (see 48 CFR 9903.201-2(c)(4)).

13-209.3 CAS Clause for Educational Institutions

The CAS clause at 48 CFR 9903.201-4(e) applies to all negotiated contracts in excess of $650,000 with educational institutions. FFRDCs operated by educational institutions are not subject to 48 CFR 9903.201-4(e). The clause requires institutions to comply with the CAS in 48 CFR Part 9905, and file a Disclosure Statement, if required by 48 CFR 9903.202-1(f). The clause also provides for equitable adjustments to contracts when an accounting principle amendment mandated under OMB Circular A-21 requires that the institution change its established accounting practices.

13-209.4 CAS Administration for Educational Institutions

The CAS administration provisions for educational institutions are contained in 48 CFR 9903.201-7 & 9903.202-6:

a. To the maximum extent possible, the cognizant federal agency shall take the lead role in administrating the CAS requirements. The cognizant federal agency is usually the federal agency responsible for negotiating indirect cost rates on behalf of the Government. Administration of the CAS requirements on a contract-by-contract basis by individual contracting officers is discouraged.

b. Agencies acting as the cognizant federal agency are required to prescribe regulations establishing responsibility for making adequacy determinations on submitted Disclosure Statements.

13-209.5 CAS Audits at Educational Institutions with Predetermined Fixed Indirect Rates

At DoD cognizant educational institutions with predetermined fixed indirect cost rates (see 13-605), the auditor will not self-initiate any CAS compliance or disclosure statement adequacy audits. In those infrequent instances when the contracting officer specifically requests DCAA audit services, the auditor will build upon the independent public accountant's single audit work to preclude any duplicate audit effort and will perform no audit work other than that specifically requested.

13-210 Regulations at Educational Institutions

a. DFARS 231.3 applies the limitation on allowable compensation at DFARS 231.205-6(a)(2)(i) and (ii) to contracts with educational institutions. Although OMB Circular A-21 applies a 26 percent limitation on administrative costs, DFARS 231.1 prohibits its application to DoD contracts awarded on or after November 30, 1993. However, the cognizant administrative contracting officer may waive this prohibition if the educational institution requests the waiver in order to simplify its overall management of cost reimbursements under DoD contracts.

b. FAR Part 35/DFARS Part 235 contain information and procurement procedures of special application to federal and DoD research and development contracts. FAR 35.003(b) implements the provisions of OMB Circular A-110 on cost sharing for both profit and nonprofit DoD auditees. DFARS 235.015-70 provides guidance on special use allowances for research facilities acquired by educational institutions which constitute an exception under limited and rare circumstances to FAR 31.3. FAR 35.014 provides for the transfer of title to equipment to nonprofit educational or research organizations. Title to equipment purchased with scientific research funds shall be vested in the auditee (or DoD grantee organization per DoD Directive 3210.2) in accordance with the guidelines contained in FAR 35.014. The regulations allow the auditee to automatically acquire and retain title to equipment costing less than $5,000 (or a lesser amount established by agency regulation) when the auditee has the advance approval of the contracting officer. When title to equipment is vested in it, the auditee must agree, as a condition to taking title, that no charge will be made to the Government for any depreciation, amortization, or use charge with respect to such equipment under any existing or future Government grant or contract. FAR Subpart 45.5/DFARS Subpart 245.5 provides guidance for the management of Government property in the possession of nonprofit organizations.

c. FAR 42.705-3(b)(6) allows for the use of multi-year predetermined indirect cost rates for DoD awards with educational institutions. The multi-year rate can be used for a period of not more than four years. See 13-605.b for additional guidance on advising the contracting officer regarding the suitability of an institution for multi-year predetermined fixed rates.

13-300 Section 3 --- General Concepts for Audit of Costs at Educational Institutions

13-301 Introduction

This section presents general concepts in the audit of costs and the evaluation of related managerial policies, procedures, and practices at universities which influence and control the level of costs.

13-302 Audit Objective

The audit objective in the DCAA audit of an educational institution is to ascertain that costs included in claims and financial reports under Government agreements are reasonable, fairly presented, appropriately charged or allocated, and determined in accordance with the terms of the agreements and applicable regulations.

13-303 Educational Institution Accounting Systems

a. A major difference between the accounting systems of industrial organizations and educational institutions is the emphasis in the latter on fund accountability and on maintenance of identity of restricted vs. general operating funds. Nevertheless, the auditor should expect to find modern accounting techniques and management practices being used by institutions in keeping with their responsibilities for recording the costs of individual Government grants and contracts.

b. Institutional balance sheets are normally set up by basic fund groups. Income statements reflect sources of income, such as tuition, gifts, investments, sponsored research, dining, student housing, etc. Expense statements show costs of operations generally segregated by academic departments, general and administrative, plant operations, auxiliary services, and organized research. The latter grouping does not include unsponsored, nonbudgeted departmental research activities. These are not separately accounted for and are treated as part of departmental instructional activities.

c. In addition to the general standards for selected items of cost in OMB Circular A-21, some agreements specify which types of expenditures may be treated as direct costs or establish limitations on the allowable amount of certain direct cost items. The institutions are responsible for the proper preparation of claims under contracts and reports of expenditures required under grants. Accounting systems and related administrative practices and controls must be adequate so that the institution recognizes and complies with the provisions on its various Government agreements.

d. The institution's accounting system must also be adequate to meet the requirement for documentation of the institution's contributions under cost-sharing provisions of grants.

13-304 Audit Planning Data – Educational Institutions

a. To plan the audit adequately, the auditor should:

(1) Become acquainted with the total volume of auditable agreements, the magnitude and type of various sponsored programs, and the extent to which various schools, departments, or other cost centers of the institution are involved.

(2) Solicit a list of the institution's open agreements indicating the type of contract or grant, the amount, and the awarding agency.

(3) Arrange for the grantee to furnish, for each fiscal year, a statement of fund transactions, a summary statement of costs incurred on grants by cost element or category as reflected in the grantee's records, and a listing of grants in effect during the fiscal year.

b. Where a listing of contracts and grants would be voluminous or unduly time consuming for the institution to extract from its records, a summary would be sufficient. If the institution does not agree to furnish the foregoing, the auditor should prepare the data from the institution's records if this can be done with a minimum of audit effort.

Otherwise, in the case of grants, the auditor should promptly notify the cognizant regional auditor to take appropriate action through DHHS channels to obtain the required information.

c. Under AID contracts, if the contractor does not furnish the data, and more than minimum effort is required to obtain it from the records, the auditor should promptly notify the Office of Audit (AG/AUD), Washington, DC 20523, to take appropriate action through AID channels to obtain the required information. In this instance, the auditor will not attempt to perform the audit until the information is obtained from the contractor.

d. As a minimum, the auditor should obtain some approximate estimate of the foregoing information for planning an all-inclusive audit scope and for measuring materiality and to satisfy certain reporting requirements as discussed in 13-700. The auditor would also use this information to ascertain the extent to which audit conclusions reached on the adequacy of internal controls, reliability of the accounting system, etc., can be applied to the various areas of performance; for example, whether previous audit opinions concerning an institution's centralized procurement system are applicable to a laboratory with autonomous responsibility for purchasing extensive specialized research materials or equipment, or whether additional audit steps should be provided in the program.

13-305 Observation of Performance Areas

13-305.1 Areas of Research Performance

a. The auditor should visit the major areas of research performance accompanied by a technical representative of the educational institution and a representative from the Government technical office. By observation and inquiry the auditor should acquire an understanding of the types of research performed and the schools involved, with the view of establishing the relative percentages of space and facility utilization as between instruction (including departmental research) and organized research. Space utilization applicable to other institutional activities is usually readily determinable.

b. The knowledge so acquired will be a factor in the auditor's later audit of the reliability of the organized research and instructional space utilization data used by the institution to support the allocation of (1) use charges and (2) plant operation and maintenance costs. Where a previously prepared schedule of space utilization is available, the reasonableness of the institution's determinations may be tested during the auditor's physical inspection of the research facilities.

c. The auditor's visit should be scheduled or repeated so that the observation takes place when representative activities are in process. For example, do not visit the research facility for this purpose during the summer vacation period, if the level of research activity is not typical of the normal academic period.

13-305.2 Areas of Nonresearch Performance

a. Similar observations should be made at institutional locations where a significant amount of work under nonresearch agreements is being performed.

b. Many on-campus costs will not apply to Government agreements performed off-campus. This may also be true in the case of agreements performed in certain on-campus or near-campus laboratories or research areas which are practically autonomous in that their research activities are not supervised by deans or instructional department heads, and they maintain their own administrative, purchasing, personnel, and accounting staffs.

13-306 Treatment of Costs Applicable to Instruction

It is implicit throughout the OMB Circular A-21 cost principles dealing with identification, apportionment and allocation of costs that instructional costs, including departmental research, are to be differentiated from the costs of sponsored, organized research. The auditor should treat instructional costs as not allowable under research agreements, except as they may be specifically provided for by the terms of a research agreement.

13-307 Audit Approach and Coordinated Audits at Educational Institutions

a. DCAA audits at educational institutions should be performed on a comprehensive basis in the depth and scope required by the materiality of the total group of auditable Government agreements. At many larger institutions, considerable audit complexity may arise from diversity in the services procured or activities sponsored through the Government agreements and differences in the types and provisions of the agreements themselves. Even in such circumstances, the best application of audit resources would normally be:

(1) the evaluation of the reliability of the centralized administrative and financial controls, including the accounting system, which affect the incurrence and recording of costs, and

(2) the testing of selected transactions.

b. Various agreements may have different provisions requiring prior approval by the awarding agency before the institution makes designated types of expenditures, or they may set other limitations on certain transactions. It is not desirable for the audit program to include an exhaustive audit of research grants to determine what special provisions exist. Instead, the focus should be on the adequacy of the institution's own procedures and controls for ascertaining its obligations under any special provisions in the agreements and for assuring compliance. This may be an appropriate auditable area for purposes of audit planning (as discussed in the DCAA Management Information System).

c. The auditor should brief the contracts (3-200) and any other agreements where specific individual attention is required in other parts of this manual.

13-308 Basic Audit Procedures

13-308.1 Use of Permanent Files

As a preliminary step in performing the audit, review the information contained in the permanent file (see 4-405). Update this information as necessary on the basis of the current audit and evaluation of the accounting and financial procedures for recording and reporting costs and activities relating to agreements.

13-308.2 Comparison of Agreement Provisions with Institution Policies

a. To determine whether the institution's system provides for the proper recording of costs, the auditor should review the agreements in effect and related policy statements and policy manuals of the activity awarding the agreement. These policies, in most instances, specify that direct costs will be allowed in accordance with the principles contained in OMB Circular A-21. However, there may be some exceptions and, in addition, institutions may incur costs which are not specifically covered by those provisions. Where the costs are not specifically covered in the circular or in the manuals of the awarding activity, the auditor should determine their allowability to the agreements being performed on the basis of the general principles included in the circular.

b. While changes in an approved budget applicable to an agreement generally require prior approval, the awarding activities' policy manual generally affords the institution some latitude in rebudgeting expense items.

13-308.3 Evaluation of Cost Sharing and Matching Compliance

a. Direct audit effort in connection with cost-sharing provisions of research agreements should be directed toward determining whether the institution's procedures provide for the identification and proper accountability of its cost-sharing obligations under each agreement and that controls are established to assure that the institution contributes its share of the costs of performance of the agreement (OMB Circular A-110). Test the effectiveness of the accounting and internal controls established with respect to cost-sharing by examining expenditures under selected grants.

b. The auditor should ascertain that the costs applicable to the grantee's contribution are not charged directly or indirectly to other Government agreements. Costs which are not allowable under cost principles applicable to the agreement may not be included in the institution's cost contribution (FAR 35.003(b), DoDI 3210.2, and OMB Circular A-110).

13-308.4 Use of Statistical Sampling

Statistical sampling techniques are particularly useful under the comprehensive approach. All agreements affected by the particular auditable area under evaluation should generally be considered as a single universe for the purposes of sampling, whether contract or grant, DoD or non-DoD. For developing appropriate audit recommendations and follow-up actions, appraise the results of the tests carefully to determine whether the deficiencies disclosed: (1) represent a specific procedural weakness which applies across the board to all agreements, including grants, or to particular categories of agreements, (2) indicate that the institution's records cannot generally be considered accurate or reliable, or (3) represent isolated errors applicable only to the individual transactions tested or to the individual agreement(s) represented by the deficient transactions.

13-309 Special Procedures Relating to Grants

a. Audit procedures relating to grants and other agreements with educational institutions are the same and should be integrated where practical into a comprehensive audit of the institution. Supplement audit coverage to the extent that specific audit emphasis is requested or that special provisions are contained in the agreement or outlined in any manuals on cost determination that grantors or contracting organizations might provide.

b. Issue reports on grants only on request or in accordance with the agreements with other agencies. (13-700 contains guidance on special reporting procedures applicable to grants.) There is an exception. A report will be issued when the auditor becomes aware, during the performance of normal audit procedures, of deficiencies on the part of the institution which have a significant effect on the cost of one or more grants even though a request for audit has not been made. For example, while evaluating the accounting system, the auditor may have encountered a deficient practice in the allocation of indirect costs which tends to produce inequities in the costing of grants. Or, the auditor may have noted erroneous charges to particular grants in a random sample of transactions performed to test voucher distribution controls. In such cases, notify the grantor promptly of significant deficiencies or errors by a report which also includes an estimate of the financial effect of the deficiencies on the grants and the amount of questionable costs on particular grants, if this can be readily computed.

13-310 Procedures for AID Contracts

Agency for International Development (AID) contracts incorporate cost principles in the FAR which should be used as the framework for determining contract costs, although the services rendered may not always be in the nature of research. In AID contracts which do not contain the CAS clause, special provisions may allow as direct costs certain items normally included in indirect costs. Special cost determination procedures in AID contracts are summarized as follows:

(1) For AID contracts, indirect costs are provisionally reimbursed at rates as provided in the contract. However, final adjustment to actual allowable indirect costs is based on rates negotiated by the AID Office of Contract Management of the Bureau for Program and Management Services after receiving the auditor's advisory comments on the contractor's proposed final rates for AID contracts. The rates negotiated by AID are the authorized new provisional rates for subsequent periods until new rates are negotiated.

(2) AID contracts may also provide for reimbursement of indirect costs through the use of predetermined fixed rates.

(3) Since the basic audit data developed for the annual indirect cost report on DoD contracts is used to determine costs applicable to AID work, the auditor should ascertain that the contractor has made all adjustments required because of any special provisions of AID contracts.

13-400 Section 4 --- Audit of Direct Costs at Educational Institutions

13-401 Introduction

This section presents audit guidance for auditing direct costs distributed to organized research, instruction, and other institutional activities.

13-402 Definition of Direct Costs

Direct costs are defined in OMB Circular A-21 Section D as those costs that can be identified specifically with a particular sponsored project, an instructional activity, or any other institutional activity, or that can be directly assigned to such activities relatively easily with a high degree of accuracy. Identifiable benefit to the sponsored work, rather than the nature of the goods and services involved, is the determining factor in distinguishing direct from indirect costs of sponsored agreements.

13-403 Direct Costs by Agreement or by Group of Agreements

a. When a particular project is an individual Government agreement, accounting complexity is at a minimum. The main audit considerations are adequacy of documentation, correct account coding, reasonableness of cost, and conformity with terms of the agreement and provisions of applicable regulations.

b. Occasionally, an institution's accounting system may provide for cost objectives which accumulate the direct costs of more than one related agreement. A further distribution is made to the individual agreements as direct costs. Examples are special facility or scientific discipline level project costs. These costs might include such items as salaries and wages, common materials and supplies, etc., used in connection with a project which is comprised of more than one agreement. Additional audit considerations, besides those mentioned in the preceding paragraph, are the equity of the method of distributing the project costs to individual agreements; the consistency of the institution's treating similar common costs by the same distribution methods; and the preservation of the identity of any kinds of costs which are subject to limitation or exclusion by the terms of the agreements.

13-404 Treatment of Certain Common Costs as Direct

a. Some types of expense which are traditionally regarded as indirect in nature can be treated as direct costs when a benefit to individual Government agreements can be specifically identified and an equitable method of charging the cost is followed consistently. The cost of fringe benefits and pension plans is an example. These should be applied to direct costs as well as to the various indirect cost groupings to which salaries and wages are charged. The portion applied to direct salaries and wages may also be treated as direct costs.

b. Assure that any special distribution methods applied do not tend to produce a recovery of more than actual costs and that any limitations on indirect costs are not circumvented. Sabbatical leave costs may require special consideration (see OMB Circular A-21 Section J.40).

13-405 Basic Tests of Direct Costs

Perform audit tests of direct costs in accordance with Chapter 6.

a. Test items of direct costs to ascertain whether the institution has complied with the policy and principles set forth in the awarding activity's manuals and in the terms of the agreements, with regard to the control, incurrence, and recording of these costs. If

these tests disclose instances of inadequate controls, incurrence of unallowable costs or inaccurate recording, make further tests sufficient to reach a definitive conclusion as to the nature and extent of the deficiencies.

b. The audit tests may indicate a lack of adequate supporting data if the auditor cannot assure the validity or accuracy of the accounting records relating to a particular element of cost under all agreements or specific categories of agreements. In such instances, obtain sufficient information to clearly show the nature and applicability of the deficiencies and the action recommended to correct the conditions.

c. The results of the test, coupled with the use of statistical projection techniques, may permit the auditor to determine a dollar amount or percentage disapproval which can be applied to an element of cost incurred under all agreements generally, or under agreements in a specific category. This is usually feasible where the cost disapproval is related to a procedural weakness in the institution's accounting controls or system which causes a definite pattern of unallowable costs to be recorded in a fairly uniform manner to all agreements, or a particular category of agreements. An example of this type of weakness would be the contractor's failure to credit material costs with purchase discounts, either actually taken or reasonably available but not actually taken.

d. As a further possibility in some instances, the deficiencies disclosed may not be related to a prevalent procedural weakness, but may occur in irregular fashion as isolated recording errors without any particular pattern being evident. In such a case, make sufficient tests to conclude whether the unallowable costs disclosed by the tests relate only to isolated agreements.

13-406 Compensation for Personal Services at Educational Institutions

13-406.1 Audit Objective

Generally, compensation for personal services, including fringe benefits and pension plan costs, is a significant percentage of total costs. The basic audit objective is to determine that the total compensation to individual employees, including fringe benefits and pension plan costs, is reasonable for the services rendered, conforms to the established policy of the institution, and is charged to Government agreements in an equitable manner consistent with the provisions of OMB Circular A-21 Section J.10.

13-406.2 Basic Audit Procedures

In accomplishing the audit objective, the auditor should be guided by the procedures which are briefly described below:

a. Lack of an acceptable written policy on personnel classification, qualification requirements, promotions, salary scales, outside activities, vacation, and sick leave is a deficiency which should be remedied promptly by the institution.

b. Amounts charged directly or indirectly to organized research for personal services, except stipulated salary support, should be based on institutional payrolls which have been approved and documented in accordance with institutional practices. Stipulated salary support is a fixed or a stated dollar amount of the salary of professional or other professional staff involved in the conduct of research which the Government agency agrees in advance to reimburse an educational institution as a part of sponsored research costs. The amounts stipulated for salary support will be treated as a direct cost. The provision for stipulated salary support will not be used for educational service agreements.

c. Determine that salary charges for work performed by faculty members on Government sponsored agreements within the regular academic year do not exceed a proportionate share of each individual faculty member's base salary. Similarly, for work performed outside the academic year or during the regular academic year but in excess of the regular departmental workload, salary charges for individual faculty members should be at rates

not in excess of their base salary rates, unless provided for by the agreement or by written approval of the sponsoring agency. For example, if the academic year at an institution is established as a nine-month period and a member of the faculty is authorized to work on sponsored agreements on a full-time basis for two of the three summer months, the monthly salary charge should not exceed one-ninth of the base salary for the academic year.

d. In the case of those personnel covered by stipulated salary support, the auditors are no longer required to verify the precise accuracy of time or effort devoted to research projects. Rather, the audits should include steps to determine on a sample basis that an institution is not reimbursed for more than 100 percent of each faculty member's salary and that the amount charged to Government-sponsored research is reasonable in view of his or her university workload and other commitments. The stipulated salary method may also be agreed upon for that portion of a professional's salary that represents cost sharing by the institution.

e. Solicit the assistance of cognizant Government technical representatives where appropriate in making evaluations of reasonableness. Guidance on requesting and using the work of technical specialists is in Appendix D.

13-500 Section 5 --- Audit of Indirect Costs at Educational Institutions

13-501 Introduction

This section presents audit guidance for audit of indirect costs distributed to organized research, instruction, and other institutional activities.

13-502 Audit Objective

The basic objective is to ascertain whether indirect costs are reasonably incurred, reliably recorded, and thereafter assembled in appropriate cost groupings for equitable distribution to benefiting Government agreements.

13-503 Basic Provisions

a. OMB Circular A-21 Section E.1. defines indirect costs as those that have been incurred for common or joint objectives and therefore cannot be identified specifically with a particular sponsored project, instructional activity, or other institutional activity. At educational institutions, such costs normally are classified under the following indirect cost categories: general administration and general expenses, sponsored projects administration expenses, operation and maintenance expenses, library expenses, departmental administration expenses, depreciation and use allowances, and student administration and services.

b. OMB Circular A-21 Section E.2. prescribes the criteria for apportionment and allocation of indirect costs to organized research and instruction.

c. DFARS 242.770-2 requires contractors, which include educational institutions, with DoD agreements to certify proposals for billing rates or final indirect cost rates unless a waiver has been obtained from the Secretary of Defense or the Secretary of the Military Department concerned.

d. On June 29, 1995, the Office of Management and Budget issued Memorandum Number M-95-14, Subject: Equipment Capitalization Threshold Waivers under OMB Cost Principles Circulars for Universities and Nonprofit Organizations. The memorandum authorizes Federal agencies with cost negotiation cognizance to increase the equipment cost threshold for capitalization from $500 to $5,000 under OMB Circulars A-21 and A-122. The waiver authority DOES NOT extend to nonprofit organizations subject to OMB Circular A-122 that are also subject to Cost Accounting Standards 9904.404 and 9904.409. OMB plans to incorporate this increased threshold in the next circular revisions.

13-504 Reconciliation and Account Analysis

a. If the educational institution is required to certify its overhead proposals (see FAR 42.703-2), the auditor should follow the audit guidance in 6-700 pertaining to such certification.

b. Because of the multitude of income, expense, and fund accounts maintained by educational institutions, an institution's proposal for an indirect cost rate should be reconciled with its financial books of account and published annual statement. Bases for allocations should be reconciled as well as indirect cost account groupings. The auditor should assure that all incurred costs, income, and credit items relevant to the Government agreements have been reflected appropriately in the institution's indirect cost.

c. Analyze the individual accounts to the extent deemed necessary to determine their allocability, reasonableness and allowability. The auditor should be guided by the auditing concepts and techniques set forth throughout this manual and the special audit considerations discussed in this chapter.

13-505 Treatment of Off-Campus Locations

The auditor's evaluation of performance areas (see 13-300) may disclose that certain agreements are performed off-campus at locations considerably removed from the institution. Such agreements may not involve the use of the institution's plant facility or the incurrence of costs for operation and maintenance of plant, use charges for building and equipment, library and possibly indirect departmental expenses. In such instances, the auditor should recommend that the institution compute an appropriate off-campus indirect cost rate which will reflect the elimination of costs not applicable to off-campus work. The institution's records should show the agreements to which the off-campus rate applies.

13-506 Treatment of Educational Institution Hospitals

13-506.1 Relationship of Hospital Operations to Institutional Activities

a. Many educational institutions operate hospitals as an adjunct to their medical schools and as a public service to their communities. This may introduce complexities in indirect cost allocations. The relationship of the hospital to the institution must be carefully understood. Experience has indicated that, except for certain general administration and general expenses, such hospitals are generally operated as autonomous subdivisions.

b. Cross-servicing activities between the hospital and other segments of the institution are usually conducted on a reimbursable basis so as to permit the proper determination of hospital patient care costs. Typical examples are the operation of utility and power facilities by the institution and the laundry by the hospital. The auditor should audit such cross-servicing costs to assure that the reimbursement rates are equitable.

c. With respect to general administration and general expenses, the hospital organization may itself perform some of these functions, the costs of which are included in their own accounts. Examples of such functions are purchasing, accounts payable, patient billing, cost accounting, etc.

13-506.2 Allocating Institution General Expenses to the Hospital

a. The most frequently used base for apportioning the institution's general administration and general expenses is total expenditures. Because the hospital performs many general expense functions for its own account and the total expenditure base for the hospital is relatively large in relation to the institution's other activities, the apportionment of the institution's general administration and general expenses on a total expenditure base, which includes the hospital, may not be equitable.

b. In such instances the following alternative methods for distributing general administration and general expenses are suggested in order of preference:

(1) The institution's general administration and general expenses should be carefully audited to determine whether any are directly applicable only to hospital operations. Any such amounts should be included as part of the hospital costs and deducted from the pool of general administration and general expenses to be apportioned to organized research, instruction and other institutional activities on the basis of total expenditures.

(2) The apportionment can be accomplished in two stages by separating the items in this indirect cost category into two groups: one representing those items applicable to organized research, instruction and other institutional activities, and a second group representing common service functions applicable to the hospital as well as the other activities mentioned above. Dependent upon the extent of the hospital's autonomy, this second group may thus include such items as the president's office, data processing department, board of trustees, etc. The apportionment of the total acceptable cost of each group would

be accomplished by relating each group total to the total expenditure base applicable to the activities serviced by the group.

(3) If neither of the above methods is practical, all general administration and general expenses incurred by the hospital and the institution can be combined and apportioned on a total expenditure basis to organized research, instruction and other institutional activities and to the hospital. This procedure, however, is theoretically incorrect because, while general expenses of the institution are applicable in part to the hospital, it is rarely true that hospital general expenses are properly apportionable to the institution. This method should, therefore, be used only if no other approach is practical.

13-507 Work Study Grants

a. At many institutions, part-time students receive Federal support through student work study program grants. When any students who are covered by the program work directly on research agreements, their total salaries for such work, whether fully or partially funded by Federal grants, should be included in the research labor base for determining and allocating applicable indirect costs. The amount of their salaries which is covered by the work study grants may not, however, be charged to Government agreements as an allowable cost.

b. Where students are performing indirect functions, the portion of salary supported under these work study grants is similarly not allowable as indirect costs of agreements.

13-508 Treatment of Dining Hall Gains and Losses

OMB Circular A-21 Section B.1.d. states that dining halls will be treated as "other institutional activities." However, in some institutions where the dining halls are open to and patronized by students, faculty, and research employees, an appropriate share of reasonable losses from the operation of such dining halls may be accepted as an employee morale and welfare expense (OMB Circular A-21 Section J.14). Conversely, a share of any gains from the operation of such dining halls should be credited to the cost of sponsored agreements.

13-509 Treatment of Fringe Benefit Costs Including Pension Plans

13-509.1 Base or Pool Treatment of Fringe Benefit Costs

a. An institution should treat fringe benefits (including pension plan) as a loading factor to be added to salaries and wages of the particular cost objectives (e.g., organized research, library, etc.) for which they were incurred rather than as an indirect cost to be distributed in total, as part of general administration and general expenses. They would be considered as part of the direct salaries and wages applicable to each cost objective. Therefore, when direct salaries and wages of organized research, instruction, and other institutional activities are used as an allocation base to distribute in direct costs, the base amounts should include applicable fringe benefits.

b. However, if the institution's submission does not include fringe benefits as part of the allocation base, this method may be accepted if the auditor determines that substantially the same results are achieved.

13-509.2 State-Wide Benefits for University Employees

a. Special audit attention may be necessary with respect to State universities for which fringe benefit costs are paid and administered by the respective State governments. If the allowability of these costs can be substantiated through the audit of other documentation provided by the institution, the costs should not be questioned solely on the basis of not being paid by the university or recorded on its books.

b. If the institution substantiates fringe benefit costs and includes them in the allocation base for contracts and grants, the auditor should ascertain that a similar adjustment is made to all other salaries and wages included in bases for allocating indirect costs and in indirect expense pools. Accordingly, the auditor should obtain from the institution all information necessary to make these adjustments.

c. Determine the need for such adjustments early in the audit, after review of pertinent files available at the institution, and obtain the necessary information promptly in order to avoid delay in completing the audit. The auditor should urge the university to include the necessary adjustments in future indirect cost submissions.

13-510 Treatment of Other Costs and Functions

13-510.1 Student Health Services

All student health services, including hospitals, should be treated as "other institutional activities" for the purpose of apportioning indirect costs. However, where the health services are made available to students and all employees, an appropriate share of the cost of the operation of the activity may, in accordance with OMB Circular A-21 Section J.14, be distributed to sponsored agreements on a basis equitable under the circumstances. Population may provide such a basis where services are made available to the same extent to all categories.

13-510.2 Television and Radio Stations

Such activities owned and/or operated by an educational institution should be treated as "other institutional activities" for the purpose of apportioning indirect costs.

13-510.3 Planning and Development for the Institution

The auditor should ascertain that all preliminary planning and development costs pertaining to contemplated new construction are being deferred for future incorporation in the cost of the new construction. General institution planning and development expense may be accepted for distribution to all activities of the institution, including sponsored agreements.

13-510.4 Scholarships and Student Aid Costs

Any remission of tuition to students for research work performed is allocable as a cost of the research and should be included in the base for allocation of indirect costs in the same manner as compensation of regular employees engaged in organized research. The costs of scholarships, fellowships, and other forms of student aid apply only to instruction. The costs of administering scholarships and student aid may be allocable in part to research in cases where the students perform services under research agreements. (See OMB Circular A-21 Section J.41).

13-510.5 Grant Support for Computer Facilities

The National Science Foundation (NSF) awards certain grants to educational institutions for the purpose of defraying part of the cost of acquiring or operating computer facilities. Such grants are for the purpose of supporting educational usage and nonsponsored research. No part of the grant is intended to be used to reduce the cost of sponsored research, whether sponsored by the Government or by others. NSF grants will clearly indicate if it is intended that the benefits of the grant be restricted in any way. Where the grant does not specify such an intention, the auditor may properly apply the grant funds to re-

duce the overall cost of acquiring or operating the computer facility for the purpose of determining sponsored research costs.

13-511 Cost Distribution Bases

13-511.1 Base Period and General Criteria for Distribution

Because educational institutions generally close their books of account annually, the base period for distribution of indirect costs should be the fiscal year. As in the case of any apportionment and allocation, the overall objective should be to select the method for each indirect cost category which will distribute the costs to all of the benefiting activities of the educational institution. Each indirect cost category should be apportioned and allocated separately using the most appropriate base for distribution (see OMB Circular A-21 Section E.2). Actual conditions must be taken into account in selecting the method or base to be used in distributing individual cost groupings to applicable cost objectives.

13-511.2 University "Cross Allocation" Method

Prior to apportionment, there normally should be added to allowable expenses appropriate shares of employee fringe benefit expenses applicable to salaries and wages. OMB Circular A-21 Section E.2.e. lists an order of allocation for indirect cost categories. However, a cross allocation of costs between two or more indirect cost categories may be used if such allocation will result in a more equitable allocation of costs in which case the specified order of allocation would not apply. The distribution of a portion of one indirect cost category to another does not change the nature of the item, as defined, although its initial identity may be lost in the distribution process. Figure 13-5-1 illustrates this process.

13-511.3 Methods of Selecting Bases

a. Cost analysis studies may be used when they result in more accurate and equitable distribution of costs. Such studies may more appropriately consider weighting factors, population, or space occupied.

b. The essential consideration in selecting the distribution base in each instance is that it be the one best suited for assigning the pool of costs to cost objectives in accordance with the relative benefits derived; a traceable cause-and-effect relationship; or logic and reason, where neither benefit nor cause-and-effect relationship is determinable. The following paragraphs explain the bases more commonly used.

13-511.4 Total Expenditures Base

a. This term means the sum of all expenditures for a given cost objective, such as for the institution as a whole, instruction, organized research, other institutional activities, etc. When used to denote a base for distribution of indirect costs, the term "total expenditures" should be exclusive of the indirect costs to be apportioned and/or allocated.

b. Any expenditures included in the general administration and general expenses pool that are applicable solely to functions or activities which are properly categorized as "other institutional activities" (see OMB Circular A-21 Section B.1.), should be reclassified from such pool to the total expenditures base. This reclassification is necessary in order to apportion to such functions and activities their proper share of general administration and general expenses.

c. The expenses for operation and maintenance of the library, exclusive of any portion of such expenses that are applicable to general administration and general expenses, should be included in the total expenditures base.

d. When total expenditures is used as a base for distributing indirect costs, total expenditures should be exclusive of capital expenditures.

13-511.5 Direct Salaries and Wages Base

When used, this base should include all salaries and wages and their equivalents (e.g., tuition remissions) applicable to instruction, including departmental research, and to organized research. The auditor should ascertain that the base includes all salaries incurred under grants and cost-reimbursement and fixed-price contracts and subcontracts. See 13-509 for discussion of application of fringe benefit costs to base.

13-511.6 Space Utilization Base

Whenever space utilization is used as a base for apportionment and allocation of indirect expenses to a cost objective, it should be supported by detailed records. The period used to develop the space utilization base should be representative of the usage during the entire period (see 13-512.3). Whenever appropriate, the services of Government technical personnel should be solicited to assist the auditor. Guidance on requesting and using the work of technical specialists is in Appendix D.

13-511.7 Population Served Base

Whenever population served is used as a base, the auditor should ascertain that all personnel served, including evening, summer, extension, and part-time students as well as the general public, are represented in the total and are appropriately weighted.

13-511.8 Modified Total Cost Base

Modified total costs consist of salaries and wages, fringe benefits, materials and supplies, services, travel, and subgrants and subcontracts up to $25,000 each. This is an alternative base for allocating some indirect cost categories to serviced or benefited functions. This base shall be used to distribute indirect cost pools to applicable sponsored agreements unless it can be demonstrated that another base would produce more equitable results (see OMB Circular A-21 Section G.2.)

13-512 Cost Classification

The following guidance is furnished for use in the audit of indirect cost functional categories.

13-512.1 General Administration and General Expenses

a. General administration and general expenses are defined in OMB Circular A-21 Section F.3. Expenses in the general administration and general expense pool should be excluded when comparable expenses are authorized as direct costs to sponsored agreements.

b. The most commonly used base for apportioning general administration and general expenses to instruction (including departmental research), organized research, and other institutional activities, is total expenditures. However, purchases of disproportionately large amounts of direct material for Government sponsored contracts, or other similar significant factors may cause the use of a total expenditure base to be inequitable. In such cases a different base which will eliminate the inequity should be used (see OMB Circular A-21 Section E.2.).

13-512.2 Sponsored Projects Administration Expenses

a. These expenses are defined in OMB Circular A-21 Section F.5. They represent costs allocable to the major functions of the institution under which the sponsored projects are conducted. Most institutions, particularly those that do not maintain a separate research office, do not provide separate accounting classification for this type of expense, but include these items in departmental administration or general administration and general expenses. Unless there is sufficient justification for doing so, the auditor should not attempt to segregate and establish a separate expense pool for these items.

b. Sponsored projects administration expenses are generally limited to those incurred by the separate organization(s) (see OMB Circular A-21 Section F.5.a.) Pursuant to OMB Circular A-21 F.5.c., where sponsored projects are separately administered, it may be necessary to exclude a portion of the normal institutional general administration expenses from allocation to sponsored agreements; e.g., purchasing or receiving, in order to avoid duplication.

13-512.3 Plant Operation and Maintenance Expenses

a. Usually, plant operation and maintenance expenses (see OMB Circular A-21 Section F.2.) fall into three main categories; i.e., (1) utility services, (2) custodial services, and (3) ordinary or normal repairs and maintenance. If the institution distributes these costs separately, the auditor should evaluate the basis of such distribution to all applicable cost objectives. Custodial services and utility services may properly be related to space utilization. On the other hand, where a work order system is in effect, the information ascertainable from the work orders is the most accurate method of determining the proper cost objective of repair and maintenance costs. If a work order system is not in effect, space utilization or other base which will provide the most equitable distribution of the costs may be used.

b. Some institutions charge operation and maintenance expenses initially to other institutional activities, buildings, groups of buildings, departments or subdivisions. Such charges should be evaluated to determine whether they reflect fairly the services involved.

c. Some institutions use weighting factors in distributing plant operation and maintenance costs which result in a larger cost per foot for space used for organized research than for other uses. Such use of weighting factors should be supported by a well documented comprehensive study. The auditor should evaluate the justification and ascertain whether the results are equitable.

d. The apportionment and allocation to their proper cost objectives of plant operation and maintenance costs and use and/or depreciation charges applicable to buildings and equipment, should ordinarily be on the basis of space utilization. Emphasis should be placed on assuring an equitable distribution to other institutional activities, classrooms, auditoriums, laboratories, and other instruction areas where organized research is not conducted. Some of the space may be applicable entirely to organized research or jointly to instruction and organized research. Commonality to both instruction and organized research results principally from graduate students who perform basic research under Government agreements aimed at obtaining advanced degrees.

e. Some institutions treat plant operation and maintenance costs and use allowance and/or depreciation applicable to buildings and equipment for organized research and instruction as a combined amount which is allocated to research and instruction on the basis of respective salaries and wages. Such allocation is unacceptable as it fails to provide for student usage of space and facilities. To be acceptable the total cost being allocated should be reduced in an amount sufficient to cover student space usage of classrooms, auditoriums, laboratories, etc.

13-512.4 Library Expenses

a. These expenses (see OMB Circular A-21 Section F.6.) relate to the operation of a single central facility and individual specialized facilities located in various schools, departments, and laboratories which provide a variety of services to the entire institution. The facilities utilizing floor space, light, heat, furniture, carpeting, book shelves, tables, periodicals, books, microfilming and storage, technical reports, personnel, etc., are available to the total population for the institution. Consequently, the proper base for expense allocation is total population. In developing a population base, all users of the library ordinarily should be included and properly weighted. This would include evening, summer, extension, and other part-time students as well as the general public to the extent that such usage can be determined or reasonably estimated. The basis proposed by the institution must be supported by data developed periodically on actual experience for representative periods.

b. Where the institution has a more complex library system, the auditor should determine whether a more refined process of allocation is required. For example, if several autonomous, specialized libraries exist, or if there is more than one centralized facility, and if the relative benefits derived from the libraries by the Government agreements vary, a distribution such as in a. above should be made for each of the libraries. The extent of audit analysis warranted depends upon the materiality of the share of the library costs which is allocable to the Government agreements and the degree of difference among the libraries in benefits received on Government sponsored work vs. other institution functions and activities.

c. The cost of books, periodicals, and materials should be reviewed for reasonableness. The cost of large and unusual purchases of books which in effect constitute an expansion of the library, should be reviewed for applicability to the period under audit. Consideration should be given to spreading the cost of unusually large purchases of books over a period of several years. Rare book purchases should be examined for reasonableness and allocability to research agreements. Costs incurred in the purchase of rare books (museum type) with no value to sponsored agreements should not be allocated to them (OMB Circular A-21 Section F.6.a.).

13-512.5 Departmental Administration Expenses

a. Departmental administration expenses are expenses incurred for administrative and supporting services that benefit common or joint departmental activities or objectives in academic deans' offices, academic departments and divisions, and organized research units (OMB Circular A-21 Section F.4.). Acceptance of these expenses must be based upon a determination that the department is engaged in organized research, and the departmental administrative personnel perform functions benefiting organized research. Functions benefiting organized research include programming, recruiting personnel, supervising sponsored research, reviewing work progress, and engaging in the administration of sponsored agreements. Where organized research is performed in a separate facility with its own administrative organization, evaluate the allocation of departmental administration expenses to such organized research to determine if it is equitable based on the benefits derived.

b. Give particular attention to any allocation of a portion of the salaries of the institution's department heads and faculty to academic administration expenses. Such allocation is limited to amounts attributable to administrative duties. However, section F.4.a.(2)(a) of OMB Circular A-21 allows recovery of salaries and fringe benefits for the administrative work of certain professionals at a rate of 3.6% of modified total direct costs. (Section G.2 of the Circular defines modified total direct costs.) Expenses covered by the allowance are to be excluded from the departmental administration indirect cost pool. No documentation is required to support this allowance. This section is

sufficiently vague as to invite misinterpretations which may result in significant excess cost allocations to the Government. Accordingly, carefully evaluate forward pricing and incurred cost proposals to determine whether the allowance, if claimed, is questionable. Question the allowance if it results in unjustified or inequitable cost allocations (e.g., if it is proposed or claimed for departments not incurring expenses covered by the allowance or which charge such expenses as a direct cost).

c. Exclude expenses treated as departmental administration expenses when similar expenses are charged as direct costs to organized research and to instruction. Most department heads, divisional heads, and deans, may spend some portion of their time teaching. When, for example, a department head devotes one-fifth of the time to teaching and the remainder to departmental administration, his or her salary should be distributed accordingly. The 20% charged to instruction should be included in the instruction direct salary base. The remaining 80% should be charged to the departmental administration expense pool and ultimately allocated to both organized research and instruction.

d. OMB Circular A-21 Section F.4.b. provides that these expenses should be distributed through bases applied to cost groupings in accordance with OMB Circular A-21 Section E.2. In many cases the total cost of direct salaries and wages of organized research and instruction will be an appropriate base for the allocation of departmental administration expenses to organized research. Because organized research may not be conducted in all departments and schools within an educational institution, it would be inequitable to allocate departmental administration expenses on the basis of a composite rate. In such cases, the expenses of offices of the deans of the schools should first be allocated to the departmental administration offices within the school. Then the expenses of each departmental administration office can be allocated to organized research and instruction. Adoption of this procedure will result in an equitable allocation of the expenses of offices of deans and departmental administration expenses to organized research.

13-512.6 Depreciation and Use Allowances

a. Depreciation or use allowances (see OMB Circular A-21 Section F.1.) compensate an educational institution for the loss of useful value of buildings, capital improvements, and equipment resulting from their use in the performance of sponsored agreements. It should be remembered that a combination of the two methods may not be used in connection with a single class of fixed assets.

b. The following procedures should be used in the audit of depreciation and use allowances:

(1) Ascertain that the institution's proposal does not include the cost of land and that the cost of buildings and equipment purchased or donated by the Government have been excluded.

(2) Review the institution's records and determine that the value placed on buildings and equipment represents actual or reasonable estimate of acquisition cost and not replacement cost.

(3) Ascertain that the equipment for which depreciation or use allowances is proposed is being used on sponsored agreements.

(4) When depreciation is proposed, the service lives placed on the properties by the institution must be evaluated. If needed, assistance from the cognizant Government technical personnel should be sought (see Appendix D). The institution's replacement policy may be an important factor in establishing proper service lives.

(5) The allocation and apportionment of depreciation or use allowances for buildings and equipment to their proper cost objectives should ordinarily be on the basis of space utilization. The audit guidance contained in 13-512.3 is helpful in the audit of depreciation and use charges.

Figure 13-5-1
Format for Allocation of Indirect Costs

	Indirect Cost Categories				Major Activities			
Indirect Costs	Operation & Maintenance	Gen. Admin. & Gen. Exp.	Dept. Admin.	Sponsored Projects Admin.	Library Expense	Organized Research	Instruction	Other Institutional
1. Salaries and other indirect expenses incurred by functional categories	$663,000	$104,000	$278,000	$12,000	$386,000	$40,000	$140,000	$79,000
2. Fringe benefit and pension plan costs - $74,000 total indirect	14,000	6,000	15,000	1,000	18,000	4,000	14,000	2,000
3. Equipment use/depreciation charges - $172,000 total	11,000	5,000	4,000	1,000	4,000	19,000	117,000	11,000
4. Building use/depreciation charges - $217,000	11,000	8,000	1,000	1,000	3,000	29,000	144,000	20,000
5. Operation and maintenance	(699,000)	26,000	2,000	1,000	15,000	59,000	492,000	104,000
6. General admin. & general expenses		(149,000)	100	200	9,000	6,000	128,000	5,700
7. Departmental admin. expense			(300,100)	--	--	74,000	191,000	35,100
8. Sponsored projects admin. expense				(16,200)	--	16,200	--	--
9. Library expenses					(435,000)	79,000	255,000	101,000
10. Total indirect expense						$326,200	$1,481,000	$357,800

NOTE: The above format is intended only to illustrate the process and sequence of allocation. It does not imply reasonable expense levels or rations nor mandatory accounting methods. When appropriate for use as an audit worksheet or audit report exhibit, the basis and methods of apportionment should be adequately explained in footnotes or supporting schedules cross referenced as required.

13-600 Section 6 --- Establishing Indirect Cost Rates at Educational Institutions

13-601 Introduction

This section describes the various methods by which Government agencies predetermine, and/or retroactively settle, the indirect cost rates to be used for costing grants and contracts with an educational institution, along with the contract audit responsibilities involved in this process.

13-602 Rates for Sponsored Agreements

Unless significant inequities would result, a single uniform rate should be used to distribute to individual sponsored agreements the indirect expenses apportioned to organized research. OMB Circular A-21 Section G.1.b. discusses conditions under which use of a single rate would not be appropriate. Dependent upon the conditions, offsite rates or separate rates for different segments of the institution may be appropriate.

13-603 Rates for Educational Service Agreements

Educational service agreements may be performed as part of general instructional activities. If these agreements require the determination of actual indirect cost rates (some grants contain administrative ceilings on these rates), additional analysis would be required. Not all the expenses associated with the general instructional activities would be allocable to particular services being performed under these agreements under the cost principles of OMB Circular A-21, and the policies of the agencies concerned. Many instructional expenses may be related to the education of the general student body and may be unrelated to specialized educational services rendered under Government agreements.

13-604 Simplified Procedure for Small Institutions

Where the total direct cost of Federal work does not exceed $10 million in a fiscal year, OMB Circular A-21 Section H. provides a simplified method for computing indirect cost rates which the institutions may elect to use. The auditor should encourage the use of this method where appropriate, since audit scope could be reduced and resources conserved. However, the auditor may find, from prior experience or from a cursory review of the institution's financial reports and supporting information, that the results would not be equitable, or that the accounting information required for use of the abbreviated procedure is not available. If so, notify the institution and recommend to the Government administrative activity that the institution should be required to use the regular procedure.

13-605 Predetermined Fixed Rates

a. OMB Circular A-21 Section G.4. cites the authority for the negotiation of predetermined fixed indirect cost rates for cost reimbursement type contracts for research and development. A further provision of FAR 42.705-3(b), is that a predetermined rate should be used only if the same basis is used on all Government contracts with the institution. Depending upon the circumstance, a rate may be negotiated at the beginning of a fiscal year for application in ensuing contracts performed during the year, or, it may be established during the pricing negotiations of an individual contract.

b. FAR 42.705-3(b)(6) allows for the use of multi-year predetermined indirect cost rates for DoD contracts with educational institutions. The multi-year rate can be used for a period of not more than four years. The pertinent factors that the auditor should consider when providing advice on the use of multi-year rates include:

(1) the stability of the indirect cost rates from year to year,

(2) the accuracy of the estimating system to forecast indirect cost rates (compare forecasted rates to actual rates for the last 3-5 years),

(3) the adequacy of the internal control systems---especially the university's internal controls for identifying and segregating unallowable costs and for ensuring that intermediate and final cost allocations are equitable, and

(4) the amount of questioned costs reported in the last 2-3 annual audits of the university's incurred cost and forward pricing proposals.

c. The auditor will evaluate an institution's proposals for predetermined rates when requested to do so by the cognizant administrative agency. The same attention should be given to the equity and propriety of the methods for allocating and applying indirect costs used in these proposals for the evaluation of historical indirect costs discussed earlier in this chapter.

d. Where predetermined indirect cost rates are negotiated, the auditor will apply the rates in subsequent audit determinations where indirect costs of the same period are includable. However, if the auditor finds that the predetermined rates are not applied consistently to all the contracts affected, for example, as to uniform treatment of the institution's direct and indirect cost classifications, inform the interested contracting officers promptly and recommend appropriate changes.

e. DoDIG Audit Policy Memorandum 95-1, dated August 25, 1995, generally prohibits the DCAA auditor from participating in the single audit for any fiscal year that an educational institution has predetermined fixed rates. Because the audit risk at educational institutions with both predetermined fixed rates and less than $50 million of indirect costs charged to Federal research and development awards is considered low, the independent public accountant will perform the entire single audit. DCAA will not perform any audit effort at these locations unless specifically requested by the contracting officer (see 13-209.7). DCAA will continue to perform limited audit work at DoD cognizant educational institutions with predetermined fixed rates and $50 million or more charged to Federal research and development awards.

13-606 Negotiated Fixed Rates

a. As explained in OMB Circular A-21 Section G.5., when fixed rates are negotiated in advance for a certain time period, the over (or under) recovery may be included as an adjustment to the indirect cost for the next rate period. When the rate is negotiated before the carry-forward adjustment is determined due to delay in audit, the carry-forward may be applied to the next rate negotiation.

b. Unrecovered amounts under lump-sum agreements or cost-sharing provisions of prior years shall not be carried forward for consideration in the new rate negotiation.

c. The carry-forward procedure does not apply to cost-type research agreements covering work performed in wholly or partially Government-owned facilities.

13-607 Indirect Rates for Training and Other Non-Research Agreements

a. Increasingly, educational institutions are being awarded contracts and grants for conducting training and other programs not of a research and development nature. The types of services rendered under these agreements may vary greatly. Some of these programs may utilize the institution's instructional and other related facilities, while others may be completely separate from all campus activities and facilities. These differences may necessitate a careful consideration of the institution's activities and related indirect costing structure. In rate determinations, the auditor should maintain a balance between the undesirable effects of inequitable distributions of particular indirect cost items on the one hand, and fragmentation or proliferation of indirect cost rates on the other. The auditor must evaluate the circumstances at each institution in terms of the relationship of cost benefits for the programs involved and the materiality of the items.

b. In some cases, indirect cost rates developed primarily for research and development agreements have been incorporated as provisional rates in contracts for training or other programs. If the auditor believes the provisional rates are inappropriate and are contributing to a significant inequity in accordance with the preceding paragraph, the auditor should notify the contracting officer setting forth the reasons and recommended rates.

13-700 Section 7 --- OMB Circular A-133 Audits and Reports

13-701 Introduction

This section provides guidance on planning the audit including:
(1) the evaluation of internal control over compliance,
(2) the evaluation of compliance related to federal programs, and
(3) the preparation and distribution of audit reports to meet the regulatory requirements of OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
The audit report guidance supplements that presented in Chapter 10, and applies to DCAA audits of all organizations covered by OMB Circular A-133. This includes non-profit organizations such as educational institutions and Federally Funded Research and Development Centers (FFRDCs).

13-702 OMB Circular A-133

13-702.1 General

a. OMB Circular A-133 (see 13-207) establishes audit and reporting requirements for states, local governments, educational institutions, and other nonprofit organizations, and defines federal responsibilities for implementing and monitoring these requirements.
b. OMB Circular A-133 requires auditors to issue reports on three parts of an auditee's operation:
(1) financial statements,
(2) internal control, and
(3) compliance with laws and regulations.
Pro forma audit reports developed by DCAA to meet the Circular's requirements for reporting on an auditee's internal control and program compliance are available through contacting either your regional representative cognizant of A-133 audits or Headquarters (PPD).
c. Related supplemental guidance for preparing DCAA audit reports is presented in the following sections of Chapter 10:
(1) Section 2 -- Audit Report Format and Contents (General),
(2) Section 4 -- Audit Reports on Operations and Internal Control (System Audits), and
(3) Section 5 -- Audit Reports on Annual Incurred Costs

13-702.2 Frequency of Audits

a. OMB Circular A-133 audits shall be performed annually, except that biennial audits are permitted under limited circumstances. These conditions are presented in Subpart B section .220 of the Circular. DCAA's A-133 audit efforts are almost always performed annually.
b. When planning DCAA's part of the A-133 audit, the auditor needs to contact the auditee or cognizant agency for audit (see 13-102.3) to determine if a biennial audit has been approved, and if so, consider using a multi-year audit approach (see 6-603.6).

13-702.3 Audit Report Due Dates

a. OMB Circular A-133 requires the auditee to submit its complete reporting package within 30 days after receiving all the audit reports or within 9 months after the end of the period audited, whichever comes first. However, the April 1997 version of OMB Circular A-133 Subpart C section .320 (a) allows for a two year transition period (this provision is effective for the fiscal years beginning after June 30, 1998) allowing entities to continue submitting their reporting package under the previous requirement i.e., 13 months after the

end of the period audited. DCAA audit reports must be available to the auditee in time for the auditee to meet its reporting due dates.

b. OMB Circular A-133 (Subpart D) authorizes the cognizant agency for audit or the oversight agency for audit (see 13-102.3) to grant auditee requests for extensions to the report due date.

13-702.4 Major Program Determination Using the Risk Based Approach

a. The Circular does not require auditors to test all federal programs; it requires the auditor to use a risk-based approach established by OMB in selecting major programs for testing. OMB Circular A-133 extends compliance testing to all programs having internal controls tested as part of the 50 percent coverage rule (see 13-702.4c(4) below). The risk-based approach allows testing to be reduced to 25 percent if the auditee is considered low-risk (see A-133 section .520(f)).

b. For the auditor to determine which major programs are to be tested for compliance using the risk-based approach, the auditee must provide a schedule of expenditures of federal awards (see 13-706.4). Using the risk-based approach, the auditor will determine which federal programs are major programs taking into consideration:

(1) current and prior audit experience,

(2) the extent of oversight provided by federal agencies and pass-through entities, and

(3) inherent risk of the federal program.

c. A four step process for determining major programs using the risk-based approach is presented in OMB Circular A-133 at Subpart E sections .520 and .525. A summary of the four step process follows:

(1) Designate programs as either type A (larger) or type B (smaller) based on total expenditures by the auditee during the audit period. Thresholds will vary by the size of the auditee's total federal expenditures and the criteria at A-133 section .520(b).

(2) Determine which of the type A programs are low-risk. Generally, a type A program is low-risk if it has been audited as a major program in at least one of the two most recent audit periods and, in the most recent audit period, had no reportable condition in internal control or reported material noncompliance with federal programs.

(3) Identify type B programs that are high risk. Using professional judgment and the criteria presented in 13-702.4b, evaluate risk. Only type B programs that meet OMB's size thresholds must be evaluated.

(4) Identify major programs for testing based on the results of the first three steps. Major programs will include all type A programs (except see A-133 section .520(e)); and additional programs as necessary so that the programs audited as major programs encompass at least 50 percent of the auditee's total federal expenditures. The additional major programs selected to satisfy the percentage of coverage rule is based on the auditor's judgment.

d. When determining nature, timing, and extent of transaction testing of an auditee's compliance with laws and regulations, the auditor should consider audit risk and materiality related to each major program rather than the financial statements (see A-133 Subpart E section .510). Since materiality is evaluated at the program level rather than at the financial statement level, this will result in lower thresholds for judging materiality.

13-702.5 Major Program Determination – First Year Audit Exemption

Section .520(i) permits the auditor to use a dollar threshold rather than the risk based approach (13-702.4) in a first year audit. This exemption applies to the first year an auditee has an audit in accordance with the Circular dated June 1997, or the first year of a change in the auditee's independent public accountant. Under either condition, the auditor may elect to determine major programs as all Type A programs plus any Type B programs necessary to satisfy the percentage of coverage rule (see 13-702.4a above). The auditee may not use this exemption more than once in every three years. This is to ensure that

constant change of independent auditors would not preclude the audit of high-risk Type B programs.

13-702.6 Compliance Supplement

The auditor should refer to the OMB Circular A-133 Compliance Supplement (see 13-208) to determine the principal compliance requirements for major programs. The document serves to identify the compliance requirements which the Federal Government expects to be considered as part of an audit. The Compliance Supplement provides a single source of information for auditors to understand the federal program's objectives, procedures, and compliance requirements relevant to the audit objectives as well as audit objectives and suggested audit procedures for determining compliance with these requirements. For programs not in the Compliance Supplement, the auditor should first review the federal award and applicable regulations and then determine if a program-specific guide is available from the Office of the Inspector General of the federal awarding agency.

13-702.7 Program Specific Audit

a. A program specific audit is an audit of one federal program, rather than a single audit of the auditee's financial statements and federal programs. Section .200(c) of OMB Circular A-133 states that when an auditee expends federal awards under only one federal program (excluding Research and Development (R&D)) and the federal program's laws, regulations, or grant agreements do not require a financial statement audit of the auditee, the auditee may elect to have a program-specific audit conducted in accordance with section .235 of the Circular. Program-specific audits are not permitted when an auditee is required to have a financial statement audit. An example of a program-specific audit that is not permitted is an award to an educational institution under the Student Financial Aid (SFA) program cluster. A program-specific audit is not permitted because the U.S. Department of Education regulations (Higher Education Act of 1965 as amended) require educational institutions with SFA to obtain an annual audit of financial statements.

b. A program-specific audit may not be elected for R&D program cluster unless:

(1) All of the federal awards expended were received from the same federal agency, or the same federal agency and the same pass-through entity, and

(2) That federal agency or pass-through entity (in the case of a subrecipient) approves in advance a program-specific audit.

Although DCAA's audit covers the R&D program, DCAA generally issues single audit reports because the auditee typically receives federal awards from more than one federal agency or it is required to obtain a financial statement audit.

c. Before performing a program-specific audit, the auditor should determine whether the auditee satisfied the requirements identified above. Program-specific audit guides that provide guidance on internal control and compliance requirements, may be obtained by contacting the Office of the Inspector General of the awarding agency. For guidance on how to identify the applicable compliance requirements for program-specific audits when a program-specific guide is not available see section .235(b) of the Circular and Part 7 of the Compliance Supplement.

13-702.8 Monitoring Subrecipients

a. Pass-through entities (see OMB Circular A-133 section .100) are required to monitor the activities of subrecipients. Monitoring a subrecipient includes on-site visits, review of documentation supporting request for reimbursement, and limited scope audits. The Single Audit Act Amendments of 1996 (see 13-103) prohibit a pass-through auditee from charging its federal awards the cost of an A-133 audit of a subrecipient when the amount of federal awards expended by the subrecipient is less than $500,000

per year. However, OMB Circular A-133 section .230(b)(2) does permit limited scope audits which includes agreed-upon procedures. The agreed-upon procedures may only address one or more of the following compliance requirements: activities allowed or disallowed; allowable costs/cost principles; eligibility; matching, level of effort, earmarking; and reporting.

b. For subrecipients that expend less than $500,000 in federal awards annually, the costs of any audits other than limited scope audits described above, are not allowable costs and therefore, cannot be charged to any federal award.

c. Auditors should consider various risk factors regarding subrecipient monitoring, such as the relative size and complexity of awards administered by the subrecipient, prior experience with the subrecipient, and the cost-effectiveness of the various monitoring procedures identified above.

13-703 Coordinated Audit Approach

13-703.1 General

a. Under the conditions for receiving federal awards presented in OMB Circular A-133, Subpart C, auditees agree to comply with applicable laws, regulations, and provisions of the awards, and to maintain internal control which reasonably ensures compliance with these requirements. Subpart E describes the auditor's responsibility for establishing the audit scope and reporting the results of audit. Under OMB Circular A-133, audits are to be made by independent auditors in accordance with Government Auditing Standards. Section .105 of the Circular defines the term "auditor" to include federal, local, and state auditors, and the recipient's independent public accountant (IPA). The term "auditor" does not include the auditee's internal auditors. Section .305(c) of the Circular contains a provision permitting DCAA (federal) auditors to perform all or part of the work required under the Circular while operating within his/her federally mandated mission (see Chapter 1).

b. As provided for in OMB Circular A-133, the auditee may elect to implement a coordinated audit approach. The objective of a coordinated audit is to avoid duplication of effort and build upon each other's work, but not to limit audit scope. As a result, the economies gained through mutual reliance will be achieved, and tests and procedures will not be duplicated.

c. DCAA's participation in a OMB Circular A-133 audit will normally be on a coordinated basis; that is, there will be multiple organizations involved in the OMB Circular A-133 audit process. The participants in a coordinated audit may include the auditee, its IPA and internal auditor, DCAA, the ACO, and the cognizant agency.

d. The coordinated audit participants should discuss and compare their individual audit/review requirements and identify areas of duplication. Participants should then agree on (and document) a coordinated audit matrix, the audit/review responsibilities of each party, which independent auditor will be responsible for reporting on the auditee's compliance with the applicable OMB Circular A-133 compliance requirement(s), and finally, which independent auditor will be responsible for completing the applicable portions of the data collection form (see 13-706.7).

e. Because ACOs and internal auditors do not meet the definition of "auditor" as used by OMB Circular A-133 (see section .105), their reports do not conform to the audit reporting requirements of A-133 (see section .505). Therefore, either DCAA or the auditee's independent auditor must perform steps necessary to place reliance upon the ACO's and/or internal auditor's work and issue a comprehensive report in accordance with the Circular.

f. The DCAA auditor should endeavor to participate as a team member in ACO business system reviews (for example, a purchasing system). The auditor should ensure that the audit is sufficient in scope to be responsive to both the needs of the contract administration organization and adequate to satisfy the requirements of OMB Circular A-133. This can best be accomplished by ensuring that the ACO participates in the initial coordi-

nated audit meeting. When preparing the OMB Circular A-133 reports, the auditor should make maximum use of any reports issued by the ACO or its designee.

13-703.2 Coordinated Audit Matrix

a. In a coordinated audit, the participants will identify and document their respective audit/review responsibilities. The documentation of each participant's responsibilities in a coordinated audit is accomplished by completing a Coordinated Audit Matrix (or a similar form). The form will ensure that all applicable compliance requirements are appropriately covered in the A-133 audit, and reported on accordingly. Typically, DCAA will report on internal control related to the administration of federal awards and compliance with applicable laws and regulations (see 13-706.1).

b. The implementation of the coordinated audit approach will generally proceed along the following line:

(1) An initial coordination meeting is held where the participants will identify and compare their individual audit/review requirements and identify areas of duplication. Out of this meeting will come a coordinated audit matrix identifying the OMB Circular A-133 compliance requirements and other audits to be performed by the audit organizations. The matrix will also delineate the required audit coverage and estimated report dates. The matrix ensures that all applicable compliance requirements are appropriately covered in the A-133 audit and that duplication of audit effort between the audit entities will be eliminated to the maximum extent feasible. See Figure 13-7-1 for an example of a coordinated audit matrix.

(2) With regard to the compliance requirements, the auditor should refer to Part 2 of the OMB Circular A-133 Compliance Supplement, to identify which of the 14 types of compliance requirements have a direct and material effect on each major program subject to audit. Because DoD's awards to A-133 covered auditees are typically R&D related, DCAA's audit responsibilities are generally in the R&D program area (see A-133 section .105). The scope of DCAA's portion of the typical A-133 audit will generally be limited to the requirements on the matrix for which DCAA is noted as the responsible audit organization.

(3) As part of the coordinated audit planning process, the participants in the coordinated audit should discuss, agree, and document on the coordinated matrix which independent auditors will be responsible for completing the applicable portions of the data collection form (see 13-706.8). The DCAA auditor should meet with the auditee and its independent auditors in an effort to persuade the auditee's IPA to complete Parts I (Item 7) and III of the data collection form. The DCAA auditor should use materiality as the persuading criterion for determining which audit organization will sign the data collection form. When the materiality of the financial statements audited by the auditee's IPA is compared to the materiality of the federal programs audited by DCAA, usually the auditee's IPA will have performed the major portion of the OMB Circular A-133 audit work. For additional guidance on completion of the data collection form see 13-706.8.

(4) Following the development and acceptance of the matrix, the audits/ reviews will be performed by the respective coordinated audit participants.

(5) Auditors will make arrangements to obtain access to audit programs, working papers, and reports for the work being relied upon.

(6) Audits under OMB Circular A-133 are to be completed and reports submitted to the auditee so that the auditee may submit its A-133 reporting package no later than 9 months (see 13-702.3) after the end of the institution's fiscal year. Participation in a coordinated audit approach requires ongoing audit planning and progress conferences to ensure that the individual audit plans will result in effective audits with minimal duplication.

13-703.3 Document Audit Scope Limitations

a. Situations that may constitute a limitation on the scope of DCAA's Circular A-133 audit and thereby warrant the issuance of a qualified audit opinion or disclaimer of opinion include:

(1) An auditee received a significant amount in federal awards from a non-DoD agency, and the non-DoD agency is unwilling to reimburse DCAA for its portion of DCAA's Circular A-133 audit services, or

(2) A significant amount of auditee expenditures for the period is excluded from the scope of DCAA's audit. For example, the DCAA auditors (including Field Detachment auditors) may not have access to certain restricted or classified information.

b. In those cases where there is both DoD and non-DoD business, and the non-DoD agency officially notifies DCAA that it will not reimburse DCAA or require DCAA audit services, the FAO should advise the non-DoD agency that its awards will not be included in DCAA's audit.

c. As part of the coordinated audit planning process, notify the auditee, its IPA, and the cognizant agency for audit that the non-DoD agency's federal awards will not be included in DCAA's audit. The participants in the coordinated audit should revise the coordinated audit matrix to reflect any change in audit responsibility for the non-DoD awards from DCAA to the IPA (or other independent auditor). OMB Circular A-133 Subpart E. 500(a) requires that an A-133 audit cover the entire operations of the auditee. Therefore, if DCAA does not cover a particular federal program, the IPA or another federal auditor must cover the program.

d. When the FAO and the Field Detachment have joint audit responsibilities, the objective should be to achieve a comprehensive, coordinated, and integrated audit of the recipient's federal expenditures. Annual coordination meetings should be held between the FAOs to determine the responsibilities of each FAO (see 6-405.4a).

e. In planning the audit, the regional FAO should assure that the auditee fulfills its reporting obligations under OMB Circular A-133, which requires that the auditee prepare and submit to DCAA the schedule of expenditures of federal awards (A-133 section .310(b)). Upon receipt of this schedule, the regional FAO should verify that it is complete and determine if audit assistance is required. This may be accomplished by knowledge gained from prior audit experience with the auditee and through discussions with the auditee at the entrance conference. When it is determined that the regional FAO does not have access to federal awards because they are classified, audit assistance from the cognizant Field Detachment FAO should be requested.

f. There may be situations where audits of the classified awards are performed by another Government audit organization similar to the Field Detachment. In all cases where classified work is involved, the regional FAO should request assistance from the Field Detachment. If necessary, the Field Detachment will then coordinate audit matters with the other Government audit organization, and will perform procedures necessary for relying upon the work of other auditors (see 4-1006.2). The Field Detachment FAO will communicate the results of audit in an assist audit report to the regional field audit office.

g. When appropriate, the DCAA FAOs will rely on the work performed by other Government audit organizations. If the work performed by the other auditor is material to the DCAA FAO's opinion being expressed, and the DCAA FAO is unable to rely upon the work performed by the other Government audit organization, the FAO's audit report will exclude those awards audited by the other Government audit organization, contain a limitation on scope paragraph, and not make mention of the classified nature of the awards.

h. DCAA FAOs will rely on the work of other DCAA offices (including Field Detachment) without making reference to the work performed by that office in the audit report (refer to 4-1006.2b). The regional FAO must fully coordinate with the cognizant Field Detachment FAO regarding the manner in which any Field Detachment

assist audit findings may be presented in the regional FAO's A-133 audit report. Consideration must be given to security concerns and the probable need to present the audit finding without reference to the classified nature of the awards, and without reference to the Field Detachment. Therefore, the information in the assist audit report should not be attached to the A-133 audit report.

13-703.4 Relation to Other Audit Requirements

a. Whether or not an FAO participates in a coordinated audit, audit planning and execution should consider the extent to which reliance can be placed on the work performed by the auditee's independent auditors. (See 4-1000 for guidance when relying upon the work of others).

b. An audit made in accordance with OMB Circular A-133 is to be in lieu of any financial audit required under individual federal awards. Accordingly, to the extent that an A-133 audit provides an FAO with the information and assurances needed to carry out its overall responsibilities, the FAO is to rely upon and use such information. FAOs can make additional audits if needed to carry out their responsibilities under federal law and regulation. Such additional audits, however, must be planned and executed so that they build upon the work already performed under the A-133 audit.

c. The Circular does not limit the authority of DCAA to conduct audits and evaluations of federal awards, nor does it authorize any institution or subrecipient thereof to constrain DCAA, in any manner, from carrying out additional audits or evaluations.

13-704 Audit of Internal Control

13-704.1 General - Internal Control

OMB Circular A-133 requires the auditor to determine and report on whether the auditee's system of internal control provides reasonable assurance that the auditee is properly managing its federal programs.

13-704.2 Scope of Audit - Internal Control

a. OMB Circular A-133 requires auditors to obtain an understanding of the auditee's internal control over federal programs, assess control risk, and perform appropriate testing of the internal control over major federal programs. The auditor relies on his/her understanding of the internal control to plan the compliance audit.

b. OMB Circular A-133 does not require testing of the internal control in situations where the auditee's system of internal control is likely to be ineffective in preventing or detecting noncompliances. These situations are always reportable conditions. If the auditor limits his/her consideration of the internal controls for any reason, the circumstance should be disclosed in the audit report.

c. During the audit, the auditor may become aware of deficiencies in the design or operation of the internal control. These deficiencies may also be considered as reportable conditions. Paragraph 5.13 of the Government Auditing Standards provides examples of potential reportable conditions.

d. If a reportable condition is considered to be of such magnitude as to preclude management from asserting that the entity has effective internal control, it would be reported separately as a material weakness. The auditor should coordinate in advance with regional management and the auditee's independent public accountant before issuing an audit report citing the auditee for a material weakness.

13-704.3 Reporting - Internal Control

The report on the system of internal control will describe the scope of testing the internal control and the results of the tests. Generally, the auditor does not express an opinion on the overall internal control system because the procedures necessary to express an opinion are not performed, but rather the auditor describes the extent of work performed.

13-705 Audit of Compliance

13-705.1 General - Compliance

OMB Circular A-133 requires the auditor to determine and express an opinion on whether:

(1) the auditee has complied with applicable laws and regulations, and

(2) any noncompliances found would have a material impact on major program(s) determined in accordance with the risk-based approach described in Subpart E of the Circular.

13-705.2 Scope of Audit - Compliance

a. The Circular states that compliance testing should include tests of transactions and such other auditing procedures necessary to provide the auditor sufficient evidence to support an opinion on compliance. When performing compliance tests the auditor is to:

(1) use the risk-based approach (see 13-702.4), to determine the major programs that are to be tested;

(2) identify the applicable compliance requirements using the compliance supplement and professional judgment (see 13-702.6);

(3) consider the auditee's internal control over compliance (see 13-704);

(4) perform compliance testing of transactions to obtain sufficient evidence to support an opinion on compliance for each major program; and

(5) perform follow-up procedures on previously reported findings (13-706.1c).

b. The principal compliance requirements applicable to most federal programs are included in the compliance supplement. The supplement also contains the audit objectives for each type of compliance requirement and suggested audit procedures to be used by the auditor in developing an audit program for testing compliance. For those federal programs not covered in the compliance supplement, the auditor should audit provisions of the contracts and grant agreements, and use the types of compliance requirements contained in the compliance supplement as guidance for identifying the types of compliance requirements to test.

13-705.3 Reporting – Compliance

DCAA's pro forma audit report requires an opinion on the auditee's compliance with laws and regulations. It also calls for (i) an opinion on the auditee's schedule of federal expenditures, and (ii) a statement of concurrence/nonconcurrence regarding the auditee's summary schedule of prior audit findings.

13-706 Preparation and Distribution of Audit Reports and the Data Collection Form

This section discusses the overall reporting requirements of OMB Circular A-133 and DCAA requirements governing audit report content and completion of the data collection form. OMB Circular A-133 requires the auditee to prepare the financial statements, schedules (schedule of expenditures of federal awards, summary schedule of prior audit findings) and corrective action plan. The preparation of audit reports and schedule of findings and questioned costs are the responsibility of the independent audi-

tor. The financial statements, schedules, corrective action plan and audit reports make-up the A-133 reporting package. OMB Circular A-133 also requires the auditee and auditor(s) to complete and sign applicable portions of the data collection form.

13-706.1 Three Parts of Auditees' A-133 Reporting Package

a. The required OMB Circular A-133 reports covering a particular fiscal year are packaged together by the auditee into a OMB Circular A-133 audit "reporting package." This reporting package, when complete, is forwarded by the auditee to a federal clearinghouse. The reporting package can include audit reports from a federal audit organization, as well as reports from the auditee's independent public accountant in a coordinated audit approach. To satisfy the Circular's reporting requirements, auditor(s) will normally issue the following reports:

(1) Report(s) on Financial Statements & Schedule of Expenditures of Federal Awards. This report calls for an opinion on whether the financial statements are presented fairly in all material respects in conformity with GAAP, and an opinion on whether the auditee's schedule of expenditures of federal awards is presented fairly in relation to the financial statements taken as a whole. These opinions may be expressed in a single or two separate reports. Audit reports on financial statements are always the responsibility of the IPA. The "Results of Audit" section in DCAA's Circular A-133 audit report includes an opinion on the auditee's schedule of expenditures of federal awards. (See 13-706.4)

(2) Report(s) on internal control and compliance over financial reporting based on an audit of the financial statements in accordance with the Government Auditing Standards. This is a report on the auditor's understanding of the auditee's system of internal control which includes a description of the scope for testing of internal control and the results of the tests. This report is the responsibility of the IPA.

(3) Report(s) on internal control and compliance with requirements applicable to each major program in accordance with OMB Circular A-133. This report provides the auditor's opinion on whether the auditee complied with applicable laws, regulations and provisions of its federal awards. Depending on the coordination between the independent auditors, the report(s) on internal control and compliance can be the responsibility of DCAA, or both DCAA and the IPA.

b. Subpart E section .505 of the Circular permits the three parts of an A-133 reporting package (financial, internal control, and compliance) to be combined or presented as separate reports.

c. In addition to the three parts of a OMB Circular A-133 report, the auditee must also submit the following as part of its A-133 reporting package:

(1) Schedule of Findings and Questioned Costs -- Subpart E section .505(a)(4) requires a summary of the audit findings and questioned costs. This is a summary of the results of audit. (See 13-706.5)

(2) Summary Schedule of Prior Audit Findings -- Subpart C section .315(b) requires the auditee to report on the status of all audit findings included in the prior audits. OMB Circular A-133 requires the auditor to follow-up on corrective actions taken by the auditee related to prior audit findings. Corrective action in OMB Circular A-133 means action taken by the auditee that: (i) corrects identified deficiencies, (ii) produces recommended improvements, or (iii) demonstrates that the audit findings are either invalid or do not warrant auditee action. The auditor assesses the reasonableness of the auditee's assertions regarding the status of previously reported findings. After completing the assessment, the auditor then reports as a current year audit finding, assertions prepared by the auditee that materially misrepresent the status of any prior audit finding. (See 13-706.6)

(3) Corrective Action Plan -- Subpart C section .315(c) requires the auditee to prepare a corrective action plan to address each audit finding. The plan should include a point of contact, corrective action to be taken, and anticipated completion date. The DCAA auditor will consider the auditee's corrective action plan when presenting the audit finding.

(4) Data Collection Form – Although not part of the auditee's reporting package, Subpart C section .320(b) requires the auditee and auditor(s) to prepare a data collection form at the completion of the audit and submit it to a federal clearinghouse designated by OMB along with the reporting package. (See 13-706.8)

13-706.2 Report Format and Content

a. Prepare the OMB Circular A-133 report using the pro forma report for internal control and compliance (13-702.1). Address the report to the cognizant agency for audit and provide concurrent copies to the auditee for inclusion in its reporting package to be submitted to the federal clearinghouse.

b. The audit findings (e.g., internal control deficiencies and noncompliance findings) should be presented in sufficient detail for the auditee to prepare a corrective action plan and allow resolution of the finding. As noted in section .510(b) of the Circular, at a minimum, the elements of an audit finding will include:

(1) Condition - facts relied on that indicate that a noncompliance occurred;

(2) Criteria - including regulatory, statutory, or other citation; information to provide proper perspective for judging the prevalence and consequences of the audit findings; and where appropriate, instances of noncompliance shall be related to the universe and the number of cases examined;

(3) Recommendation - corrective action to prevent future occurrences of the deficiency;

(4) Auditee reaction - pertinent views of responsible officials of the audited entity;

(5) Auditor's response - if viewed as appropriate; and

(6) Reference number - each audit finding is to include a reference number to allow for easy referencing by the auditee in preparing both the current year corrective action plan, and the summary schedule of status of prior audit findings. To avoid confusion, the DCAA auditor should coordinate with the IPA and agree on each audit organization using a different audit reference numbering scheme.

c. For A-133 reporting purposes, the auditor is required to report as audit findings in the schedule of findings and questioned costs:

(1) questioned cost greater than $10,000 for a type of compliance requirement for a major program (A-133.510(a)(3)), and

(2) questioned costs greater than $10,000 for a federal program which is not audited as a major program (A-133.510(a)(4)).

The auditor is not prohibited from reporting as an audit finding questioned costs that are less than the above thresholds. The auditor will exercise judgment and report each audit finding considered to be material under the given circumstances.

13-706.3 Limitation of Audit Scope

a. Restrictions on the scope of the DCAA field audit office's work on compliance may require the auditor to express a qualified opinion or disclaim an opinion (see 13-703.3). For example, the circumstances may be that DCAA's portion of the coordinated audit of federal programs does not include the entirety of the auditee's federal awards, the excluded awards are significant, and the exclusions impact the auditee's ability to form an overall opinion on compliance over the federal program(s). These circumstances may occur when a non-DoD agency does not have the funds to reimburse DCAA for audit services, or when the Field Detachment is precluded from applying all the procedures considered necessary to rely on the work of another Government audit organization. In such cases DCAA's audit report will be revised as follows:

(1) The non-DoD awards will not be identified in DCAA's audit report and the other documents accompanying DCAA's Circular A-133 audit report;

(2) The circumstances should be identified in a separate paragraph of DCAA's Circular A-133 audit report(s), however, no mention will be made that any awards are classified;

(3) Both the Scope and Results of Audit paragraphs in the audit report should specifically refer to this limitation on scope, and the audit opinion will refer only to those awards listed in DCAA's audit report.

b. In those situations where it is not clear whether or not the regular DCAA office should report audit findings that may also affect classified work because of security concerns, the matter should be elevated to management for resolution. In all circumstances, the auditee should be made aware of audit findings that affect classified awards.

13-706.4 Reporting on Schedule of Expenditures of Federal Awards

a. There are over 1,000 individual grant programs and several types of federal awards. Many of the major programs are identified by their catalog of federal domestic assistance number (CFDA number, see A-133, Subpart 105). OMB Circular A-133, section .310 requires the auditee to prepare a schedule of expenditures of federal awards along with notes that describe significant accounting policies used in preparing the schedule. For the R&D program, total federal awards expended shall be shown either by individual award or by federal agency and major subdivision within the federal agency.

b. The purpose of reporting on the schedule is to present a summary of the auditee's total expenditures by major program, non-major program, and non-cash assistance (i.e., programs involving commodities received, loan guarantees, loans, or insurance). A-133 section .505(a) requires the auditor to express an opinion on whether the schedule of federal awards is presented fairly in all material respects in relation to the financial statements. Typically, DCAA will comment on the research and development program. DCAA's pro forma Circular A-133 report will satisfy this requirement.

13-706.5 Schedule of Findings and Questioned Costs

a. OMB Circular A-133, section .505(d) requires that each audit organization's audit report include a schedule of findings and questioned costs. This schedule is required even if there are no current year audit findings. Figure 13-7-2 is an example of a completed schedule for a typical DCAA A-133 coordinated audit.

b. If the IPA's participation in the A-133 coordinated audit results in the IPA serving as the principal auditor by accepting responsibility for DCAA's work insofar as that work relates to the IPA's expression of an opinion, there will normally be a single schedule. This schedule will appear in the IPA's audit report. The participants in the coordinated audit should discuss, agree, and document how their respective audit findings will be presented in this schedule.

c. In all A-133 audits, the DCAA field audit office will complete the schedule and include at a minimum, the information relative to the scope of the DCAA auditor's work. When the following two conditions are met, the information in DCAA's schedule of findings and questioned costs will be incorporated in the schedule that the auditee's IPA prepares:

(1) the IPA's participation in the A-133 coordinated audit results in the IPA serving as the principal auditor, and

(2) the IPA assumes responsibility for the work of DCAA insofar as that work relates to the IPA's expression of an opinion.

d. The schedule is prepared by the auditor(s) and is comprised of the following three sections: Section 1, Summary of Auditor's Results; Section 2, Findings Related to the Financial Statements; and Section 3, Findings Related to Federal Awards.

(1) Section 1 -- Summary of Auditor's Results (OMB Circular A-133 section .505(d)(1)). This section of the schedule includes information relative to both the audits of the financial statements and the federal awards. The IPA should include information relating to the financial statement in their schedule, since this area is beyond DCAA's audit mission. However, audit findings that relate to both the financial statements and federal awards should also be included in Sections 2 and 3 of the schedule. For example, a reportable condition that is a material weakness in the auditee's internal control may affect the auditee's financial statements and federal awards. With respect to DCAA's reporting responsibilities, the auditor should coordinate each finding with the IPA. If DCAA's audit procedures result in an audit finding (as defined in A-133 section .510(a)), the DCAA auditor will disclose in Section 1 that an audit finding exists and report the finding in detail in the federal awards part of Section 3 of the DCAA prepared schedule. If appropriate, the IPA may note a finding exists in Section 1A and summarize the audit finding in the financial statement part of Section 2 of the IPA prepared schedule. The IPA should cross reference to the detailed audit finding number contained in DCAA's audit report. OMB Circular A-133 section .505(c) requires that each audit finding include a reference number (see 13-706.2b(6)). A suggested format is to precede the note number with the last two digits of the auditee fiscal year reported, for example fiscal year 1998 notes may read, 98-1, 98-2 and so on.

The information required by the Circular to be included in Section 1 of the schedule and the parties responsible for this information are presented in the following table:

Section 1. – Summary of Auditor's Results	IPA	DCAA
PART A. The type of report issued on the financial statements of the auditee (i.e., unqualified opinion, qualified opinion, adverse opinion, or disclaimer of opinion.) (See OMB Circular A-133 §_.505(d)(1)(i).)	X	
When applicable, a statement that reportable conditions in internal control were disclosed by the audit of the financial statements and whether any such conditions were material weaknesses (see OMB Circular A-133 §_.505(d)(1) (ii)).	X	
A statement on whether the audit disclosed any noncompliances that are material to the financial statements (see OMB Circular A-133 §_.505(d)(1) (iii)).	X	
PART B.1. When applicable, a statement that reportable conditions in internal control over major programs were disclosed by the audit and whether any such conditions were material weaknesses (see OMB Circular A-133 §_.505(d)(1) (iv)).	X	X
PART B.2. The type of report the auditor issued on compliance for major programs (i.e., unqualified opinion, qualified opinion, adverse opinion, or disclaimer of opinion), (see OMB Circular A-133 §_.505(d)(1) (v)).	X	X
PART B.3. A statement on whether the audit disclosed any audit findings that the auditor is required to report under section .510(a), (see OMB Circular A-133 §_.505(d)(1) (vi)).	X	X
PART B.4. Identification of major programs (see OMB Circular A-133 §_.505(d)(1) (vii)).	X	X
PART B.5. The dollar threshold used to distinguish between type A and B programs as described in section .520(b) of the Circular), (see OMB Circular A-133 §_.505(d)(1) (viii)).	X	X
PART B.6. Statement as to whether the auditee qualified as low risk under section .530 of the Circular, (see OMB Circular A-133 §_.505(d)(1) (ix)).	X	X

(2) Section 2, Findings Related to Financial Statements (OMB Circular A-133 section .505(d)(2)). As noted above, audit findings that relate to the financial statements are the responsibility of the IPA. DCAA's schedule will refer the reader to the IPA's audit report(s).

(3) Section 3, Findings Related to Federal Awards (OMB Circular A-133 section .505(d)(3)). Information in Section 3 of the schedule provides the detail findings of compliance. This section is somewhat similar to the format used in DCAA's annual incurred cost audit report exhibit(s) and supporting schedules. See 13-706.2 for the audit finding details to be included in this section.

13-706.6 Summary Schedule of Prior Audit Findings

a. The auditee is required to prepare and submit a "summary schedule of prior audit findings" (see 13-706.1c(2)) presenting the status of corrective action taken on all audit findings included in the prior audit report. In addition, at the completion of the current year's audit and prior to issuance of the final audit report(s), the auditee is required to:

(1) evaluate the current year audit findings;

(2) determine proper actions in response to these findings; and

(3) prepare a written response on each finding, referred to as a "corrective action plan."

b. The auditor is required to comment on the accuracy of the auditee's required statements, responding to both the corrective action taken by the auditee on prior and

current year findings. The summary schedule of prior audit findings and the corrective action plan for the current year are requirements of OMB Circular A-133. Because they contain material necessary for the reader to obtain a full understanding of the circumstances, both the schedule and action plan should be included as appendixes to DCAA's audit report.

13-706.7 Report Distribution and Restrictive Markings

a. DCAA's Circular A-133 audit reports on internal control and compliance are addressed to the cognizant agency for audit, with the auditee listed on the distribution list. There is no need to distribute the audit report to other federal agencies since this is the responsibility of the federal clearinghouse and auditee. See section .320(d), (f), and (h) of OMB Circular A-133 and 10-206 for additional guidance.

b. In contrast with DCAA audit reports on a for-profit contractor, the OMB Circular A-133 reports are available for public inspection (see A-133 section .320(a)). To avoid public confusion regarding FOUO markings and audit report distribution and restrictions (see 10-212), DCAA's Circular A-133 pro forma reports have been modified to satisfy the A-133 requirement that they be available for public review.

c. The auditor will issue DCAA's Circular A-133 audit reports (see 13-702.1) including the For Official Use Only (FOUO) markings to comply with DoD FOIA regulations. However, the auditor will furnish the auditee an electronic version of its A-133 audit reports, and advise the auditee that it should remove the FOUO restrictions from the DCAA audit reports prior to their incorporation into the Circular A-133 reporting package. Figure 13-7-3 is an example of the "Restrictions" page which must be incorporated into Circular A-133 audit reports prepared by DCAA auditors. The "restrictions" language defines FOUO markings, authorizes the auditee to release the audit report to the public, and authorizes the auditee to remove the FOUO markings from the audit report.

d. DCAA's reports are largely based on procedures from the Compliance Supplement. Audit reports include language stating that the audit report is a restricted-use report, and should not be used by anyone other than the intended parties specified in the audit report. The Audit Report Distribution and Restrictions page includes language to comply with Statement on Auditing Standards (SAS) No. 87, Restricting the Use of An Auditor's Report. A restricted-use report is one that is intended only for specified parties.

e. The auditee submits its complete audit report package to a federal clearinghouse designated by OMB. The federal clearinghouse is responsible for retaining a copy of the report package for records, distributing the report package to federal funding agencies and pass-through entities, and maintaining a database with information on each auditee.

13-706.8 Data Collection Form

a. Both the auditee and auditor(s) complete and sign applicable sections of the data collection form (Form No. SF-SAC) at the completion of the audit, regardless of whether findings and questioned costs were noted. The data collection form provides summary information about the auditee, its federal programs, and the results of audit. Using information on the data collection form, the federal clearinghouse maintains a database of A-133 audit results, which is used to followup with auditees who have not submitted the required data collection form and reporting package. The clearinghouse also distributes the reporting packages to those federal awarding agencies for which an audit finding is included in the package's schedule of findings and questioned costs.

b. The types of information required by the data collection form and the parties responsible for this information are presented in the following table:

Part No./ Title	Part Description	Auditee	IPA	DCAA
I. General Info	Identifies affected fiscal year, type of audit, employer identification number, and federal cognizant or oversight agency.	X		
I. Item 6 - Auditee Info	Provides organizational information about the auditee. Auditee signs a certification of completeness and accuracy.	X		
I. Item 7 – Auditor Info	Provides organizational information about the IPA. Auditor(s) sign(s) a statement on completeness.		X	X
II. Financial Statements	Provides information on the type of audit and reported results. (Generally, the IPA will be responsible for completing this part, since this area is beyond DCAA's audit mission.)		X	(X)
III. Federal Programs	Information on the type of audited federal program, information on the audit and audit results, identification of federal agencies required to receive audit reporting packages, and a summary of audit results by program.		X	X

c. The auditor is required to complete Parts I (Item 7), II, and III. Part I (Item 7) is a statement signed by the auditor. The signed statement indicates: the auditor's responsibility for the information on the form, the form is not a substitute for the A-133 audit reports, the data elements and information on the form are limited to those prescribed by OMB, and no additional audit procedures were performed since the date of the audit reports. Part II provides information about the financial statements, and Part III provides information about the results of audit as they pertain to federal programs. Auditors may not create their own electronic version of the form.

d. Since DCAA's participation in a Circular A-133 audit will normally be on a coordinated audit basis (see 13-703), there will be multiple audit organizations involved in providing information needed to complete the data collection form. DCAA auditors are to coordinate completion of the form with the IPA. This is best accomplished at the inception of the coordinated audit planning process. The DCAA auditor's responsibility regarding completion of the data collection form should generally be limited to entering the results of his or her audit into Part III, federal programs. To accomplish this the DCAA auditor should meet with the auditee's IPA to persuade the IPA to be the "lead or coordinating auditor," and accept responsibility for completing Parts I (Item 7), II, and III of the data collection form. The DCAA auditor should use materiality as the criterion for determining which audit organization will be the "lead or coordinating auditor" which signs the data collection form. Comparing the materiality of the financial statements (and federal programs if applicable) audited by the IPA to the materiality of the federal programs audited by DCAA, typically the IPA will have performed the major portion of the OMB Circular A-133 audit work. If the IPA concludes that DCAA should be the "lead or coordinating auditor," the DCAA auditor should coordinate this matter with his or her field audit office (FAO) manager before accepting the responsibilities.

e. Completing Part I. If the IPA's participation in the A-133 coordinated audit results in the IPA serving as the principal auditor, and the IPA assumes responsibility for the work of DCAA insofar as that work relates to the IPA's expression of an opinion, the IPA should be designated as the lead auditor for purposes of completing the data collection form. The IPA should complete Parts I (Item 7), II, and III of the data collection form. In all cases, the DCAA auditor should attach a sheet to the data collection form with the same type of information provided by the IPA for Part I Item 7. In addition, if agreed as part of the coordinated audit planning process, the FAO manager may also sign the auditor statement in Item 7.

f. The IPA and DCAA may decide that a clear division in audit and reporting responsibility exists. If the IPA decides not to serve as the lead auditor, the DCAA auditor may agree to serve as the lead auditor and the FAO manager will complete and sign Item 7. However, to indicate the division of responsibility, the IPA must agree to also sign Part I and attach a sheet to the data collection form with the same information provided by DCAA. The sheet should identify the division of audit and reporting responsibility.

g. Completing Part II. The information for completing Part II is obtained from the audit reporting on the financial statements only. Generally, the IPA will be responsible for completing Part II, since this area is beyond DCAA's audit mission. However, if the DCAA auditor agrees to serve as the lead or coordinating auditor, then the DCAA auditor working with the IPA may complete this section of the form.

h. Completing Part III. In all coordinated audits, the FAO will either complete or, when requested, assist the IPA in completing Part III of the form for those programs audited by DCAA. Auditors are not permitted to include a photocopy of the auditee's Schedule of Expenditures of Federal Awards as a substitute for completing this section of the data collection form. If additional pages are needed to complete this part, photocopy page 3 of the data collection form, attach the additional pages to the form, and enter the total for all pages in the "Total Federal Awards Expended" block on the last page.

i. The data collection form instructions for Part III, Item 6 (a) and (b) require the auditor(s) to enter the number assigned to the federal program in the Catalog of Federal Domestic Assistance (CFDA). Since the research and development cluster program does not have a CFDA number, the auditor(s) enter the federal agency's two-digit prefix, followed by a period and the letters "RD." For example, a DoD research and development program would be entered as "12.RD" under column (a). For other programs that do not have a CFDA number, auditors should enter only the federal agency's two-digit prefix. For a list of federal agency two-digit prefix numbers, see the Appendix to the instructions for completing the data collection form. Also, auditors are to enter the amount of expenditures (Part III, Item 6(c)) from the auditee's Schedule of Expenditures of Federal Awards for each federal program. For guidance on the Schedule see OMB Circular A-133 §._310(b) and 13-704. The CFDA catalog is compiled and published annually by the General Services Administration and may be accessed electronically at the site: http://www.gsa.gov/fdac/.

j. Item 7 requires the auditor to enter information regarding audit findings and questioned costs. This information is taken from the Schedule of Findings and Questioned Costs, prepared by the auditor as part of the audit report. Using the two-digit prefix discussed above the auditor must identify audit findings for each federal agency within the R&D cluster program. To assist DCAA auditors, a matrix (see Figure 13-7-4), summarizes the information in the audit report to facilitate completion of Part III, Item 7 of the data collection form. The matrix accumulates questioned costs by compliance requirement for each federal program to be entered onto the data collection form. The matrix also serves as a tool to assist federal departments to resolve audit findings and recommendations affecting their awards. The matrix at Figure 13-7-4 is a suggested format that should clarify the relationship between the explanatory notes in the audit report and the audit reference numbers in the data collection form. The matrix or a similar document is to be included as the last page to DCAA's Schedule of Findings and Questioned Costs in DCAA's Circular A-133 audit report.

k. Instructions and the data collection form may be obtained from:

(1) OMB's fax information line, (202) 395-9068, document no. 1330;

(2) OMB's web site located at:
http://www.whitehouse.gov/WH/EOP/OMB/Grants/sfac.pdf;

(3) Federal audit clearinghouse: phone no. (888) 222-9907, document no. SF-SAC;

(4) Federal audit clearinghouse web site: http:harvester.census.gov/sac. This site has an electronic template (Microsoft Word) containing four documents that may be downloaded. This approach permits the auditor to complete the form using a computer.

Figure 13-7-1
Example Of Circular A-133 Coordinated Audit Matrix Identifying Compliance Requirements of ABC Nonprofit Organization
CFY 19XX

Date Completed _____

Program Types of R&D Compliance Requirements (Refer to Compliance Supplement, Parts 2&3)	Compliance Requirement that is Applicable, and May have a Material Effect on Major Program (Y,N, or N/A)	Organization Accepting Responsibility for Providing Audit and Auditor Accepting Responsibility for Providing Reporting Coverage (Internal Control and/or Compliance Audit)			Addtl. Comments
		Independent Public Accountant	DCAA	Other (Identify organization)	
A. Activities Allowed or Unallowed					
B. Allowable Costs/Cost Principles					
C. Cash Management					
D. Davis-Bacon Act					
E. Eligibility					
F. Equipment and Real Property Management					
G. Matching, Level of Effort, Earmarking					
H. Period of Availability of Federal Funds					
I. Procurement and Suspension and Debarment					
J. Program Income					
K. Real Property Acquisition and Relocation Assistance					
L. Reporting					
M. Subrecpient Monitoring					
N. Special Tests & Provisions					
Other (list as applicable)					

Figure 13-7-1

Y: denotes requirement is applicable and will be included in audit scope.
N: denotes requirement is applicable, however, it may not have a direct and material effect of the major program.
N/A: denotes requirement is/is not applicable and will not be included within current year audit because (provide explanation in Additional Comments – for example, the specific requirement does not have a direct and material impact on the R&D program, see working paper XXX for documentation supporting assessment).

Point of Contact:
Auditee_____
Independent Public Accountant_____
DCAA _____
Other _____

Figure 13-7-2
Illustration
Schedule Of Findings And Questioned Costs

ABC NONPROFIT ORGANIZATION
Fiscal Year Ended September 30, 1998

SECTION 1: -- SUMMARY OF AUDITOR'S RESULTS

A. Financial Statements:

Information pertaining to the financial statements can be found in the independent public accountant's audit report.

B. Federal Awards:

1. Internal control over major programs:

	YES	NONE REPORTED
Material weaknesses were identified.	X	
Reportable conditions identified not considered to be a material weakness.	X	

2. Type of auditor's report issued on compliance for major programs:

Type of Audit Opinion	
Unqualified	X
Qualified	
Adverse	
Disclaimer	

3. Any audit findings disclosed that are required to be reported in accordance with OMB Circular A-133, Section .510(a):

Yes	X
No	

4. Identification of Major Programs:

CFDA Number	Program
N/A	Research and Development

5. Dollar threshold used to distinguish between low and high-risk pools.

$ 385,000

6. Auditee classified as a low-risk auditee under OMB Circular A-133, Section .530.

Yes	
No	X

Figure 13-7-2

SECTION 2: -- FINDINGS RELATED TO FINANCIAL STATEMENTS
Information pertaining to the financial statements can be found in the independent public accountant's audit report.

SECTION 3: -- FINDINGS RELATED TO FEDERAL AWARDS

ILLUSTRATION
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
ABC NONPROFIT ORGANIZATION
Fiscal Year Ended September 30, 1998

OVERHEAD EXPENSES AND RATE

	Questioned Costs (Note 98-X)					
Cost Element	Proposed	Total	Concurred	Non-concurred	Notes	Page
Rent & Occupancy Costs	$ XXXX	$XXXX	$XXX	$	98-X	X
Employee Morale	XXXX	XXX	XX	XXX		
Subtotal	$XXXXX	$XXXXX	$XXX	$XXX		
Less:						
Voluntary Deletions	(XXX)					
Totals	$XXXXXX	$XXXXX	$XXXX	$XXX		
Allocation Base (Total Direct Labor Dollars):						
Proposed and Accepted:	$XXXXX					
Research Overhead Expense Rate:						
Proposed	70.02%					
Questioned	3.28%					
Audit Recommended	66.74%					
Concurred	2.79%					
Nonconcurred	.49%					

Explanatory Notes:
98-X. Rent and Occupancy Costs
a. Condition:
b. Criteria:
c. Recommendation:
d. ABC's Reaction:

[The above example provides one note explaining the questioned costs in the schedule of findings and questioned costs. The details of the explanatory notes are excluded from this illustration.]

Figure 13-7-3
Audit Report Distribution and Restrictions

Audit Report No. XXXX-XX169000XXX

AUDIT REPORT DISTRIBUTION AND RESTRICTIONS

DISTRIBUTION

[List names and addresses as shown on cover page, as well as any other names and addresses to which the report is being distributed.]

ABC Nonprofit Organization E-mail Address
6000 Chestnut Boulevard
Philadelphia, PA 19106-4498

RESTRICTIONS

1. The For Official Use Only (FOUO) marking placed on this audit report is not a security marking. It is a marking required by DoD Freedom of Information Act (FOIA) regulations. The marking provides notice that the report might contain information that is subject to withholding under FOIA. The FOUO marking is a notice limited to Department of Defense employees.

2. The Defense Contract Audit Agency has no objection to the auditee releasing this report at its discretion for public inspection.

3. The Defense Contract Audit Agency has no objection to the auditee removing the FOUO markings from this audit report.

4. This report is intended solely for the information and use by federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

FOR OFFICIAL USE ONLY

Figure 13-7-4
Illustration
Matrix Reconciling Audit Findings From DCAA's Audit Report to the OMB Data Collection Form (Form No. SF-SAC) part III, Item 7

Questioned Costs by Federal Program								
(1) Type of Compliance Requirement		(2) DCAA Audit Report Ex-plana-tory Note No.	(3) Cumula-tive Ques-tioned Costs	(4) Govt Partici-pation in Ques-tioned Costs	(5) DoD R&D 12.R&D	(6) HHS R&D 93.R&D	(7) DoT 20.205	(8) DoI 15.605
A	Activities al-lowed or unal-lowed							
B	Allowable costs/cost prin-ciples	98-1, 98-2, 98-4, 98-7, 98-8, 98-9	$70,227	$42,136	$19,382	$9,691	$11,798	$1,265
C	Cash manage-ment							
D	Davis-Bacon Act							
E	Eligibility							
F	Equipment and real property management	98-3	4,000	2,400	1,104	552	672	72
G	Matching, level of effort, ear-marking	98-5	3,250	1,950	898	448	546	58
H	Period of avail-ability of funds							
I	Procurement							
J	Program In-come							
K	Real property acquisition and relocation assis-tance							
L	Reporting							
M	Subrecipient monitoring							
N	Special tests and provisions	98-6	20,000	20,000		20,000		
	TOTAL		$97,477	$66,486	$21,384	$30,691	$13,016	$1,395

This matrix is a reconciliation of the questioned costs in the audit report to the related questioned costs in the Data Collection Form. The questioned costs from the audit report's schedule of findings and questioned costs are grouped by type of noncompliance with a specific compliance requirement in column (1). The cumulative questioned costs in column (3) are shown as they relate to each impacted federal program by compliance requirement and then factored for the Government participation in column (4). These individual program impacts in column (4) are then entered on the Data Collection Form Part III, Item 7(e).

The cumulative questioned costs in column (3) are factored down for the Government participation, as shown in column (4). In this example, the overall Government participation in indirect costs for federal financial assistance and federal reimbursement contracts is 60%. The amounts in column 4 is factored further for each federal program. In this example the estimated federal program participation in the indirect costs by compliance requirement column (4), are DoD R&D 46% column (5); Health and Human Services (HHS) R&D 23% column (6); Dept. of Transportation (DOT) 28% column (7); and Department of Interior (DOI) 3% column (8). The noncompliances with the Special tests and provisions" compliance requirements row N is applicable only to HHS as a direct cost noncompliance. Supporting detailed computations are to be maintained in the auditor's working papers.

13-800 Section 8 --- Office of Management and Budget (OMB) Circular A-122 "Cost Principles for Nonprofit Organizations," and Related Areas for Audit Consideration

13-801 Introduction

a. This subsection introduces Office of Management and Budget (OMB) Circular A-122 "Cost Principles for Nonprofit Organizations." For guidance on audits at educational institutions see 13-100 through 13-700.

b. The cost principles described in this chapter and contained in OMB Circular A-122 should be used in conjunction with the guidance contained in other sections of this manual for reviewing specific areas of cost at applicable nonprofit organizations. A current copy of OMB Circular A-122 should be available at each field audit office (FAO). The most recent version is dated June 1, 1998, and is a recompilation of the original and all subsequent amendments. FAOs which do not have a current and complete copy should contact the regional office. When planning the audit, the auditor must ascertain the implementation dates for the specific revised OMB Circular A-122 provisions and adjust the scope accordingly.

13-802 Definition

Section 4 of OMB Circular A-122 defines “nonprofit organization” as any corporation, trust, association, cooperative, or other organization which:

- is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;
- is not organized primarily for profit; and
- uses its net proceeds to maintain, improve, and/or expand its operations.

Excluded from this definition are:

(1) colleges and universities;
(2) hospitals;
(3) state, local and federally-recognized Indian tribal governments; and
(4) other nonprofit organizations which because of their size and the nature of their operations are considered similar to commercial concerns.

13-803 Cost Principles

a. OMB Circular A-122. This Circular establishes principles for determining costs of grants, contracts and other agreements with nonprofit organizations as defined by the Circular (see 13-802). The principles do not apply to awards under which an organization is not required to account to the Government for actual costs incurred. Provision for fee or other increment is not addressed by OMB Circular A-122.

b. FAR Subpart 31.2. Those nonprofit organizations covered by 13-802(4) above are subject to Federal cost principles applicable to commercial concerns, i.e., FAR Subpart 31.2. Attachment C of OMB Circular A-122 contains a listing of these nonprofit organizations, although other organizations may be added from time to time. Contracts and grants which refer to FAR Subpart 31.7 for determining allowable costs will have the allowability of costs determined by OMB Circular A-122.

c. Cost reimbursable subawards (i.e., subgrants, subcontracts, etc.) are subject to the Federal cost principles applicable to the organization to which they were awarded. Thus, for subawards to nonprofit organizations, OMB Circular A-122 applies; for subawards to commercial organizations, the cost principles applicable to commercial concerns apply; for subawards to colleges or universities, OMB Circular A-21 applies; and for subawards to State, local or federally recognized Indian tribal governments, OMB Circular A-87 applies.

13-804 Basic Audit Approach

a. The same basic audit approach described in the other chapters of this manual is to be applied to nonprofit organizations. Audit problems specific to nonprofit organizations not adequately covered in other sections of this manual may be referred to Headquarters, DCAA (Attn: PPD).

b. OMB Circular A-122, Attachment A, Section A.2.e., requires the nonprofit organization to compute allowable costs in accordance with Generally Accepted Accounting Principles (GAAP). To be compliant with GAAP, a nonprofit's incurred cost proposal usually has to be based on accrual accounting. GAAP allows the use of cash basis accounting only if the nonprofit organization demonstrates that the results of the cash basis do not differ significantly from the results of the accrual basis. It is the responsibility of the nonprofit (not the auditor) to make this demonstration.

13-805 Indirect Cost Rates at Nonprofit Organizations

13-805.1 Types of Indirect Cost Rates

a. OMB Circular A-122, Attachment A, Section E, permits various types of indirect cost rates at nonprofit organizations. The types of rates are:

(1) predetermined rates,
(2) fixed rates,
(3) final rates, and
(4) provisional rates.

b. Predetermined rates. A predetermined rate is an indirect cost rate fixed for an applicable period and generally, once negotiated, it is not subject to audit adjustment. The use of predetermined rates is appropriate when there is reasonable assurance, based on past experience and reliable projection of the nonprofit’s costs, that the indirect rate is not likely to exceed the nonprofit’s actual costs. Predetermined rates should not be used by those nonprofit organizations experiencing significant fluctuations in their rates from year to year.

c. Fixed rates. A fixed rate is similar to a predetermined rate, except that the difference between the estimated costs and the actual costs of the period covered by the rate is carried forward as an adjustment to the rate computation of a subsequent period. Fixed rates require two separate negotiation cycles; one to establish the fixed rate at the beginning of the period, and one to determine the final rate after the end of the period. A negotiated fixed rate should not be used when:

(1) all or most of the federal awards will expire before the carry-forward adjustment can be made,
(2) the Government’s participation in indirect costs fluctuates greatly from year to year,
(3) the business base fluctuates significantly from year to year, or
(4) a carry forward adjustment may not be equitable because of significant changes in accounting practices.

d. Provisional and final rates. A provisional rate is an indirect cost rate applicable to the period which is used for funding and interim reimbursement pending the establishment of a final rate for the period. The final rate is an indirect rate based on the actual costs of the period. A provisional rate may be adjusted upward or downward during the fiscal year in order to avoid overpayment or underpayment to the nonprofit. Provisional and final rates shall be negotiated where neither predetermined or fixed rates are appropriate.

13-805.2 Facilities and Administration (F&A) Cost Categories

a. Effective with the June 1998 revision to OMB Circular A-122 (OMB Circular A-122, Attachment A, subparagraph C.3), the Circular requires major nonprofit organiza-

tions (i.e., those nonprofit organizations with over $10 million in direct federal funding) to breakout "indirect costs" into one of two components: "facilities" and "administration." The identification of indirect costs as F&A is required regardless of the allocation method selected to distribute the costs (see 13-805.3). Attachment A, subparagraph C.3 of the Circular, defines "facilities" to include the following cost categories: depreciation and use allowances on buildings; equipment and capital improvements; and operations and maintenance expenses. The "administration" cost groupings include general administration and general expenses such as the director's office, accounting, personnel, and library expenses.

b. An adequate indirect cost proposal will include supporting documentation for both the development of the two broad categories "facilities" and "administration" (as described in OMB Circular A-122 Attachment A, subparagraph C.3) and the overall overhead and/or G&A rate(s). Although major nonprofit organizations' accounting records and indirect cost rate proposals are to make distinctions between F&A costs, the allocations of the nonprofit organizations' indirect costs are to continue to be accomplished through application of an overall overhead and/or G&A rates. The F&A categories are simply components of the nonprofits' overhead and/or G&A rate(s).

13-805.3 Indirect Cost Allocation Methods

a. Allocation Methods. Nonprofits have the flexibility to select one of the following three methods for allocating indirect cost rates:

(1) Simplified allocation method (OMB Circular A-122, Attachment A, subparagraph D.2);

(2) Multiple allocation base (MAB) method (OMB Circular A-122, Attachment A, subparagraph D.3); or

(3) Direct allocation method (OMB Circular A-122, Attachment A, subparagraph D.4).

b. Simple Allocation Method. Where an organization's major functions benefit from its indirect costs to approximately the same degree, the allocation of indirect costs may be accomplished through an indirect cost rate. If an organization receives more than $10 million in Federal direct costs, a breakout of the indirect cost component into "Facilities" and "Administration" as discussed at 13-805.2, is required as part of the process in arriving at an overall indirect cost rate.

c. Multiple Allocation Base (MAB) Method. OMB has modified the MAB method effective June 1998 to be more consistent with OMB Circular A-21 (see 13-203). The MAB is now a much more detailed method than in the prior OMB Circular A-122. When a nonprofit organization has several major functions (see OMB Circular A-122, Attachment A, subparagraph D.1.c), which benefit from its indirect costs in varying degrees, the indirect costs are to be accumulated into one of the four separate cost groupings listed below (OMB Circular A-122, Attachment A, subparagraph D.3.b). At major nonprofit organizations the cost groupings are classified within the two broad categories, F&A (13-805.2). OMB Circular A-122, Attachment A, subparagraph D.3.c lists an order of allocation for indirect cost groupings. However, a cross allocation of costs between two or more indirect cost groupings may be used if such allocation will result in a more equitable allocation of costs. Each cost group is then allocated individually to benefiting functions. The four cost groupings are as follows:

(1) Depreciation and use allowances (OMB Circular A-122, Attachment A, subparagraph D.3.b(1));

(2) Interest (OMB Circular A-122, Attachment A, subparagraph D.3.b(2));

(3) Operation and maintenance expenses (OMB Circular A-122, Attachment A, subparagraph D.3.b(3)); and

(4) General administration and general expenses (OMB Circular A-122, Attachment A, subparagraph D.3.b(4)).

d. Direct Allocation Method. Some nonprofit organizations treat all costs as direct costs except for general administration and general expenses. This method is acceptable

provided joint costs are distributed using a base which accurately measures the benefits provided to each award or other activity.

e. The nonprofit organization's selection of bases for allocation of indirect costs may have a substantial effect on federal award costs. Therefore, the auditor should determine that the allocation bases used by the nonprofit organization for allocation of indirect costs are equitable and consistent with OMB Circular A-122. It is likely that when a nonprofit converts to MAB it will require substantial changes to the nonprofit organization's accounting system.

f. A change in allocation base is a change in accounting practice under 48 CFR 9903.302-2, Change to a cost accounting practice, for nonprofit organizations with contracts subject to CAS. Accordingly, the nonprofit organization is required to revise its Disclosure Statement. In addition, nonprofit organizations are required to comply with the requirements of FAR 52.230-6, Administration of Cost Accounting Standards (see 8-500). Consequently, it is the responsibility of the nonprofit organization to determine the materiality of the change in accounting practice. Where applicable, the auditor should ensure the nonprofit organization has made the appropriate revisions to the Disclosure Statement and that it complies with FAR 52.320-6.

13-806 Selected Areas of Cost

13-806.1 Capitalization of Equipment

The capitalization threshold for equipment is the lesser of the amount used for financial statement purposes or $5,000. OMB Circular A-122, Attachment B, paragraph 15 of the Circular includes guidance on accounting for the undepreciated portion of equipment cost as a result of the nonprofit's change in capitalization levels. The undepreciated portion of equipment costs resulting from an nonprofit organization's change in capitalization levels may be recovered by continuing to claim the otherwise allowable use allowance or depreciation on the equipment, or amortizing the undepreciated amount over a period of years as negotiated between the nonprofit organization and their cognizant agency for cost negotiations.

13-806.2 Interest – Selected Areas of Cost

OMB Circular A-122, Attachment B, Paragraph 23.a. is intended to encourage nonprofit organizations to acquire, whether by lease or purchase, assets in the manner that would be least expensive. Paragraph 23.a.(1) provides that interest on debt incurred to acquire or replace capital assets (including renovations, alterations, equipment, land, and capital assets acquired through capital leases) is allowable under certain circumstances. The allowability of interest is not retroactive, and only applies to debt to acquire or replace capital assets after September 29, 1995.

13-900 Section 9 --- Audits of Federally Funded Research and Development Centers (FFRDCs)

13-901 Introduction

This section provides auditors with a basic understanding of FFRDCs, applicable regulations, and guidance as to the auditor's responsibilities related to the audit of management fees.

13-902 FFRDC Organizations

a. FFRDCs are organizations established to meet a special long-term research or development need for the Federal Government which cannot be met effectively by existing federal or contractor resources. The federal agencies sponsoring FFRDCs include: DoD, Department of Energy, the National Science Foundation, the Federal Aviation Administration, the Internal Revenue Service, the National Institutes of Health, and the National Aeronautics and Space Administration. The National Science Foundation maintains a master list of FFRDCs and their Government agency sponsors.

b. Each FFRDC is operated by either a commercial organization, nonprofit organization, or educational institution. FFRDCs are generally a separate operational unit within the parent organization. With respect to DoD-sponsored FFRDCs, each is managed by either an educational institution or nonprofit organization under a long term contract, generally for 5 years.

13-903 Federal and DoD Regulations

a. FAR 6.302-3 implements 10 U.S.C. 2304(c)(3) which permits FFRDCs exemption from the Competition in Contracting Act, allowing FFRDCs to receive sole-source contracts.

b. FAR 35.017 prescribes Government-wide policies for the establishment, use, periodic audit, and termination of an FFRDC. The policies require agencies to rely on existing Government research activities and private industry when practicable to satisfy research and development requirements. DoD sponsors are required to conduct a comprehensive audit of the use and need for an FFRDC before renewing a contract or agreement for the FFRDC. The detailed examination includes an assessment of the FFRDC's management controls (FAR 35.017-4(c)(4)).

c. The DoD FFRDC Management Plan issued by the Director, Defense Research and Engineering, sets forth the Department's policies and procedures for the management and use of DoD-sponsored FFRDCs. It also provides guidelines and procedures for awarding management fees and ensuring compliance with federal regulations. The publication is available from DCAA Headquarters, Policy Programs Division.

d. DFARS 215.404-75, provides guidance to the contracting officer to determine whether payment of management fees to FFRDCs is appropriate.

e. Costs incurred by the FFRDC are generally subject to the cost principles applicable to the type of entity operating the FFRDC. An FFRDC operated by a nonprofit organization is subject to FAR 31.7, except as noted in Paragraph 5 and Attachment C of OMB Circular A-122 (see 13-803); an FFRDC operated by an educational institution is subject to FAR 31.3 (see OMB Circular A-21 and 13-203); and an FFRDC operated by a commercial organization is subject to the FAR 31.2 cost principles (see Appendix A-300).

f. All FFRDCs, including those operated by a nonprofit organization or educational institution, are subject to the CASB rules, regulations, and standards for commercial companies.

g. OMB Circular A-133, "Audits of States, Local Governments, and Nonprofit Organizations," is applicable to an FFRDC operated by an educational institution or nonprofit organization (see 13-205).

13-904 Management Fees

a. Management fees are funds that can be provided to FFRDCs in addition to reimbursement of incurred costs. They are somewhat similar to profit earned by commercial contractors.

b. Although FAR 35.017 sets forth federal policy for establishing, using, reviewing, and terminating an FFRDC, there are no Government-wide regulations regarding the development of management fees at FFRDCs. Within DoD, the guidelines for the development of management fees at nonprofit organizations that are DoD sponsored FFRDCs are addressed in: (1) DFARS 215.404-75, Fee requirements for FFRDCs and (2) the DoD FFRDC Management Plan, section D.3, FFRDC Fee. The weighted guidelines method or an alternate approach shall not be used at DoD sponsored FFRDCs.

c. To arrive at a management fee amount in accordance with the preceding guidelines, the contracting officer may seek DCAA's assistance. Although DCAA is not responsible for fee determination, the auditor may be requested to comment on whether the FFRDC's financial and cost data supporting the fee proposal are fairly stated. Since the FFRDC will be recovering the proposed elements as fee and not elements of cost charged to the contract, the auditor's comments regarding fee will not include an audit opinion. Auditors should not offer opinions on the proposed fees as if cost or pricing data had been audited. Rather, the auditor discloses the results of the analysis for consideration by the contracting officer. In any case, the auditor's effort will be limited to furnishing factual information.

d. To assist the contracting officer in determining whether any amount of fee is warranted, Section D.3. of the DoD FFRDC Management Plan (see b. above) calls for the FFRDC to submit an Application of Funds and Sources of Funds Statement to the contracting officer. If determined to be warranted, the FFRDC will then submit a fee proposal to the contracting officer to determine the fee amount. When auditing the FFRDC's Application of Funds and Sources of Funds Statement the auditor should:

(1) identify the types and amounts of proposed fee elements that are not consistent with the criteria contained in the DoD FFRDC Management Plan, and

(2) prepare comments to the contracting officer on this identification. Section D.3.a of the FFRDC Management Plan provides examples of what can be used by the FFRDC to justify and support its proposed fee. These examples include the proportion of the FFRDC's retained earnings that relates to the DoD contracted effort, working capital funding needs, facilities capital acquisition plans, and reimbursement of unreimbursable costs deemed "ordinary and necessary" to the FFRDC's continued successful operation. Examples of areas of concern to the auditor include:

(a) a fee proposal prepared inconsistently with the FFRDC's accounting practices,

(b) a fee proposal including items that are statutorily prohibited from being reimbursed, for example charitable contributions or contract overruns (see 13-906);

(c) a fee proposal including items that should be charged as a cost to the contract, for example sponsored research, IR&D or marketing expenses;

(d) a fee proposal including as elements of fee items that are also recovered as costs charged to the federal award resulting in a duplicate recovery, for example depreciation (see 13-906);

(e) the reliability of the FFRDC's estimates when compared to last year's proposed estimates; and

(f) a fee proposal including items not reimbursable under the contract but considered "ordinary and necessary" to the successful operation of the FFRDC.

13-905 Ordinary and Necessary Costs

One of the criteria used by the contracting officer in determining a fee objective is reimbursement through fee of unreimbursable costs deemed “ordinary and necessary” to the successful operation of the FFRDC. Ordinary and necessary costs used to justify a fee should not include statutorily prohibited costs, allowable (direct or indirect) costs that can be charged to the contract, or costs that are not reimbursable under the appropriate cost principles. If any of these costs are included in the fee proposal as “ordinary and necessary,” the auditor shall advise the contracting officer. At the request of the contracting officer, the FFRDC must demonstrate to the contracting officer’s satisfaction that these costs are essential to the FFRDC’s successful operation.

13-906 Prohibition Against the Use of DoD Funds for Construction of New Buildings

a. Since FY 1995, every DoD Appropriations Act has included language prohibiting a DoD-sponsored FFRDC from constructing a new building with its reserve funds or management fees (13-904), as long as those funds originate from DoD appropriated funds received during those years while the restrictive language is in effect.

b. Section 8026(c) of the DoD Appropriation Act (PL 109-148) for FY 2006 provides: “Notwithstanding any other provision of law, none of the funds available to the department from any source during fiscal year 2006 may be used by a defense FFRDC, through a fee or other payment mechanism for construction of new buildings, for payment of cost sharing for projects funded by Government grants for absorption of contract overruns, or for certain charitable contributions, not to include employee participation in community service and/or development.” ("Other payment mechanism" refers to profit or award fee, and not to costs that are generally allowable under the cost principles such as depreciation or cost of money.)

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CHAPTER 14

14-000 Other Contract Audit Assignments

14-001 Scope of Chapter

This chapter provides guidance for certain miscellaneous or special audit assignments related to the contract audit mission. It covers only those procedures that are special to accomplishing a particular assignment. Auditing concepts, policies, and procedures having general application, as covered in other chapters of this manual, also apply to assignments discussed in this chapter.

14-100 Section 1 --- Postaward Audits of Contractor Cost or Pricing Data

14-101 Introduction

This section describes postaward audits for defective pricing and provides specific audit guidelines and procedures related to this type of audit. General audit procedures that are equally applicable to these audits are in other chapters of this manual.

14-102 The DCAA Postaward Audit Program

a. Defective pricing occurs when a contractor does not submit or disclose to the Government cost or pricing data that is accurate, complete, and current prior to reaching a price agreement. Generally, the auditor establishes the existence of defective pricing in a postaward audit by examining and analyzing the records and data available to the contractor as of the date of prime contract price agreement and comparing them with the submitted cost or pricing data.

b. The objective of a postaward audit is to determine if the negotiated contract price was increased by a significant amount because the contractor did not submit or disclose accurate, complete, and current cost or pricing data. To show that defective pricing exists, the audit must establish each of the following five points:

(1) The information in question fits the definition of cost or pricing data.

(2) Accurate, complete, and current data existed and were reasonably available to the contractor before the agreement on price.

(3) Accurate, complete, and current data were not submitted or disclosed to the contracting officer or one of the authorized representatives of the contracting officer and that these individuals did not have actual knowledge of such data or its significance to the proposal.

(4) The Government relied on the defective data in negotiating with the contractor.

(5) The Government's reliance on the defective data caused an increase in the contract price.

Establishing these five points is a necessary prerequisite to support recommended price adjustments and provide the contracting officer with the information to achieve price reductions to contracts.

c. Based on a 1965 GAO audit, the DoD developed policy designating DCAA to establish and conduct a program for performing regularly scheduled defective pricing (postaward) audits of selected contracts, modifications, subcontracts, and other eligible pricing actions. Based on inter-agency agreements, this program includes contracts awarded by certain non-DoD agencies as well as DoD contracts.

d. Each DCAA branch office, resident office, and suboffice performs postaward audits for defective pricing based on:

(1) the annual requirements and selection plans issued by Headquarters and

(2) specific requests received from contracting officers or other authorized persons or activities.

Audit effort does not stop once the audit is completed and the report is issued. The auditor is also responsible for providing negotiation support to the contracting officer for timely settlement of defective pricing allegations. This audit responsibility continues until the Government achieves final resolution either by negotiation or litigation.

e. Headquarters, PSP, will periodically issue guidance on program objectives.

14-103 Truth in Negotiations Act (TINA)

14-103.1 Purpose of TINA

a. The purpose of the TINA (Truth in Negotiations Act) is to put the Government on equal footing with contractors when negotiating contracts requiring cost or pricing data. The TINA requires contractors to submit accurate, complete, and current cost or pricing data when negotiating contracts with the Government. It also provides the Government with a price reduction remedy if a contractor fails to comply and includes provisions for interest and penalties. The price reduction remedy takes effect when the contractor does not submit accurate, complete, and current data for a contract and the Government relied on that defective data in determining the contract price.

b. Section 2306a of Title 10, United States Code, contains the TINA as it applies to DoD, NASA, and the U.S. Coast Guard contracts entered into on or after February 15, 1987. Before February 15, 1987, 10 U.S.C. 2306(f) contained the necessary provisions. Similar provisions for other executive agencies are contained in 41 U.S.C. 254(d) and apply to those solicitations for bids or proposals issued after March 31, 1985 and before December 5, 1994. For contracts entered into on or after December 5, 1994 the provisions are contained in 41 U.S.C. 254b. FAR Parts 15 and 52 implement the TINA.

14-103.2 TINA Applicability

a. The TINA applies to negotiated prime contracts, modifications, and subcontracts where the Government required cost or pricing data. (See FAR 15.403-1 and DFARS 215.403-1 for exceptions to this requirement.) In addition, this includes interdivisional work, final price redeterminations, equitable adjustments, and termination settlements. TINA also applies to modifications of advertised contracts when the modification exceeds the applicable dollar threshold. TINA also applies to change orders when the absolute value of the increase and decrease exceeds the applicable dollar thresholds, even though the net change in price itself is under the threshold.

b. 10 U.S.C. 2306a(a)(7) and 41 U.S.C..254b(a)(7) require adjustments of the TINA threshold for inflation every 5 years, starting October 1, 1995.

- The current threshold applicable to all agencies is $700,000 for prime contracts awarded on or after the effective date of October 1, 2010 and for any subcontracts or modifications under those prime contracts that are expected to exceed $700,000.
- The previous thresholds were $550,000 for prime contracts awarded on or after October 11, 2000 and for any subcontracts or modifications under those prime contracts that are expected to exceed $550,000 and $650,000 for prime contracts awarded on or after September 28, 2006 and their related subcontracts or modifications that are ex-

The operative date is the date of prime contract award. The higher threshold does not apply to modifications or subcontracts (or to modifications or changes to subcontracts) awarded on or after the effective date if the prime contract was awarded before the effective date and the prime contract was not subsequently modified to incorporate the higher threshold. If the prime contract is subsequently modified to substitute the higher threshold, then any subcontractors awarded after that prime contract modification will be subject to the modified higher threshold.

Also, the higher threshold does not apply to undefinitized contract actions issued before the effective date, even though negotiations were completed after that date unless the prime contract was subsequently modified to incorporate the higher threshold. However, contracting officers may modify Basic Ordering Agreements to reflect the higher thresholds for orders issued after the effective date. Contracting officers can request cost or pricing data between the Simplified Acquisition Threshold of and the cost or pricing data threshold only with the approval at the Head of the Contracting Activity and provided that an exception at 15.403-1(b) does not apply.

c. As provided in FAR 15.403-1(b), contractors may obtain exceptions from submitting cost or pricing data when:

(1) the price is based on adequate price competition,
(2) the price is based on prices set by law or regulation,
(3) the item meets the definition of a commercial item,
(4) when a waiver has been granted, and
(5) a commercial contract is modified and meets the requirements of 15.403-1(c)(3).

14-104 Cost or Pricing Data

14-104.1 Legislative and Regulatory Background

The TINA, when enacted in 1962, did not originally define cost or pricing data. The definition was established through legislative intent, regulations, and in decisions by the courts and BCA (Board of Contract Appeals). Congress' initial concern in 1962 was to assure the disclosure of historical cost facts that can be verified objectively to assure that the disclosure of such facts is accurate, complete, and current. The Armed Services Procurement Regulations in 1964 specified that such cost or pricing data are factual only, but also expanded the concept to include more than just historical accounting data. These regulations also emphasized distinctions between facts and judgment. Court and Board cases often attempt to distinguish between cost or pricing data and judgment, and frequently address other concepts such as disclosure, government reliance, and increase in contract price. Court and Board decisions are based on the specific issues of each particular case, but do establish precedent for current audit work. Observing the principles established in those decisions improves the chances for sustaining issues in current audit work. Results of appeals are determined on a case-by-case basis, but those results are reached through application of fairly constant principles established through statutes, regulations, and case law. Congress eventually amended the TINA in 1986 and again in 1987 to provide a statutory definition of cost or pricing data.

14-104.2 TINA Definition

TINA defines the term "cost or pricing data" to mean all facts that, as of the date of agreement on the price of a contract (or the price of a contract modification), a prudent buyer or seller would reasonably expect to affect price negotiations significantly. Such term does not include information that is judgmental, but does include the factual information from which a judgment was derived.

14-104.3 FAR Definition

FAR 2.101 states that "cost or pricing data" mean all facts as of the date of price agreement or, if applicable, another date agreed upon between the parties that is close as practicable to the date of agreement on price, that prudent buyers and sellers would reasonably expect to affect price negotiations significantly. Cost or pricing data are data requiring certification in accordance with 15.406-2. Cost or pricing data are factual, not judgmental, and are therefore verifiable. While they do not indicate the accuracy of the prospective contractor's judgment about estimated future costs or projec-

tions, they do include the data forming the basis for that judgment. Cost or pricing data are more than historical accounting data; they are all facts that can be reasonably expected to contribute to the soundness of estimates of future costs and to the validity of determinations of costs already incurred. They also include such factors as

(1) vendor quotations;

(2) nonrecurring costs;

(3) information on changes in production methods and in production or purchasing volume;

(4) data supporting projections of business prospects and objectives and related operations costs;

(5) unit-cost trends such as those associated with labor efficiency;

(6) make-or-buy decisions;

(7) estimated resources to attain business goals; and

(8) information on management decisions that could have a significant bearing on costs.

When reporting a finding of defective pricing, in the section of the audit report addressing the first point to establish defective pricing, the auditor should discuss the FAR definition of cost or pricing data and explain the connection between the FAR definition and the data identified as defective.

14-104.4 Determining What Data are Cost or Pricing Data

Distinguishing between data that are cost or pricing data and data that are not requires careful analysis in each case. The auditor must separate facts from judgment when analyzing data. Consider the following issues:

a. A purchase order or vendor quote for material is generally considered cost or pricing data. Escalation applied to the purchase order or vendor quote is most likely an estimate. However, the contractor may have based the escalation on prior purchases or usage. Any judgments the contractor applies to such prior purchases or usage to estimate escalation are not cost or pricing data, but the actual purchases or usage are.

b. Are contemplated management actions cost or pricing data and, if so, when do such contemplated actions become facts subject to disclosure? At the time a decision to act was made or when the decision was acted upon? To assess contemplated management actions and business strategies begin with the definitions of cost or pricing data and then assess the facts in each circumstance in relation to the contract price agreement.

What management decisions have been made?

When were the management decisions made?

When were the management decisions carried out or acted upon?

How do such decisions affect the contract price?

For example, management discussions about whether or not to modernize a production line would not be cost or pricing data. It is a fact that discussions have been held, but a decision to act has not yet happened. On the other hand, a decision to modernize, even though the particular method of modernization has not been established, is cost or pricing data which must be disclosed.

14-104.5 Judgments Intertwined With Facts

Judgments are not cost or pricing data and do not become cost or pricing data when intertwined with facts. However, when data contains judgments and facts that are so intertwined they cannot practically be segregated, then the entire data is subject to disclosure, but only the facts require certification. For example, a production planning schedule shows both estimated production on potential orders not yet received and actual production on orders received. The schedule is subject to disclosure, but the contractor will only certify to the actual production for orders received.

14-104.6 Reasonably Available Data

Regulations require the contractor to submit or disclose to the Government cost or pricing data that are reasonably available as of date of agreement on price or, if applicable, another date agreed upon between the parties that is close as practicable to the date of agreement on price. The concept of reasonably available data depends on the type of cost or pricing data, contractor accounting or estimating systems, and closing or cutoff dates agreed to at negotiations. The auditor must establish whether the cost or pricing data were reasonably available based on the facts and circumstances for each specific contractor and audit. FAR 15.406-2(c) deals with the time at which cost or pricing data become reasonably available to the contractor. Normally, data such as actual indirect costs and production records may not be reasonably available except on normal periodic closing dates. However, the FAR also points out that data within the contractor's or subcontractor's organization on matters significant to management and to the Government will be treated as being reasonably available on the date of agreement on price. When reporting a finding of defective pricing, in the section of the audit report addressing the second point to establish defective pricing, the auditor should discuss the date that the cost or pricing data was reasonably available to the contractor and the applicable date of price agreement.

14-104.7 Errors in Cost or Pricing Data

TINA addresses only the submission of cost or pricing data. It does not require a contractor to use such data in preparing its proposals or for there to be a relationship between the proposals and the conclusions that can be drawn from such data. Furthermore, the certification relates only to the cost or pricing data. The offeror does not certify its proposal. Therefore, under TINA, the proposal does not constitute cost or pricing data and, therefore, does not have to be free from mathematical errors. However, errors can result in inaccurate cost or pricing data which may result in defective pricing. Although the proposal may contain mathematical errors that would not be considered defective pricing, mathematical errors attributable to the underlying factual cost or pricing data, not just the proposal calculations, can be considered defective pricing. The error must be an error in the cost or pricing data (i.e., factual information) submitted. For example, if an error exists in an offeror’s proposal relative to a vendor quote, defective pricing would not exist if the actual quote and presentation of the quote’s factual data in the proposal (i.e., factual cost or pricing data) was accurate and submitted to the Government. In contrast, if an error exists in an offeror’s proposal relative to direct labor costs or a vendor quote due to a transposition error in the actual labor rates or the vendor quote amount (i.e., factual cost or pricing data) submitted, defective pricing may exist. Facts underlying contractor opinions and projections are cost or pricing data; but judgments based on those facts are not (see 14-104). Therefore, errors in estimates (i.e., estimated escalation factors, estimated direct labor rates, etc) generally would not result in defective pricing because these estimates

14-105 Submission or Disclosure of Cost or Pricing Data

14-105.1 TINA Requirements

Prime contractors subject to TINA must submit accurate, complete, and current cost or pricing data to the contracting officer or to the "designated representative" of the contracting officer. Subcontractors subject to TINA (at any tier) must make their submissions to the prime contractors or higher-tier subcontractors.

14-105.2 FAR Requirements

Unless an exception applies, the contracting officer must obtain cost or pricing data from the contractor before awarding any contract or modification meeting the cost or pricing data criteria of FAR 15.403-4. The contractor must actually submit the cost or pricing data in the format specified in the solicitation (for example, Table 15-2 of FAR 15.408), or specifically identify the data in writing. The requirement for submission of cost or pricing data is met when all accurate cost or pricing data reasonably available to the offeror have been submitted, either actually or by specific identification. FAR 15.408, Table 15-2 details the procedural requirements for submitting a proposal and the required supporting cost or pricing data.

14-105.3 Submission Versus Availability of Data

The mere availability of books, records, and other documents for audit does not constitute submission of cost or pricing data. The regulations make a clear distinction between submitting cost or pricing data and merely making available books, records, and other documents without identification. The adequacy of a given submission or disclosure depends on whether the cost or pricing data is disclosed in a way that places the Government on essentially equal footing with the contractor in regard to making the pricing decisions and must be determined on a case-by-case basis.

14-105.4 Contractor Analysis and Disclosure

The contractor does not have to analyze data solely for the benefit of the Government. On the other hand, if the Government is unable to analyze the data and the contractor can do so and does, that information must be disclosed. The Government is entitled to the best cost or pricing data available to the contractor, not second best. An example of disclosing only second best would be if the contractor has prepared an analysis of cost or pricing data to better understand the raw cost or pricing data, but discloses only the raw data which the Government was unable to analyze. However, see 14-108d regarding prime contractor or higher-tier subcontractor analyses of subcontract costs. This concept can also relate to the meaningful disclosure of cost or pricing data to the Government (i.e., submission versus availability).

14-105.5 Updating Cost or Pricing Data

a. The contractor must update its cost or pricing data, not its proposal. TINA requires cost or pricing data to be submitted prior to contract award, but the data must be accurate, complete, and current as of the date of agreement on price or, if applicable, another date agreed upon between the parties that is close as practicable to the date of agreement on price. It is DoD policy to accept cost or pricing data after agreement on price but before contract award, if the data existed before agreement on price or, if applicable, another date agreed upon between the parties that is close as practicable to the date of agreement on price. See 14-120.4 on Defective Pricing "Sweeps." The contracting officer may require submission of cost or pricing data in the format indicated in Table 15-2 of FAR 15-408, specify an alternative format, or permit submission in the contractor’s format. Table 15-2, Note 1, explains that the contractor should promptly submit to the contracting officer later information as it comes into the offeror's possession. The requirement for submission of cost or pricing data continues up to the time of final agreement on price. As later information comes into the offeror’s possession, it should be promptly submitted to the contracting officer in a manner that clearly shows how the information relates to the offeror's price proposal. Future additions or revisions, up to date of agreement on price, must be annotated on a supplemental index.

b. In postaward audits, the auditor and contracting officer must assess whether the updated cost or pricing data was adequately disclosed. The auditor can provide the contracting officer with information about data which he or she believes was not adequately disclosed by the contractor. However, it is the contracting officer who must ultimately determine whether the contractor's disclosure was adequate and affected the price negotiations. For example, material is proposed at $100 a unit based on a $75 vendor quote plus escalation. The contractor provides updated cost or pricing data for a purchase order of $80 with no escalation applicable. Merely providing updated cost or pricing data without its effect on a bill of material (also cost or pricing data) doesn't appear to provide meaningful disclosure. However, if the contracting officer received the updated information and that information was provided in an adequate way, the fact that the bill of material was not adjusted by the contractor is not a noncompliance with TINA. Moreover, adequate disclosure does not mean contractors have to give a monetary impact of updated cost or pricing data or revise a part of their proposal.

14-106 Contracting Officer's Designated Representatives for Receiving Cost or Pricing Data

a. Submission or disclosure of cost or pricing data to the contracting officer is generally easy to establish. Who a contracting officer's designated representative is and when that designation begins or ends require further analysis. The BCA has held that the contracting officer's representative is someone who is substantially involved in the proposal evaluation or contract negotiation process. Accordingly, such designation may be by specific direction or implied through field pricing support/audit support under FAR 15.404-2. During the field pricing support process, consider the timing of any Government assistance given to the contracting officer. To support price negotiations, a contracting officer can use the buying command administration staff (pricing, contract administration, technical), the contract administration staff responsible for activity at the contractor's location (pricing, contract administration, technical), and DCAA. The organizational staff that provides support to the contracting officer and the timing of that support depends on the nature of the procurement and is not the same in every situation.

b. Auditors must address this issue with the contracting officer to determine if the contractor made an appropriate submission of cost or pricing data. The active involvement of the parties supporting the contracting officer on a specific procurement generally establishes when such designation begins or ends. As a member in the procurement process, DCAA can provide audit support in evaluating a price proposal that enables it to obtain information as the contracting officer's representative. Once that audit is complete, those services may no longer be required. At this point, the auditor would not normally be a representative of the contracting officer for receiving cost or pricing data on that procurement. However, if the auditor subsequently becomes aware of additional cost or pricing data and recognizes its relationship to a specific proposal, the auditor need not perform any analysis of the data but must immediately make the contracting officer aware of the data. Additionally, if the auditor is involved in supporting negotiations after issuing the proposal audit report, he or she is a proper representative for receiving cost or pricing data. The same considerations apply for any of the contracting officer's supporting groups.

c. Case law has held that the entity responsible for establishing indirect cost rates is an appropriate recipient of cost or pricing data relating to indirect costs. Frequently DCAA is such an entity. Even though that entity may not have any active involvement in the negotiations, disclosure of such cost or pricing data to it would be to a proper representative. Because there is a Government entity responsible for establishing indirect cost rates, the ASBCA has held that the contracting officer must rely on that entity for evaluation of indirect cost rates, prior to agreeing on price, to ensure all field support data is considered.

d. When the subcontractor denies the prime contractor access to its records, the contracting officer may request that the cognizant DCAA office audit the subcontractor's proposal. The ASBCA has held that, in those cases, disclosure of cost or pricing data to the auditor satisfies the FAR 15.406-2 requirement for disclosure to the contracting officer or his representative (Motorola, ASBCA No. 41528, 94-2 BCA ¶26,596 and Martin Marietta Corp., ASBCA No. 48223, 98-1 BCA ¶29,592). The subcontractor has no obligation to either use the cost or pricing data to update its proposal or analyze it for the Government. Therefore, when the subcontractor discloses cost or pricing data to the DCAA office that performed the subcontract audit (because the subcontractor refuses to allow the prime contractor access to its books and records), the auditor should coordinate with the subcontractor ACO to ensure that the prime ACO is provided the subcontractor cost or pricing data in a timely manner for use during the prime contract negotiations. A supplemental audit report should be issued if doing so will serve a useful purpose.

14-107 Certificate of Current Cost or Pricing Data

a. As soon as practicable after reaching agreement on price, FAR 15.403-4 requires the contractor to submit a Certificate of Current Cost or Pricing Data certifying to the accuracy, completeness, and currentness of the cost or pricing data. The Certificate of Current Cost or Pricing Data covers all cost or pricing data reasonably available to the contractor as of the date of final price agreement or, if applicable, another date agreed upon between the parties that is as close as practicable to the date of agreement on price. The allowance for a date other than the date of agreement on price was an attempt to reduce the need for proposal updates and sweeps since certain data may not be reasonably available before normal periodic closing dates, e.g., indirect costs. When performing the audit, the auditor must consider any cutoff dates and use the agreed-to date found on the certificate. Also, the contractor's responsibility is not limited to the personal knowledge of the contractor's negotiator. It extends to all information reasonably available within the contractor's organization at the time of price agreement.

b. Absence of a Certificate of Current Cost or Pricing Data does not prevent the auditor from doing a defective pricing audit, since the contractor is statutorily liable if it furnishes defective data. However, the auditor must confirm the date of price agreement with the contracting officer in order to determine if defective data exists.

c. When submitting the certificate required by FAR 15.403-4, the contractor certifies that as of the date of the price agreement or, if applicable, another date agreed upon between the parties that is as close as practicable to the date of agreement on price, the cost or pricing data are accurate, complete, and current. The Certificate addresses the concept of submitting or disclosing required cost or pricing data (facts) to the Government as of the date of price agreement or another date agreed upon between the parties. The certification itself usually does not identify the cost or pricing data by specific dollar amounts or cost elements. The auditor is the one who establishes dollars or amounts associated with the cost or pricing data in order to perform the audit.

d. Subcontract cost or pricing data must be accurate, complete, and current as of the same date specified in the prime contractor's certificate. Dates other than that of the prime contractor's certification may be relevant to the cost or pricing data provided by the subcontractor depending on the timing of subcontract award and/or the type of prime contract. (See 14-119.3 for significant dates.)

14-108 Subcontractor Cost or Pricing Data

a. Any contractor required to submit cost or pricing data and a certificate also must obtain cost or pricing data from subcontractors and prospective subcontractors. This requirement applies for any subcontract, purchase order, or modification expected to exceed the dollar thresholds for required cost or pricing data (see 14-103.2).

b. Regulations also require the prime contractor to submit subcontractor data to the Government if one of the following conditions applies:

(1) the subcontract cost estimate is $11.5 million or more,

(2) the estimate is more than the applicable dollar threshold for required cost or pricing data and more than 10 percent of the prime contractor's proposed price, or

(3) the contracting officer considers submission necessary for adequately pricing the prime contract.

c. Submitting cost or pricing data from more than one subcontractor, for the same subcontract item, is not usually required when:

(1) the subcontractor providing the data is the one most likely to receive the subcontract and

(2) the prospective prime contractor's subcontract cost estimate for such item is based on the data obtained.

d. A subcontractor or a prospective subcontractor must submit cost or pricing data to the prime contractor or higher-tier subcontractor. The prime contractor or higher-tier subcontractor is responsible for conducting price or cost analysis of the subcontract (see FAR 15.404-3(b)). The results of this analysis are furnished to the Government as part of its cost or pricing data submission up to the date of price agreement. Therefore, defective cost or pricing data of a subcontract cost or item may be attributable to the prime contractor or higher-tier contractor, subcontractor, or both.

e. A prime contractor granted a waiver from submitting cost or pricing data in accordance with FAR 15.403-1(b)(4) is considered as having been required to make available cost or pricing data. Therefore, although the prime contract would not be subject to TINA, any lower-tier subcontract expected to exceed the cost or pricing data threshold is required to submit cost or pricing data unless an exception at 15.403-1 applies. These subcontracts would be subject to TINA and included in the defective pricing universe for possible selection for audit. The appropriate price reduction clauses in FAR Part 52 would be included in the prime contract to allow the Government to recover for subcontract defective pricing if found. If defective pricing is found, prime contract add-ons should be applied based upon the deemed negotiated rates. For example, if the pricing action was negotiated based upon prior cost or pricing data plus updated cost or pricing data for indirect rates, the deemed negotiated rates would be the updated indirect rates, as adjusted at negotiations. The FAO should be able to verify from the PNM whether cost or pricing data was obtained from the lower-tier subcontractor. If the FAO cannot verify this from the PNM, the PCO should be contacted for this information. This should be done when the defective pricing universe is being developed to ensure the universe is as accurate as possible.

f. In establishing the Government’s reliance on cost or pricing data, one of the five points for defective pricing detailed in 14-102, the auditor should give special consideration to subcontractor cost or pricing data. As stated in FAR 15.404-3(a), the contracting officer has a responsibility to determine the price reasonableness at the prime and subcontract levels. Therefore, the auditor can most readily prove reliance by looking closely at the negotiation documentation. Although the TINA is worded so as to require all subcontractors to submit cost or pricing data to the prime contractor, FAR does not require prime contractors to submit all cost or pricing data to the Government (see b. above). If a subcontractor submits cost or pricing data to a prime contractor, but the prime contractor is not required to submit the data to the Government, it may be difficult to prove reliance by the Government on the subcontractor’s cost or pricing data. In this case, before the Government can get a price reduction for defective cost or pricing data, it would have to show that the prime contractor relied on the defective data in pricing the subcontract before award of the prime contract. On the other hand, if the prime contractor was required to submit the subcontractor’s cost or pricing data to the Government, Government reliance on that data would be more readily established. In either case, the auditor would have to determine what was relied upon by the contracting officer to price that subcontract. The Government does not have to accept the negotiated subcontract price when determining what would be a fair and reasonable price.

Instead, the Government is free to evaluate the reasonableness of subcontract price. The Government could have relied on the subcontractor cost or pricing data even if the prime contractor did not. Possible sources of this information would be the PNM, the contracting officer's contract files, and discussion with the contracting officer. Since reliance is one of the five points required to establish the existence of defective pricing, the auditor should ascertain this reliance early in the postaward audit. If reliance cannot be proven, making this determination early in the process would minimize resources spent.

14-109 Natural and Probable Consequence of Defective Data

The ASBCA (American Bosch Arma Corporation, ASBCA No. 10305, 65-2 BCA ¶5280) and the Court of Claims (Sylvania Electric Products, Inc. vs. U.S, 202 Ct. Cl. 16, 479 F.2d 1342 (1973)) have held that the presumed natural and probable consequence of defective data is an increase in the contract price of the defective amount plus related burden and profit or fee unless there is evidence that shows otherwise. The "natural and probable consequence" presumption, when unrebutted, relieves the contracting officer of the burden of reconstructing negotiations to demonstrate the effect of defective data on the contract price. However, a contractor may offer a rebuttal to this presumption and present evidence showing that the result was not a contract price increase. The contracting officer may require a DCAA analysis of the contractor's support for its rebuttal.

14-110 Government's Right of Access to Records

a. The TINA provides the Government with the right to examine contractor records to evaluate the accuracy, completeness, and currentness of the cost or pricing data required to be submitted. This right relates to the following:

(1) Proposal for the contract or subcontract,
(2) Discussions conducted on the proposal,
(3) Pricing of the contract or subcontract, or
(4) Performance of the contract or subcontract.

b. The right to examine contractor records expires 3 years after final payment under the contract or subcontract. Therefore, the auditor should plan to complete postaward audits before the right of access expires. If the auditor has not obtained the necessary records before the access rights have expired, the Government may have lost its legal entitlement to the records. If the access rights are expiring soon, consult Headquarters, PAS, to determine whether there is a legal recourse available to extend the rights.

14-111 Contracting Officer's Record of Price Negotiations

a. FAR 15.406-3 provides that after concluding each negotiation of an initial or a revised price, the contracting officer shall promptly prepare, or have prepared, a negotiation agreement (e.g., price negotiation memorandum (PNM)) giving the principal elements of the price negotiation. If we provided field pricing assistance (i.e., a preaward audit report), the contracting officer shall forward one copy of the memorandum to the cognizant auditor.

b. When the contractor submitted cost or pricing data and a Certificate of Current Cost or Pricing Data was required, the PNM shall reflect the extent to which the contracting officer:

(1) Relied on the cost or pricing data submitted.
(2) Used the cost or pricing data in negotiating the final price.
(3) Recognized as inaccurate, incomplete, or noncurrent any cost or pricing data submitted by the contractor.
(4) Took action as a result of the defective data and the contractor's action on such data.

(5) Determined the effect of such defective data on the price negotiated.

c. In June 1989, the Director, Defense Procurement, Acquisition Policy, and Strategic Sourcing (DPAPSS) issued policy guidance to contracting officers for situations where contractors provide cost or pricing data after price agreement. In these situations, the contracting officer must also include in the PNM a list of all data submitted by the contractor after price agreement and the extent to which these data were relied on in order to establish a fair and reasonable price.

d. If the contractor was not required to submit cost or pricing data, the PNM will provide the exception or waiver used and the basis for claiming or granting it.

e. Subcontract auditors will obtain information on the prime contractor's certification of subcontract cost or pricing data or prime/subcontractor negotiations from the prime contract auditor.

14-112 Contract Clauses

14-112.1 Price Reduction for Defective Cost or Pricing Data

a. The contract clauses entitled Price Reduction for Defective Cost or Pricing Data are in FAR 52.215-10, 11, 12, and 13. These clauses provide for a reduction in the contract price whenever the contracting officer determines that the contract price increased by a significant amount because the contractor furnished inaccurate, incomplete, or noncurrent cost or pricing data as certified in the contractor's Certificate of Current Cost or Pricing Data. However, the TINA and regulations do not define what is a "significant amount" of increase to a contract price. (See 14-120.1 for further discussions on materiality.)

b. Absence of the price reduction clause in a contract that requires such a clause does not prevent the Government from performing a postaward audit for defective pricing. Under a well-established legal principle (the so-called "Christian doctrine") a contractor is bound by a required clause even though the clause is omitted from the contract.

14-112.2 Examination of Records

FAR 52.214-26 and 52.215-2 set forth the audit and records clauses to be inserted in prime contracts and subcontracts subject to defective pricing. 10 U.S.C. 2306a and 41 U.S.C. 254d grant audit access to contractor or subcontractor records for evaluation of cost or pricing data for three years after final payment under the contract or subcontract. (See 14-110 for the statutory language regarding the Government's right of access to contractor records.)

14-112.3 Multiple Award Schedule (MAS) Contracts

a. Federal Supply Schedule Multiple Award Schedule (MAS) contracts are issued by General Services Administration (GSA) and Veterans Affairs (VA), and include two clauses that can affect the Government's price and result in a contract price adjustment after award. Although audit procedures for the clauses may call for different audit techniques, these agencies prefer to see both clauses addressed in one audit report.

b. The Price Reduction for Defective Pricing Data clause contained in the solicitation/offer under the ""Basis for Price Negotiation" clauses covers contract prices up to the date when price negotiations are concluded. This clause addresses pricing and is not the same as the FAR clause which addresses cost or pricing data. Data supporting MAS contracts are typically based on catalog pricing; no cost data is submitted. If prices are overstated based on the contractor's failure to provide current, accurate, and complete data prior to award, the Government can obtain a refund from the contractor. This clause is normally applied to the pricing data contained in the Discount Schedule and Marketing Data (DSMD) pages of the solicitation/offer.

c. MAS contracts also contain a clause entitled ""Price Reductions". The clause is intended to ensure that throughout the term of the contract, the Government maintains its relative price/discount advantage in relation to the commercial customer or category of customers upon which the MAS contract price was based. This clause provides for repayment or price reductions to the Government for actions taken after contract award. If prices are reduced in the commercial catalog, price list, or schedule or to the commercial customer or category of customers upon which the contract award was based, the Government is entitled to similar price reductions or refunds. Such adjustments are handled in accordance with the Price Reductions Clause.

14-113 Requirements and Program Plans (Postaward Audits)

14-113.1 Requirements Plan Development

FAOs and regions develop their annual defective pricing requirements plan using the DCAA Management Information System (DMIS) and specific instructions issued by Headquarters. FAOs develop and maintain a universe of eligible actions from which they select actions for audit. The specific Headquarters instructions explain how to estimate contractor risk and determine the number of pricing actions for postaward audit. Auditors should be familiar with these Headquarters instructions prior to starting a programmed audit.

14-113.2 Program Plan Coordination with Government and Contractor Personnel

a. To foster the exchange of useful information and achieve maximum cooperation, FAOs will provide a list of all programmed postaward audits to affected Government personnel (contracting officers and prime contract auditors) at the beginning of the program year. This type of coordination with other Government personnel establishes contact points for communications, provides information for planning and prioritizing workload, and offers the chance to obtain pertinent information that may affect the planning and performance of the postaward audits. Coordination and communication with contracting officers and prime contract auditors throughout all phases of the audit will enable the Government to achieve timely resolution of defective pricing findings. Send written notification of programmed postaward audits on prime contracts or modifications to the PCO, with a copy to the onsite FLA, if applicable (see 15-303). Like wise, it is important to notify the contracting officer when a programmed postaward audit is cancelled after having been announced. Accordingly, auditors are required to notify the contracting officer, in writing, when a programmed postaward audit is subsequently cancelled after having been started and announced. On subcontract audits, send written notification to the prime auditor. Identify for the PCO or prime auditor, at a minimum, such information as the PCO code, symbol and case number, the prime contract number or modification number, the contractor name, the product name, and subcontract purchase order number. The notification can complement an initial request for the price negotiation memorandum (Attachment 3 to the Postaward Audit Program).

b. At those contractors with significant programmed defective pricing activity, discuss the defective pricing program plan with contractor representatives for effective planning and audit coordination. This coordination will include discussions on the contractor risk designation and reasons for such determination, which contracts were selected and how, the timing of the audits, outstanding estimating system deficiencies, and internal control weaknesses.

14-113.3 Timing of Audit

a. Promptly audit and report on pricing actions selected for postaward audit. Each audit is part of the FAO's annual program plan for the fiscal year. To effectively accomplish the plan, phase the audits for completion throughout the fiscal year. Furthermore, the PASS

guidance requires audits of all fixed price and all high risk incentive pricing actions over $100 million to start as soon as the office is aware of the award and to be completed no later than one program year after the year of award. Generally, schedule these audits for completion as soon as possible after contract award. However, the audits can be delayed if significant actual cost data will be available within a reasonable time frame after contract award. In any case, these audits should be scheduled no later than two program years after year of award.

b. The Government has the right of access to records for three years from the date of final payment under the contract or subcontract. However, it is better to report on any apparent defective pricing before prime contract completion, or at the latest, before the due date of the final audit report on incurred costs under the contract. While the Government has the right of access to records for three years from the date of final payment under the contract or subcontract, the Contracting Officer has six years from the date the Government establishes the basis for defective pricing to issue a written decision under the disputes clause of the contract (FAR 33.206(b) bars recovery after six years). Generally, the initiation of the six year period is the date of the audit report, including the date of any subcontract reports issued to the prime contract auditor.

14-114 Audit Program for Postaward Audits

a. Use the standard audit program for performing postaward audits for defective pricing found on the DCAA intranet. The audit program consists of risk assessment/preliminary audit steps, probe transaction testing steps, detailed steps, and concluding audit steps. Risk assessment/preliminary audit steps are completed to assess the pricing action's risk of defective pricing, compile basic information needed to conduct the audit, perform analytical procedures and assist the auditor in planning the nature and extent of probe transaction testing for the major cost elements. Complete the risk assessment/preliminary audit steps, discuss with the supervisor the planned scope for further effort; and obtain supervisory approval of any additional effort before beginning the probe transaction testing.

b. Probe transaction testing must be completed to ensure adequate substantive testing has been performed to provide a reasonable basis for an opinion. Perform probe transaction testing for the highest risk major cost elements based on the results of the risk assessment/preliminary audit procedures. However, if there has not been an audit of the preaward proposal and an audit of the estimating system, probe transaction testing should be performed for all major cost elements. Complete the probe transaction testing steps, discuss the results and any plans for additional detailed audit steps with the supervisor, and obtain supervisory approval before beginning any detailed audit steps.

c. Detailed audit steps in the program allow the auditor to document additional audit procedures beyond probe transaction testing applied to specific cost elements and support evidence obtained for an audit conclusion. The auditor plans the detailed steps based on the results of the probe transaction testing. Successful accomplishment of the detailed steps requires auditors to fully establish the five points detailed in 14-102b to prove defective pricing (see also the defective pricing standard audit program).

d. Concluding audit steps identify the administrative requirements upon completion of field work. These steps include communicating the issues and findings with the contracting officer; reporting estimating system findings, CAS findings, and potential irregularities; conducting exit conferences with the contractor; and preparing the audit report.

e. The audit program also includes sections on contract brief schedules, information request guides, schedule for chronology of events, and audit notification to the contractor.

14-115 Obtaining Price Negotiation Memorandums and Requesting Data for the Audit

a. The PNM is the most important Government document for the successful completion of any postaward audit. The auditor must review the PNM to determine what cost or pricing data the contractor provided and when, whether the Government relied on such data, what considerations the contracting officer made during negotiations, and other factual considerations that may have influenced the negotiations. FAR 15.406-3 details the minimum information included in the negotiation agreement (e.g., PNM) and requires contracting officers to provide auditors with a copy of the negotiation agreement (see 14-111). Notwithstanding the FAR requirements, the auditor is still responsible for communicating or coordinating issues with the contracting officer. At the start of the audit, the auditor should confirm with the contracting officer the statement in the PNM that the Government relied on the cost or pricing data. Sole reliance on the PNM without communicating with the contracting officer is not sufficient.

b. Follow the procedures outlined below for requesting data from the contracting officer when doing postaward audits.

(1) Determine what required data is available from the DCAA FAO files, the contractor, or the ACO. Do not request data from the PCO until you determine it is not available locally.

(2) Review available data to determine if additional information is required to perform the audit. Proper planning for any postaward audit begins with the PNM. Specifically, review the PNM to establish the audit scope and determine what data may be needed to do the audit. If we do not have the PNM and cannot obtain it from the ACO, we should initially request only the PNM from the PCO. Also, the FLA can assist in obtaining required PNMs and other data.

(3) Requests for data or clarification on significant issues should be made to the PCO in writing during the audit. Requesting specific data as needed during the audit will enhance communication with the PCO and result in a better audit and a more effective report. Effective communication with the PCOs shows that we are sensitive to their resource constraints and are taking prudent steps to develop sustainable audit recommendations.

(4) Use the standard request letter (Attachment 2 to standard audit program) as a guide when writing to the PCO. Specific explanations or reasons for the data requested should be set forth. The standard request letter was designed to notify the contracting officer of the planned audit and request specific data that was not already available from DCAA FAO files, the contractor, or the ACO.

c. In rare instances the auditor may have to travel to the buying office for a personal review of the contract file before starting the audit. Also consider requesting the contractor's negotiation log and/or record of negotiation. The lack of a PNM should not delay the start of a scheduled audit. However, it becomes increasingly difficult to support an audit baseline, disclosure of cost or pricing data, and reliance without the PNM.

d. If inadequate negotiation documentation, lack of PNMs, or chronic late receipt is jeopardizing the defective pricing program, notify the FLA at the buying office and the regional office. The regional office should work with the FLA to resolve PNM deficiencies with the buying offices.

e. For subcontracts, determine what cost or pricing data of the subcontractor the Government relied on in pricing the prime contract. The auditor at the subcontractor location will contact the auditor at the prime contractor location to obtain the prime contractor's PNM in order to identify the data relied on in pricing the prime contract. Use the FLA to assist in this internal DCAA coordination to obtain the necessary information.

14-116 Establishing the Baseline for Audit, Determining the Defective Data, and Calculating the Recommended Price Adjustment (Postaward Audits)

The auditor must (1) establish the appropriate baseline for audit, (2) determine the potential defective data, and (3) calculate the total recommended price adjustment.

14-116.1 Communicating with the Contracting Officer at the Start of the Audit

When reviewing the PNM at the beginning of the audit, the auditor should confirm with the contracting officer the statement in the PNM that the Government relied on the cost or pricing data or if there is no statement on reliance, the auditor should ask the contracting officer if there was reliance on the cost or pricing data. If the PNM has not been provided to the FAO, request the contracting officer to provide it. A copy of a pro forma memorandum to the Contracting Officer which should be tailored to each specific circumstance is available on DCAA's Intranet and APPS as Format for Announcing Postaward Audit and/or Requesting Data. After completing the risk assessment, the auditor should notify the PCO of the planned audit, as described in 4-103.

14-116.2 Baseline for Audit

a. When contractors certify cost or pricing data (facts) and execute the Certificate of Current Cost or Pricing Data, they do not specifically identify the amounts or elements of costs that are certified. Therefore, to evaluate cost or pricing data for compliance with TINA, the auditor must establish an audit baseline as a starting point in order to determine if the cost or pricing data were accurate, complete, and current. The audit baseline for determining if defective pricing exists is (1) the contractor's last proposal before price negotiations began and (2) adjustment for any additional cost or pricing data up to the time of price agreement or disclosure of sweeps data (see 14-120.4) for which the contractor addresses its significance on the proposal and submits it to the Government. Since the baseline starts with the contractor's proposal, it will include both cost or pricing data and judgments.

DEFECTIVE PRICING AUDIT
BASELINE

$$$ Contractor's last proposal by cost element before price negotiations began

+ - (Plus or Minus) Additional cost or pricing data up to the time of agreement on price (or another date agreed upon between the parties), to include sweeps data, for which the contractor addresses its significance on the proposal and submits it to the Government

$$$ (Equals) Baseline for determining if defective pricing exists

b. Examine the PNM first to determine if the contractor updated its proposal or submitted additional cost or pricing data before negotiations of the contract price began. Sources of data other than the PNM include the buying office's contract file and the contractor's PNM and contract file. Depending on the circumstances, the auditor may need to pursue one or more of these alternative data sources. Follow the procedures in 14-115 to obtain the PNM or other data needed if it is not available locally.

c. The PNM should clearly identify the cost or pricing data the contracting officer relied on to negotiate the prime contract price (FAR 15.406-3(a)(6)). If not specifically addressed in the PNM, coordinate with the contracting officer and obtain a written statement as to what data were relied on. If the contracting officer will not provide a written statement on reliance and the FAO's review of the contracting officer's file discloses no con-

trary evidence, assume that the Government relied on all data submitted by the contractor in negotiating the contract price.

d. Sometimes the contractor does not submit additional cost or pricing data, but the costs negotiated by the contracting officer are less than the amounts shown in the contractor's proposal. Unless the PNM discusses additional data provided at negotiations, the contractor's proposal is the baseline for audit.

14-116.3 Determining the Potential Defective Data

Once the auditor has established the baseline for audit, the next step is to compare the cost or pricing data in the audit baseline to all accurate, complete, and current cost or pricing data reasonably available to the contractor prior to agreement on price, or another date agreed upon between the parties. Differences found identify potential defective pricing. For such differences the auditor must establish the five points identified at 14-102. If the auditor cannot establish or support these points, he or she has not developed evidence to support that potential defective pricing exists.

IDENTIFICATION OF POTENTIAL DEFECTIVE PRICING

$$$ Cost or pricing data in audit baseline (14-116.2)

- (Less) Accurate, complete, and current cost or pricing data reasonably available up to the time of agreement on price (or another date agreed upon between the parties), to include sweeps data, for which the contractor addresses its significance on the proposal and submits it to the Government
- (Less) Adjustment for contracting officer nonreliance, contractor disclosures or Government's actual knowledge, and specific adjustment by the contracting officer for the effect of factual information on the negotiated price

$$$ (Equals) Potential defective pricing

14-116.4 Calculating the Recommended Price Adjustment

a. The recommended price adjustment is the total amount the contract price increased because the contractor submitted defective cost or pricing data. It includes not only the defective data, but also the associated costs and profit. Recommended price adjustments that do not meet the materiality guidelines in 14-120.1 should not be reported.

b. If the defective pricing involves a subcontract, the prime contract auditor will compute the allocable portion of prime indirect costs and profit applicable to the subcontract defective pricing and include this amount in the total recommended price adjustment for the prime contract. The prime contract auditor's report will include prime add-ons (indirect costs and profit or fee) to the subcontract defect to reflect the total amount of the subcontract defective pricing on the prime contract price.

c. The following guidance applies when calculating the recommended defective pricing adjustment:

(1) When particular cost or pricing data is not disclosed, or inaccurate or noncurrent data is used, (defective data) there is a presumption that the natural and probable consequence (see 14.109) of the defective data is an increase in the negotiated contract price in the amount of the defect, plus indirect costs and profit or fee. However, the natural and probable consequence presumption has its limits in determining the extent to which defective cost or pricing data caused an increase in the contract price. When there is evidence of reductions obtained in negotiations, the "natural and probable consequence" is less than the full reduction attributed to the defective data. This is explained more fully in paragraphs (2) through (5) below.

(2) When there is insufficient evidence to establish the negotiated value or price of a specific defective cost element, the starting point/baseline for calculating the recommended price adjustment is the contractor’s last proposal plus or minus the impact of sub-

sequently disclosed cost or pricing data less adjustment for contracting officer nonreliance (14-116.3).

(3) The negotiated value of the defective element is the starting point/baseline for calculating the recommended price adjustment when there is evidence to show that the Government in negotiation already secured a reduction in the price of the defectively priced cost element below the contractor's last proposal, plus or minus the impact of subsequently disclosed cost or pricing data related to the defective element.

(4) Evidence to confirm the negotiated value or price of a specific defective element of cost may be included in the Government's price negotiation memorandum or other documents such as the Government's pre-negotiation clearance, target objectives, or technical analyses that were attached or referenced in the memorandum to show the breakdown of the elements of cost negotiated. Alternatively, the breakdown of the specific elements of cost in the pre-negotiation clearance or other similar documents that are not attached or referenced in the price negotiation memorandum but which the contracting officer asserts in writing is representative of the prices negotiated for those elements may also represent substantiating evidence. If there is evidence available from Government sources that confirms the specific negotiated cost element prices, this cost level should be used in the computation of the recommended price adjustment for the defective element.

(5) Computing recommended price adjustments:

(a) Starting point/baseline for computing the adjustment:

i. The value of the specific defectively priced element of cost (the level of detail at which the non-disclosed cost or pricing data relates) in the contractor's last proposal, plus or minus the impact of cost or pricing data related to the defective element submitted up to the time of agreement (or another date agreed upon between the parties) to include "sweep" data (14-120.4).

ii. However, if there is evidence available from Government sources of the negotiated value of the defectively priced element, use:

The negotiated value of the specific defectively priced cost element (the level of detail at which the non-disclosed cost or pricing data relates) based on evidence in the price negotiation memorandum or associated Government documents.

Less:

(b) The corresponding value shown by the accurate, complete, and current cost or pricing data that was reasonably available up to the time of agreement on price (or another date agreed upon between the parties) to include sweeps data.

Plus:

(c) Associated costs and profit:

i. In all cases (starting points (a)i or (a)ii above) when the negotiated values of the associated indirect rates and factors can be confirmed and are not defective, apply the negotiated rates and factors to the defectively priced cost elements. If the non-defective negotiated rates are not available, use the rates and factors in the contractor's last proposal, plus or minus the impact of related cost or pricing data submitted up to the time of agreement (or another date agreed upon between the parties) including "sweep" data.

ii. When the indirect rates are defectively priced in addition to the defective element, follow the guidance for the starting point for (a)i or (a)ii under the circumstances.

Equals:

(d) The total recommended price adjustment.

(6) If there was a total bottom-line negotiation price based on a significant reduction to the last proposal, there can be no recognition of the reduction in computing the recommended price adjustment unless there is evidence available from Government sources to confirm the negotiated value of the specific defectively priced element. In such circumstances, the starting point for computing the recommended price adjustment would be 14-116.4c(5)(a)i.

14-117 Possible Defective Pricing Indicators

To effectively achieve the basic objectives of the DCAA defective pricing program, audit procedures must be designed to identify and explore conditions suggesting possible defective pricing. The audit procedures should also consider specific information furnished by the contracting officer when applicable. Items normally examined for indications of defective pricing are historical unit cost records, vendor quotes, purchase orders, voluntary refunds or credits from suppliers, cost trend records, sales and manufacturing volume projections, profit and loss statements, and product cost and profit analyses. The following examples are possible defective pricing indicators:

a. Significantly lower actual cost of individual items and cost elements as compared with the amounts included in the audit baseline as explained in 14-116.2. When this condition exists, perform additional tests to determine whether the lower costs reflect defective data.

b. Operations not actually performed or items of cost not incurred, although included in the contractor's proposal. (For example, changes made in the make-or-buy program, a special testing program not performed, or Government-owned equipment rental not paid.) Explore the reasons for not incurring the cost.

c. Items of direct cost included in the contract pricing proposal at prices higher than appropriate based on information available to the contractor (and not disclosed to the Government) at the time of contract price agreement. Examples are as follows:

(1) After submitting the original proposal but before price agreement, the contractor receives a firm quote from an established source which is significantly below the cost included in the original proposal.

(2) A previously used supplier not solicited this time but who normally submits a low bid. The contractor later purchases the material from this vendor at a price lower than proposed.

When detecting the above or similar situations, evaluate the circumstances involved to reach a conclusion on whether defective pricing exists. A contract price is not defective simply because subsequent market price declines allow the contractor to obtain lower material prices than the quotations obtained before award.

d. Closing or cutoff dates for recording transactions or for computing summary indirect cost rates or production cost data that did not coincide with the date negotiations concluded. For instance, the contractor's proposal included indirect or other cost data as of a prior cutoff period. In this case, the contractor is responsible for the currentness of its cost or pricing data, if a cutoff date for this information was not agreed to and identified on the Certificate of Current Cost or Pricing Data, , the Government would consider significant matters in the books or records on the date of price agreement as reasonably available to the contractor for purposes of defective pricing. This is true even if the data had not yet been summarized (see 14-104.6).

e. Less obvious defective pricing indicators may include the contractor's failure to reflect in the proposal decisions expected to lower costs on prospective contracts. This usually relates to budgets, production, automation, time and motion studies on labor, and management decisions when the decisions were made and the information was available before price agreement. Facts underlying contractor opinions, and projections are cost or pricing data; but judgments based on those facts are not (see 14-104).

14-118 Treatment of Offsets

a. The 1987 Defense Authorization Act amended the TINA to give statutory recognition to contractor offsets for defective cost or pricing data that result in understated costs. The amended TINA places the burden of proof for such offsets on the contractor and disallows using any intentional understatements to offset defective cost or pricing data that resulted in a price increase. This amendment applies only to contracts or

modifications to contracts entered into on or after February 15, 1987 (10 U.S.C. 2306a). As a result, the following guidelines apply to offsets.

(1) For contracts entered into before February 15, 1987, offsets are usually appropriate against defective cost or pricing data and should be considered during the normal course of audit. This includes inadvertent understatements in the contractor's cost or pricing data and intentional underproposed/negotiated prices where full disclosure of the cost or pricing data relating to the underproposed price has been made. An example of this offset is mathematical errors in the cost or pricing data. It does not include unsupported "bottom-line" management adjustments.

(2) For contracts or modifications to contracts entered into on or after February 15, 1987, offsets against defective cost or pricing data are allowable if the contractor:

(a) certifies to the contracting officer that, to the best of the contractor's knowledge and belief, the contractor is entitled to the offset in the amount requested; and

(b) proves that the cost or pricing data were available before the date of agreement on the price of the contract (or price of the modification) and that the data were not submitted before such date.

(3) However, an offset shall not be allowed if:

(a) the understated data was known by the contractor to be understated before the “as of” date specified on the Certificate of Current Cost or Pricing Data; or

(b) the Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the date of agreement on price.

(4) The first exception prohibits an offset if the contractor intentionally withheld from the Government information showing a higher cost for an item or service. To deny an offset for this reason, it is not enough that someone in the contractor's organization was aware of the true cost of the item or service. Rather, the Government must establish that someone in the contractor’s organization knew of the cost or pricing data and knew the certificate was inaccurate when submitted.

(5) The Government permits offsets among and within the various line items of the cost or pricing data, but only up to the maximum of defective overstated costs in the same pricing action. For example, the contractor may offset understated material costs against overstated labor, overhead, and G&A. However, offsets apply only within the same pricing action, e.g., for an initial pricing action or for the pricing of a change order.

b. Prior to the evaluation of any contractor offset submission (or potential offsets found during audit) for contracts entered into on or after February 15, 1987, the contractor must provide an appropriate certification in support of its claim. Although audit procedures should not be specifically designed to seek out understatements, the auditor should notify the contractor and the contracting officer in writing of potential offsets, and obtain the required certification. Until the contractor provides the required certification for its submission, DCAA should neither adjust the findings nor expend additional resources on the alleged offsets. It is important that the contractor certify to the apparent offset to ensure its allowability as stated in 14-118a.(3), (4), and (5). For example, the contractor's review of a potential offset found during the audit of a statistical sample of a bill of material may disclose that the cost or pricing data related to the higher price was known and considered by the contractor prior to agreement on price. If the contractor refuses to submit such certification, inform the contracting officer and request assistance in obtaining certified offsets prior to issuing the report to ensure timely consideration of probable offsets. If certification of the offsets cannot be obtained, state in the report that the contractor (or auditor) has identified offset amounts, but the contractor refused to provide any certification of offsets and therefore DCAA will not express an opinion on the validity of the claimed offsets. However, if the contracting officer requests evaluation of the uncertified offsets, comply with that request and include the supplementary information in a separate appendix to the postaward report.

(1) When the contractor contends that there are understated costs for contracts entered into before February 15, 1987, but does not provide specific information, request in writing that the contractor submit specific information. Also solicit contracting officer assistance in confirming data supporting the alleged offsets and give appropriate consideration in the audit report. If the contractor does not submit this offset information within a reasonable time, normally 30 days or as agreed among the FAO, contracting officer, and contractor, issue the audit report. Present available information concerning alleged offsets in the audit report.

(2) When the contractor contends that there are understated costs for contracts entered into on or after February 15, 1987, but does not provide a certified offset submission, request in writing that the contractor submit its certified offsets so data supporting the alleged offsets can be evaluated. If the contractor does not submit this offset information within a reasonable time, normally 30 days, proceed as discussed in paragraph b.

(3) When the contractor submits offset data to the auditor after issuing the audit report, tell the contracting officer of this additional submission, furnish a copy should he or she not have one, and request his or her views on the need for auditing the additional data.

14-119 Subcontract Audit Procedures (Postaward Audits)

The "Price Reduction for Defective Cost or Pricing Data" clauses in FAR provide that when the Government finds defective pricing on a subcontract after the prime contractor and the Government have agreed on the contract price, the prime contractor is liable to the Government for the amount of the defective pricing. The subcontractor is liable to the prime contractor. Additionally, because the prime contractor is responsible under FAR 15.404-3(c) for obtaining accurate, complete, and current subcontractor cost or pricing data and for updating the data, the prime contractor is liable for subcontract price reductions even when it had no knowledge of the defective data.

14-119.1 Prime and Subcontract Auditor Responsibilities for Subcontract Costs

a. Auditors at the prime contractors, higher-tier subcontractors, and subcontractors are responsible for determining whether the certified subcontract cost or pricing data was accurate, complete, and current. Defects in subcontract cost or pricing data may be attributable to the prime contractor or higher-tier contractor, subcontractor, or both. The auditor's job is to uncover defects in subcontract costs regardless of who caused the defect. However, auditors at each level of cost (prime, higher-tier, subcontractor) have slightly different administrative responsibilities.

b. Prime contract auditors are responsible for reporting on the prime pricing action as a whole, including subcontract costs. The prime auditor evaluates cost or pricing data as of the date of price agreement with the Government. The prime auditor reports the results of the postaward audit, including any subcontract audit results, to the contracting officer. Even though the DCAA postaward selection process requires each FAO to establish pricing actions for audit, the prime auditor is still responsible for all costs under the prime contract. The prime auditor also serves as the focal point for providing subcontract auditors with the necessary information to do the subcontract audit. To properly manage the prime contract audit and its subcontract costs, the prime auditor must:

(1) Establish the subcontract cost or pricing data certified to by the prime contractor and assist the subcontract auditor in establishing the subcontract audit baseline.

(2) Assess the cost or pricing data to identify leads or potential defective pricing related to specific subcontractors or subcontract parts.

(3) Request necessary assist audits based on the assessment of the cost or pricing data.

(4) Coordinate and provide relevant facts and information to the subcontract auditor doing the subcontract postaward audit.

(5) Ensure that subcontract audit reports support defective pricing and that such defects actually affected prime contract price.

(6) Calculate the full effect of subcontract defects on the prime contract price by including prime add-ons.

(7) Report the audit results to the contracting officer. Contact the contracting officer to establish the most effective approach for issuing a prime report when the subcontract report is not complete (see10-6051.c.(1)) or when issuing completed subcontract findings when the prime report is not completed (see 10-605.1c.(2)).

c. Subcontract auditors are responsible for evaluating the subcontractor cost or pricing data submitted and/or certified to the prime contractor. The relevant dates for auditing the subcontractor's cost or pricing data vary and should be established at the beginning of the audit (see 14-119.3). The subcontract auditor obtains necessary information through the prime auditor and issues its report directly to the prime auditor, unless otherwise directed. The subcontract auditor must:

(1) Coordinate with the prime auditor to understand why the subcontract pricing action was requested for audit or to explain why the action was selected for audit.

(2) Obtain from the prime auditor, not the contracting officer, the necessary facts and information to do the subcontract postaward audit.

(3) Establish the relevant dates to determine the existence of defective pricing and confirm such with the prime auditor.

(4) Report the audit results to the prime auditor, unless directed otherwise.

14-119.2 Release of Subcontractor Data to Higher-tier Contractors

FAR 15.407-1(f) governs the release of information necessary to support a reduction in prime contract or higher-tier subcontract prices. FAR provides for contracting officer release of information, on request, to prime contractors or higher-tier subcontractors as necessary to secure a prime contract price reduction. However, if the information includes trade secrets or confidential business information, the contracting officer must protect it from improper disclosure. To assist the contracting officer, the auditor will determine if the subcontractor objects to the release of the information in the audit report to the higher-tier contractor. Present contractor objections in the audit report in accordance with 10-604.2b(2). Follow the procedures in 6-802.6 in resolving any objections to unrestricted release of information to the higher-tier contractor.

14-119.3 Subcontract Defective Pricing - Significant Dates

Depending on the circumstances, two different dates may be relevant when determining subcontract defective pricing. These dates are:

(1) the date of negotiation between the Government and the prime contractor and

(2) the date of negotiation between the prime contractor and subcontractor. Three factors determine whether one or both dates should apply:

(a) timing of the subcontract award (whether awarded before or after the prime contract),

(b) type of prime contract, and

(c) type of subcontract.

a. When a subcontract is awarded before the prime contract, subcontractor cost or pricing data must be accurate, complete, and current as of the date of final agreement on subcontract price. As a practical matter, later data would have no impact on final subcontract negotiations. Nevertheless, the prime contractor must still furnish the Government with data it becomes aware of which may have an impact on final subcontract cost to the prime contractor, e.g., a subsequent decrease in a flexibly priced subcontractor's labor rates. Such information is cost or pricing data bearing on the negotiation of the prime contract, and the failure to provide the data may lead to defective pricing.

b. If the subcontract is awarded after a firm-fixed-price prime contract, all prime and subcontractor cost or pricing data existing as of the date of the price agreement between the prime and the Government must be accurate, complete, and current. Defective subcontractor data occurring after the prime and Government price agreement cannot affect the prime contract negotiated price, since there is no right of recovery by the Government. Therefore, in this case, only the date of prime contract final price agreement is relevant for subcontractor defective pricing.

c. If a subcontract is awarded after a flexibly priced prime contract, defective subcontractor data occurring between the prime and subcontract price agreement date will affect the prime contract final price (FPI) or total cost (CPFF/CPAF/CPIF) paid by the Government. Accordingly, both dates (prime/Government and prime/subcontractor) are relevant to determine defective pricing of the subcontract. In this situation, defective pricing could occur at (1) the prime level if the prime did not provide the Government with accurate, complete, and current cost or pricing data as of prime and Government price agreement (or, if applicable, another date agreed upon between the parties that is close as practicable to the date of agreement on price,) and/or (2) the subcontractor level if the subcontractor did not provide the prime with accurate, complete, and current cost or pricing data as of prime and subcontractor price agreement.

14-119.4 Handling Subcontract Price Adjustments

Subcontract cost or pricing data may be defective regarding either the prospective subcontractor, the actual subcontractor, or both.

a. When the prospective and actual subcontractor are the same, and the subcontractor's proposal as a prospective subcontractor is defective, the recommended reduction in the prime contract price is the recommended subcontract price adjustment plus the prime contractor's additives. When a prospective subcontractor's data is defective, and the actual subcontractor for the item was an organization other than the prospective subcontractor, this limits the recommended reduction in the prime contract price to the difference between the prospective subcontractor's cost estimate and the actual subcontract price, plus the prime contractor's additives (FAR 15.407-1(f)(1)).

b. Defective pricing adjustments for subcontracts under flexibly priced prime contracts require different treatment and reporting, depending on the timing of the subcontract award.

(1) Defects in subcontract cost or pricing data negotiated with the subcontractor prior to the date of prime contract price agreement or defects in unnegotiated subcontractor cost or pricing data existing at the date of prime contract price agreement affect the prime contract price. Subcontract defects in these situations, whether caused by the subcontractor or the prime contractor, require recommended prime contract price adjustment that include the application of negotiated profit. The following guidance in (2) below regarding billed costs on subcontracts defectively priced after prime contract price agreement also applies to defects in subcontracts negotiated or existing prior to the date of prime contract price agreement.

(2) Defects found in subcontracts negotiated after the prime contract price agreement, but which did not exist as of the date of prime contract price agreement, do not affect the prime contract price agreement. Subcontractor defects in these circumstances require disallowance (for cost-type contracts) or nonrecognition (for final pricing of redeterminable and incentive-type contracts) of costs on the prime contract that will include prime contractor loadings at the rates actually applied by the prime contractor to the incurred costs. No adjustment is required to the profit on the prime contract.

(a) Payments to subcontractors under flexibly priced prime contracts that are higher than they would be had there been no defective subcontractor cost or pricing data shall be the basis for disallowance or nonrecognition of costs. Under flexibly priced prime contracts the Government has a continuing interest in such overpayments to subcontractors that is unaffected by the initial agreement on prime contract price. Accordingly, the

disallowance or nonrecognition of costs will be accomplished under the contract clauses prescribed in FAR 15.408 (also see FAR 15.407-1(f)).

(b) Until the contract closing or final pricing is completed, the disallowance or nonrecognition of costs should be effected through reductions in the prime contractor's billings. If the prime contractor has reduced its own billings for the subcontractor defects, determine if the reduction is comparable to the audit findings.

(3) Separately present findings in the prime audit report "Results of Audit" section and exhibits for (a) recommended price adjustments and (b) recommended disallowance or nonrecognition of incurred costs.

c. A firm-fixed-price contractor may obtain a refund for a defectively priced subcontract even if the subcontract cost or pricing data was not defective at the time the prime was negotiated. In this situation, the Government has no contractual right to a price adjustment. However, we should review the facts to determine if an audit report recommendation for voluntary refund is appropriate (see 4-802).

14-120 Other Audit Considerations

14-120.1 Materiality of the Defective Pricing Findings

a. The TINA and regulations do not define what is a "significant amount" by which a contract price was increased because the contractor furnished defective cost or pricing data. The Courts and the BCA have made differing decisions regarding what is a significant amount.

b. The Government expends a substantial amount of resources finding, pursuing, and settling claims of defective pricing. Accordingly, materiality should be one of the underlying factors when doing postaward audits. In determining the significance of defective pricing, consider the magnitude of the defective data including all applicable burdens (see 10-103.3j(2) and 14-116.4).

c. Any issue involving significance of a defective pricing recommendation should be resolved using the following working guideline.

Potential price adjustments of 5 percent of contract value or $50,000 whichever is less should normally be considered immaterial. When applying this standard consideration must be given to contract type. For example, on a CPFF contract with a 10 percent fee a $500,000 price adjustment is required to effect a $50,000 recovery. These materiality criteria do not apply in the following circumstances:

(1) when a contractor’s deficient estimating practices have resulted in recurring defective pricing; or

(2) the potential price adjustment is due to a systemic deficiency which affects all contracts priced during the period.

14-120.2 Defective Pricing from CAS Noncompliances

a. Generally, a CAS noncompliance found in a postaward audit does result in the certification of inaccurate cost or pricing data. However, the auditor will report CAS noncompliances revealed in postaward audits to the cognizant Federal agency official (CFAO) with the authority to make determinations of noncompliance. Regulations require that the CFAO, not the PCO, perform CAS administration for all contracts. Further, regulations require the DCAA auditor to make CAS-related recommendations to the CFAO. Therefore, do not include a price adjustment for the amount of the noncompliance in the postaward audit report, but do briefly explain in the notes to the exhibit:

(1) the noncompliance,

(2) its effect on the pricing action, and

(3) its status.

b. Issuing a CAS noncompliance report permits the CFAO to adjust all affected contracts that are both CAS noncompliant and defectively priced. Whether the violation

causes a defect on multiple pricing actions or just one, the responsibility for adjustment belongs to the CFAO. Also, systemic noncompliance issues, while significant in the aggregate, may not be significant on individual pricing actions. The CFAO has a greater chance to obtain consistent recovery on all affected pricing actions through CAS than the individual PCOs do under defective pricing.

c. For subcontracts, regulations require that the CFAO of the subcontractor shall make the noncompliance determination and advise the CFAO of the prime or next higher-tier subcontractor of such decision. The subcontractor CFAO's determination will not be reversed by the CFAO at the prime or next higher-tier subcontractor. Accordingly, the Government should receive adjustment for the subcontract noncompliance and for the prime contractor's markups applied to the subcontract.

d. If the CFAO determines the finding is not a CAS noncompliance, do not report the finding later to the PCO as defective pricing. Once the CFAO has made such a determination, the finding would be difficult to support as defective pricing.

14-120.3 Systemic Defective Pricing Issues (Non-CAS)

a. Non-CAS-related defects attributable to breakdowns in the contractor's systems may affect multiple pricing actions. The defects may be relatively small on each individual action, but significant in the aggregate. The defects may also affect many contracting officers from the various services. The best way for the Government to achieve consistent and maximum recovery of systemic defects is for one designated official to settle the issue on all affected contracts.

b. To promote consistent and maximum recovery for systemic issues the auditor must do the following:

(1) identify systemic defects, affected pricing actions, and applicable contracting officers;

(2) notify the affected contracting officers, explain the systemic defects, and suggest they designate or establish one individual to negotiate with the contractor;

(3) separate systemic findings from other specific defective pricing allegations found in the audits of the individual pricing actions;

(4) report the systemic findings in a single report that identifies all affected pricing actions and contracting officers; and

(5) address the report to each affected contracting officer. If a focal point has been designated to resolve the systemic issue, address the report to that individual with copies furnished to each affected contracting officer.

c. Set up the assignment for the systemic defect as an audit lead and include a description of the systemic defect.

14-120.4 Defective Pricing "Sweeps"

a. A defective pricing sweep is a process whereby a contractor reviews its records to determine if more current cost or pricing data exist and need to be disclosed to the Government. The sweep usually occurs after price agreement and the contractor submits this additional data to the Government with its executed Certificate of Current Cost or Pricing Data. The additional data reflect cost or pricing data that were reasonably available at the time of price agreement but not submitted or disclosed before price agreement. As a result of FASA, FAR now allows a date other than the date of price agreement on price for certification (see 14-104.3). This and the encouragement to the contracting officer to use cutoff dates, where practicable, should reduce the need for sweeps.

b. Sweep data appear defective in that the cost or pricing data were not submitted or disclosed to the Government before the price agreement. However, if the Government receives cost or pricing data with the certificate before the contract award, the contracting officer has the opportunity to adjust the contract price for such data. In addition, procurement policy issued by the DoD in June 1989 (see 14-111c) requires contracting

officers to reflect such data in the PNM and the extent to which they relied on it in establishing the contract price.

c. In situations involving sweeps, contact the contracting officer to fully understand the type of data included with the Certificate, what the contracting officer did with the data, and the effect the data had on the negotiated contract price. The auditor should not recommend a price adjustment simply because the data were provided with the certificate after price agreement because this is not defective pricing.

d. The auditor must assess whether a contractor's sweep practices reflect deficiencies in estimating systems or procedures. For example, a contractor continually delays submitting cost or pricing data until after price agreement or the cost or pricing data were available to the contractor for some time before price agreement (aging of the availability of cost or pricing data). In those cases, the auditor must take appropriate steps to report the deficiencies or irregularities.

14-120.5 Statistical Sampling Techniques in Postaward Audits

a. Agency policy supports the use of statistical sampling and professional standards recognize audit sampling as a proper audit practice to provide evidential matter. While statistical sampling provides evidential matter, can it be used to support a projection of a recommended price adjustment for defective pricing? Neither the Courts nor the BCA has ruled on the propriety of sampling evidence to support recommended price adjustments.

b. The Government has the burden of proving its case by the preponderance of the evidence. Absolute certainty is not required. The evidence need only show that the validity of the claim is more probable than not. The statistical sampling techniques which are applied within DCAA provide admissible evidence of the amount of the impact of defective data. The issue for the judge is to determine whether the sampling evidence will satisfy the standard of proof for the whole amount claimed. Therefore, the Government will be successful in litigation only if judges are persuaded that sampling has sufficient weight to comply with the "preponderance of evidence" test. The test does not require absolute certainty; it does require a weighting of the evidence and a determination of the probability of accuracy. In evaluating whether statistical sampling is a proper audit practice for determining the amount of overpricing, the Courts or the BCA will have to examine this audit technique in the context of professional standards, professional custom, and audit necessity. The weight which a judge will give to sampling evidence will depend upon the facts of the case.

c. The auditor can use sampling techniques for postaward audits to establish that defective pricing exists. However, projecting sample results for the recommended price adjustment requires satisfying the "preponderance of evidence" test. The auditor must properly develop and document the sample plan, assess the reasons for defects found, evaluate the sample, and expand the sample as necessary to reach the desired confidence level and precision. Successfully projecting sample results for defective pricing requires high confidence levels and low precision. To achieve such results, the sample may have to be expanded even more than once after evaluation.

d. Address offsets in accordance with 14-118.

(1) Offsets the auditor finds during the audit of contracts awarded before February 15, 1987 are considered as part of the normal course of audit sampling.

(2) Offsets the auditor finds during the audit of contracts awarded on or after February 15, 1987 must be certified prior to considering them in the sampling process. The auditor will make a reasonable attempt to obtain certification of possible offsets prior to evaluating and projecting sample results (see 14-118 b.).

(3) If the contractor will not certify to offsets identified during our audit of sampled items, take the following steps:

(a) Evaluate the sample, excluding the effect of any offsets the auditor discovers, to assess the confidence level and precision and expand the sample as necessary to achieve the desired confidence level and precision. If certification of offsets is likely, the auditor should also

evaluate the sample including the offsets, and notify the PCO of the effect of the offsets on the sample.

(b) Project the amount excluding any uncertified offsets from the sample findings. Use this projection for the amount of the recommended price adjustment to be presented in the audit report.

(c) Use the guidance in 14-118b. to report potential offsets that the contractor would not certify.

14-120.6 Obtaining Third Party Confirmations

Obtain third party confirmations as appropriate when performing postaward audits. Confirmation of initial contract dates and price quotes to prime or higher-tier subcontractors is a valid audit step in conducting defective pricing audits. For instance, confirming purchase orders issued within six months after certification at a price significantly lower than that certified to may disclose existence of defective pricing. Vendor confirmations will also help determine if the prime or higher-tier subcontractors were aware of reduced prices before certification. Normally, use positive (rather than negative) confirmations. Begin with informal vendor contact and follow up with a formal confirmation letter.

14-120.7 Other Administrative Audit Considerations

a. Significant defective pricing findings, direct or indirect, may affect other contracts of the contractor. The FAO will coordinate the selection of contracts for audit in addition to the current FAO program plan with the regional office if it is likely to involve a major increase in the programmed workload level for postaward audits.

b. Do not issue a DCAA Form 1 instead of an audit report for apparent defective pricing findings on a cost-type contract.

c. During a postaward audit, request any necessary technical advice and assistance from the ACO or PCO as appropriate.

d. Determine whether defective pricing findings suggest estimating system deficiencies. Unless the defective pricing was caused by a breakdown in internal controls, the problem usually relates to an estimating system deficiency. Promptly report those deficiencies using the flash reporting procedures outlined in 9-310.

14-121 Findings and Conditions Requiring Further Pursuit as Potential Cases of Fraud (Postaward Audits)

During postaward audits of cost or pricing data, be constantly alert to identify any condition which might suggest wrongdoing against the Government. Section 14-121.2 provides examples found during defective pricing audits. When finding any of these or similar conditions, refer them to the responsible investigative organization following the procedures in 4-702.

14-121.1 Statutory Provisions

a. Defective pricing may result in criminal acts under two statutory sections: 18 U.S.C. 1001 False Statements and 18 U.S.C. 287 False Claims. It may also be subject to civil penalties under 31 U.S.C. 3729, the civil False Claims Act.A false statement results when a contractor willfully makes a statement knowing that it contains false information. Certification by use of the Certificate of Current Cost or Pricing Data is an example of a statement subject to 18 U.S.C. 1001. No filing of a claim is required.

b. A violation of 18 U.S.C. 287 occurs when a contractor willfully submits a claim for money or property knowing that the claim is false, fictitious, or fraudulent. Thus, submitting an invoice on a contract that is defectively priced can be a violation.

c. A violation of the civil False Claims Act, 31 U.S.C. 3729-3733, occurs when a contractor or subcontractor knowingly presents, or causes to be presented to the Government, a false or fraudulent claim for payment or approval. "Knowingly" is defined in the statute as either:

(1) has actual knowledge,
(2) acts in deliberate ignorance of the truth or falsity of the information, or
(3) acts in reckless disregard of the truth or falsity of the information.

Unlike the criminal statutes, the civil statute provides that "...no proof of specific intent to defraud is required." Civil penalties include damages of 2 to 3 times the amount of damages sustained by the Government, plus $5,000 to $10,000 for each voucher submitted based on the defective pricing.

14-121.2 Examples of Conditions Warranting Consideration of a Fraud Referral

The following are examples of conditions found during defective pricing audits which warrant additional evaluation to determine if there is a reasonable basis for suspecting fraud.

a. High incidence of persistent defective pricing.
b. Repeated defective pricing involving similar patterns or conditions.
c. Continued failure to correct known system deficiencies.
d. Consistent failure to update cost or pricing data with knowledge that past activity showed that prices have decreased.
e. Undisclosed specific knowledge regarding significant cost issues that will reduce proposal cost. Two examples are a revision in the price of a major subcontract and settlement of union negotiations resulting in lower increases in labor rates.
f. Denial by responsible contractor employees of the existence of historical records that are later found.
g. Repeated use of unqualified personnel to develop cost or pricing data used in the estimating process.
h. Indications of falsification or alteration of supporting data.
i. Distortion of the overhead accounts or base information by transferring charges or accounts that have a material impact on Government contracts.
j. Continued failure to make complete disclosure to the Government of data known to responsible contractor personnel.
k. Continued prolonged delay in release of data to the Government to prevent possible price reductions.
l. Employing people known to have previously committed fraud against the Government.

14-122 Discussing Audit Findings

The auditor must coordinate and communicate with contracting officers and prime contract auditors on a regular basis to enable the Government to achieve timely and maximum resolution of defective pricing findings. The accomplishment of the DCAA defective pricing program (in terms of completing planned audits, supporting audit findings, and helping contracting officers achieve price reductions) requires a DCAA commitment to coordination and communication with Government personnel. Use the FLA to assist as necessary.

a. When apparent defective pricing is found, and the materiality threshold provided in 14-120.1 has been met, thoroughly discuss these findings with the contracting officer. Do this during the course of the audit to ensure mutual understanding of the facts (e.g., confirm reliance on and disclosure of cost or pricing data), resolve differences in method of computation, and present a unified position to the contractor. Significant factual issues should be confirmed with the PCO as early as possible to avoid wasted effort and incorrect conclusions. In addition, request the contracting officer to confirm in writing that the ap-

parent defective data was not disclosed to either the contracting officer or his/her representative, that neither the contracting officer nor his/her representative had actual knowledge of the data, and that the contracting officer relied on the inaccurate data. A copy of a pro forma memorandum to the contracting officer which should be tailored to each specific circumstance is available on DCAA's Intranet and APPS as Format for Informing the CO of Preliminary Postaward Audit Findings and Requesting CO Reaction. At the conclusion of the audit, auditors should provide the PCO (and the ACO if the finding is related to indirect rates) with the draft report exhibit(s) and explanatory notes on the audit position, along with copies of disputed documents and other significant audit evidence, to obtain his or her comments on the factual matters involved. Coordination does not require that the auditor provide a complete draft report to the PCO or obtain PCO approval before report issuance. A copy of a pro forma memorandum to the Contracting Officer which should be tailored to each specific circumstance is available on DCAA's Intranet and APPS as Format for Providing the CO with the Draft Report Exhibits and Explanatory Notes. The auditor will also provide a copy of any draft report information provided to the PCO to the onsite FLA (refer to the FLA Locator on the DCAA Intranet site). On subcontracts, the subcontract auditor should have the prime auditor contact the PCO to determine whether the PCO wants to review the draft subcontract findings. If the PCO wants to review the draft subcontract findings, the subcontract auditor will forward the draft findings to the PCO. If the PCO doesn't want to review the draft subcontract findings, the subcontract auditor will prepare the report and forward it to the prime auditor.

b. Discuss pertinent factual matters with the contractor throughout and at the conclusion of the audit as suggested by 4-303.1 and 4-304.3. Draft copies of the report exhibits and explanatory notes, along with copies of disputed documents and other significant audit evidence should be provided to the contractor. However, do not give the contractor any Government documents, including Price Negotiation Memorandums (PNMs) or portions of PNMs, without permission from the cognizant PCO. Refer to and comply with 4-702.4 if there is suspected fraud or unlawful activity. Generally, the contractor's responses to audit findings and the auditor's comments on those responses should be included in the audit report in order to minimize delays in resolution. The auditor should obtain the contractor's responses to audit findings as they are developed or presented at the exit conference and carefully consider the responses when calculating the final recommended price adjustment. If the contractor refuses to provide a response to the audit findings, the auditor should request the assistance of the PCO. Normally, no more than 30 days (after the exit conference) should be allowed for receipt of contractor comments.

c. If the PCO provides information which does not appear in the PNM or clarifies the PNM content regarding the cost or pricing data relied on, written confirmation should be obtained for purposes of working paper documentation. Copies of data and written confirmation should also be obtained when PCOs confirm receipt of cost or pricing data not otherwise documented in the PNM or the contractor's Certificate of Current Cost or Pricing Data. If PCOs are unwilling to provide written confirmation, the FAO should confirm its understanding of the PCO's orally provided information in writing, noting that the information will be relied on in the final audit position unless notified to the contrary in 10 days. The assistance of the FLA may also be sought if the circumstances (such as materiality, uncertainty of PCO data, and complexity) warrant it.

14-123 Reporting Results of Audit (Postaward)

a. An audit report is required for all (positive and negative) postaward audits. Prepare and distribute postaward audit reports using the guidance in 10-600. See 14-118 for a discussion of the proper treatment of offsets.

b. Each audit report with a recommended price adjustment must specifically list the five points for establishing defective pricing in the notes to the report exhibit and discuss how each point has been met (14-102b and the defective pricing standard audit program). Highlights to be addressed in discussing the points are outlined in 10-606.5c.

c. Furnish copies to the responsible Plant Representative/ACO. Distribute additional copies as shown in 10-6S1. The working papers file will contain a summary describing audit work performed, the basis for the audit conclusion, and the rationale for any reduction in the audit scope. (For example, if reporting negative findings after auditing only a bill of materials, the summary would explain why the auditor did not audit other cost elements.) The summary will also reflect supervisory review and endorsement of the audit conclusion.

14-124 Charging Interest When Defective Pricing is Found

a. Section 952 of the 1987 Defense Authorization Act amended 10 U.S.C. 2306a to allow the Government to recover interest on overpayments to contractors resulting from defective cost or pricing data on DoD contracts or modifications dated after November 7, 1985. In addition, these contracts are subject to a penalty payment equal to the overpayment if prior to price agreement the contractor knew the data was defective. FAR extended the interest provision to all Government agencies for contracts or modifications entered into on or after January 22, 1991. FAR extended the penalty provision to all Government agencies for contracts or modifications entered into on or after December 5, 1994 (FAR 15.407-1(b)(7). Reimbursements by the contractor for defective pricing must include interest computed from the date of overpayment to the date of repayment. Interest rates are the same as the taxpayer underpayment rates which are prescribed by the Secretary of the Treasury under Section 6621 of the 1986 Internal Revenue Code (see 14-125 below).

b. Interest does not accrue until delivery payments are made for supplies and services accepted by the Government, or in the case of subcontracts, accepted by the prime contractor (see paragraph c.(1) below). Overpayments do not result from "contract financing payments" as defined at FAR 32.001. Interest does not apply to contract financing payments which include advance payments, interim payments on cost-type contracts, and progress payments other than those made on fixed-price, architect-engineering contracts. Interest also does not apply when there is no overpayment, for example when costs are disallowed or not recognized under cost-type or flexibly priced prime contracts (see 14-119.4).

c. To assist the contracting officer in carrying out the responsibility for collecting interest on overpayments resulting from defective pricing, applicable reports (see a. above) at the prime level will include the statement given at 10-606.5e as part of the "Results of Audit" portion of the report. Subcontract audit reports will include the statement given at 10-606.5f . If it is determined that interest is applicable (see a. above), the auditor should contact the contracting officer to determine if the contracting officer wants the details of the interest calculations included in the audit report. If so, an exhibit similar to Figure 14-1-1 will be added to the report. The exhibit should be prepared using the Excel spreadsheet (DPInter.xls) available on DCAA's Intranet. In any case, offer to provide assistance to the contracting officer in calculating interest during negotiation of the price adjustment when a more accurate calculation can be done. In developing the information for the exhibit, use the following method for both prime and subcontract defective pricing findings.

(1) Information developed for the exhibit will be based on the premise that interest on defective pricing begins to accrue whenever some part of delivery payment to a contractor under an FFP/FPI contract includes the defective-related amount (price). For cost type contracts, interest will be computed on any fee payments, made to the contractor, if the fee was overstated based on defective cost or pricing data. A public voucher payment of costs to a prime which includes prices or fees paid on a defectively priced subcontract is the triggering event for subcontract interest computation. Likewise, a progress payment of costs to a prime which includes payments for deliveries on a defectively priced subcontract is the triggering event for subcontract interest computation.

(2) Once the Excel spreadsheet, dpinter.xls, is downloaded from the DCAA Intranet, the auditor need only input data on the Summary worksheet. The auditor is required to input the contract price, recommended price adjustment, expected repayment date, and

dates and amounts of each delivery payment. The model will automatically calculate the interest base (the defective portion of each delivery payment) and interest due. The spreadsheet also provides the details of the interest calculation associated with each delivery payment on a separate worksheet. The spreadsheet will compute interest for up to 15 delivery payments. If there are more than 15 delivery payments, the auditor should make additional copies of the spreadsheet, input the additional payments, and add the calculated interest together from all the summary spreadsheets to determine the total interest. If there is an unusually large number of payments, it is recommended that the payments be combined by month, quarter, or year, as appropriate. If the payments are combined, the auditor should establish a midpoint payment date, which is the date when 50 percent of the total value of the items delivered in each period is reached. The midpoint date and the total amount paid in each period are then input into the spreadsheet. Additional detailed instructions are included in the spreadsheet in the worksheet titled, "About This File."

14-125 Interest Rates – Defective Pricing

The Treasury rates in effect since July 1, 1985 are as follows:

1985	July-December	11
1986	January-June	10
	July-December	9
1987	January-March	9
	April-June	9
	July-September	9
	October-December	10
1988	January-March	11
	April-June	10
	July-September	10
	October-December	11
1989	January-March	11
	April-June	12
	July-September	12
	October-December	11
1990	January-March	11
	April-June	11
	July-September	11
	October-December	11
1991	January-March	11
	April-June	10
	July-September	10
	October-December	10
1992	January-March	9
	April-June	8
	July-September	8
	October-December	7

1993	January-March	7
	April-June	7
	July-September	7
	October-December	7
1994	January-March	7
	April-June	7
	July-September	8
	October-December	9
1995	January-March	9
	April-June	10
	July-September	9
	October-December	9
1996	January-March	9
	April-June	8
	July-September	9
	October-December	9
1997	January-March	9
	April-June	9
	July-September	9
	October-December	9
1998	January-March	9
	April-June	8
	July-September	8
	October-December	8
1999	January-March	7
	April-June	8
	July-September	8
	October-December	8
2000	January-March	8
	April-June	9
	July-September	9
	October-December	9
2001	January-March	9
	April-June	8
	July-September	7
	October-December	7
2002	January-March	6
	April-June	6
	July-September	6
	October-December	6
2003	January-March	5

	April-June	5
	July-September	5
	October-December	4
2004	January-March	4
	April-June	5
	July-September	4
	October-December	5
2005	January-March	5
	April-June	6
	July–September	6
	October–December	7
2006	January-March	7
	April-June	7
	July-September	8
	October-December	8
2007	January-March	8
	April-June	8
	July-September	8
	October-December	8
2008	January-March	7
	April-June	6
	July-September	5
	October-December	6
2009	January-March	5
	April-June	4
	July-September	4
	October-December	4
2010	January-March	4
	April-June	4
	July-September	4
	October-December	4
2011	January-March	3

14-126 Resolution of Audit Findings

a. The auditor must continue to coordinate and communicate with the contracting officer after postaward audit reports are issued in order to enable the Government to achieve a timely and favorable resolution either by negotiation or litigation of the defective pricing findings. During periodic discussions with the contracting officer, the auditor should always determine the status of open defective pricing issues. In addition, the auditor should continuously offer assistance such as commenting on data received by the contracting officer after the audit report was issued and offering to attend negotiation conferences. When assistance is requested by the contracting officer, it should be treated as a customer requested assignment.

b. If the receipt of additional information or audit effort results in a revised audit position, issue a supplemental audit report (see 10-214) However, if the additional information or audit effort does not result in a change to the audit position, write a memorandum to the PCO describing the scope of additional audit effort and why there is no change in the audit position.

c. If the contracting officer informally advises the auditor of a disagreement with the audit position, every effort should be made to resolve the differences before a final determination is made. If the difference cannot be resolved, elevate the matter to management for resolution. In some cases it may also be necessary to obtain legal advice.

Figure 14-1-1 (Ref. 14-124)
Example of an Exhibit Used to Determine the Base and Simple Interest Computation on a Firm-Fixed-Price Contract Action Required Under Section 952 of the FY 1987 Authorization Act and FAR 15.407-1(b)(7)

Payment	Payment Date	Total Value of Items Delivered	Pro-Rata Base Allocation Factor	Allocated Interest Base	Interest
	(Note 1)		(Note 2)	(Note 3)	
1	10/16/95	$ 500,000	5.0%	$ 25,000	$ 5,110
2	11/20/95	1,000,000	5.0%	50,000	9,789
3	12/22/95	900,000	5.0%	45,000	8,455
4	1/23/96	700,000	5.0%	35,000	6,300
5	2/13/96	1,400,000	5.0%	70,000	12,238
6	3/8/96	500,000	5.0%	25,000	4,224
Total		$5,000,000		$250,000	$46,116
		(Note 4)			(Note 5)

Explanatory Notes:

1. Payment Date

This date represents the actual date of payment to the contractor. (Note: If payments have been combined, the note should state that this is the period midpoint date which represents the date on which 50 percent of the total value of items delivered in each period is reached.)

2. Pro-Rata Base Allocation Factor

Computation of the Pro-Rata Base Allocation Factor is as follows:

Total Contract Price	(A)	$5,000,000
Recommended Price Adjustment	(B)	$250,000
Pro-Rata Base Allocation Factor	(B/A)	5%

3. Allocated Interest Base

Simple interest shall be applied to the allocated interest base for each payment date at the applicable rates prescribed by the Secretary of the Treasury under Section 6621 of the Internal Revenue Code of 1986. Treasury rates are issued quarterly, and for convenience of computation, the quarterly interest periods may be combined if the interest rate does not change.

4. Total Value of Items Delivered

Total dollar amount will differ from contract price if performance has not been completed. (Note: for cost-type actions, the value of this column will relate to the total amount of defective fee and/or the amount of the subcontract defect.)

5. Simple Interest Calculation

The repayment date in this example is February 1, 1998; simple interest on each payment is computed up to (but not including) the repayment date. However, if the contractor and contracting officer have not agreed on a repayment date, the contracting officer may also request that the auditor recompute the interest once a repayment date has been established.

14-200 Section 2 --- Audit of Progress Payments

14-201 Introduction

a. Interim contract financing is available on certain fixed price contracts during the predelivery period as a percentage of allowable costs adjusted as discussed in this section. Financing is interest-free, but the amount is subject to limitations specified in the contract.

b. Interim financing helps stabilize the contractor's cash flow and reduces the need for outside financing. The reduced financial burden increases the number of qualified bidders and can result in a better price to the Government.

c. The risk to the Government of interim financing is the time value of money if the contractor is provided premature payments or is overpaid. The Government is also at risk if the contractor does not deliver or delivers goods and services that do not meet contractual specifications. The DCAA/CAO evaluation process must monitor and limit these risks.

d. This section provides guidance for performing audits of contractor progress payment requests based on cost. The DCAA Intranet and the APPS include a standard audit program for performing these audits (entitled APPAYCOS). Since progress payment requests based on percentage of completion are infrequently encountered, they are not addressed in this section. However, the DCAA Intranet and the APPS include APPAYPCT, a standard audit program for auditing these requests.

14-202 FAR/DFARS Provisions

14-202.1 Customary or Unusual

a. Progress payments are considered customary (see FAR 32.5/DFARS 232.5) when the contract includes the progress payment clause (FAR 52.232-16) establishing the uniform rate for calculating progress payments.

b Any other progress payments are considered unusual, and may be used only in exceptional cases when authorized in accordance with FAR 32.501-2/DFARS 232.501-2.

c. The uniform rates for customary progress payments for foreign military sales, small businesses, or small disadvantaged businesses are shown in DFARS 232.501-1. The rates for large business are based on the contract award date and are listed below.

Contract Award Date	Uniform Rate
Prior to May 1, 1985	90%
May 1, 1985 through October 17, 1986	80%
October 19, 1986 through September 30, 1988	75%
October 1, 1988 through June 30, 1991	80%
July 1, 1991 through November 10, 1993	85%
On or after November 11, 1993	75%
On or after October 1, 2001	80%

d. The contractor can request progress payments as work progresses, but not more frequently than monthly. The amount of each progress payment is computed by (i) applying the rate stipulated in the progress payment clause of the contract (DFARS 252.232-7004) to the cumulative total allowable costs under the contract as shown in the contractor's books and records (see 14-202.4); (ii) plus financing payments to subcontractors or other divisions of the contractor's corporate office (see 14-205h); (iii) less the sum of all previ-

ous progress payments. The contracting officer is responsible for approving progress payment requests.

e. The contractor is responsible for maintaining reliable accounting and billing systems with adequate internal controls for the proper administration of progress payments. If the systems or controls are deemed inadequate, the auditor should recommend that the contracting officer suspend progress payments (or suspend the portion of progress payments associated with the unacceptable portion of the contractor's systems) until the necessary corrections have been made.

f. As contract items are delivered and accepted, progress payment amounts are recovered (liquidated) by reducing payments to the contractor for completed contract items. The liquidated amount is computed by applying the liquidation rate in the progress payment clause to the contract price of items delivered and accepted (FAR 32.503-8 and 32.503-9).

(1) At the beginning of a contract, the liquidation rate is generally the same as the progress payment rate.

(2) As the contract progresses, the contracting officer may adjust the liquidation rate (FAR 32.503-9) to permit the contractor to retain the earned profit element of the contract price for completed items in the liquidation process.

14-202.2 Approval of Progress Payment Requests

The ACO will normally approve progress payment requests as a matter of course, if recent audit experience (within the last 12 months) shows that the contractor is:

(1) reliable, competent, and capable of satisfactory performance;

(2) possesses adequate accounting and billing system controls; and

(3) in sound financial condition.

As long as these favorable conditions exist, the ACO will sample progress payment requests for audit. If the contractor has poor or inadequate accounting and billing system controls, or there is reason to believe that the contract will involve a loss, the ACO may ask for more frequent audits of the contractor's progress payment requests (FAR 32.503-4). Acknowledge these requests in accordance with 4-103.

14-202.3 Contract Price and Rate Limitations

a. Contract price is a significant factor for determining the limitations on progress payments (FAR 32.501-3). The contract price for progress payment purposes is as follows:

(1) Firm fixed price contracts --- the current contract price including any unpriced modifications with obligated funds.

(2) Redeterminable or Economic Price Adjustment contracts --- the initial contract price until modified.

(3) Fixed Price Incentive --- target price plus unpriced modifications with obligated funds. However, in certain circumstances, the ACO may provisionally increase the price to the ceiling or maximum price.

b. Contract price is limited to the funds obligated under the contract, as amended. For progress payments, the contract price should exclude any part of the contract where costs are being reimbursed by other means (e.g., cost reimbursable line items).

c. Multiple Order Contracts. Generally, progress payments made under multiple order contracts should be administered under each individual order as if the order constituted a separate contract. However, if the contractor requests it and the contracting officer approves, the administration of progress payments may be based on the overall contract or agreement. Under this method, the contractor shall include a supporting schedule to identify the costs applicable to each order [FAR 32.503-5(c)].

d. Unpriced Contract Actions. The contracting officer may include unpriced contract actions as part of the contract price for purposes of computing progress payments (FAR 32.501-3). The amount for unpriced contract actions must not exceed the funds obligated for the unpriced contract action or the estimated or target prices.

e. Undefinitized Contract Actions. Effective August 24, 1987, the progress payment rate applicable to the work accomplished on undefinitized contract actions is limited to 80 percent. A higher rate is not authorized under unusual or flexible progress payments for undefinitized actions [see FAR 32.501-1(d)].

(1) Additional Limits. In an effort to encourage definitization of contract actions and to protect the Government's interests, DFARS 217.7400 limits DoD expenditures on undefinitized contract actions to 50 percent of the not-to-exceed price without a qualifying proposal and 75 percent of the not-to-exceed price without a definitized contract. This limitation will be applied prior to the 80 percent limitation covered by FAR 32.501-1(d), or any other limitation of payment that may be imposed by the contract.

(2) Exceptions. For DoD contracts, DFARS 217.7402 exempts undefinitized actions from these limits if they represent purchases at or below the simplified acquisition threshold, or purchases involving special access programs, foreign military sales, or congressionally mandated long-lead procurement contracts. DFARS 217.7404-5 exempts purchases of initial spares.

(3) Price Ceiling Clause. This clause (DFARS 252.217-7027) establishes a not to exceed ceiling amount which the undefinitized contract action (UCA) cannot exceed upon definitization.

(4) Limitation of Government Liability Clause. This clause (FAR 52.216-24) establishes a ceiling over which the contractor is not authorized to expend or incur obligations. Generally the dollar value in this clause is a percentage of the price ceiling which was established in the Price Ceiling Clause. DFARS 216.603-4 requires this clause be included in all UCAs. Together the Limitation of Government Liability Clause and the Price Ceiling Clause establishes the dollar value of the limitation and limits the amount the contractor can bill on progress payments. If the clauses are in conflict with the DFARS, the contract provisions would take precedence, but the contracting officer should be notified. If a progress payment request includes both definitized and undefinitized work, the cost must be broken out separately. Computations of the limitation of payments must be made for each.

14-202.4 Costs to be included in Progress Payment Requests

The following costs may be included in progress payment requests, under the conditions noted:

a. Incurred Costs. Total costs incurred under the contract whether or not actually paid, plus financing payments to subcontractors.

b. Financing and Other Payments. The amount of financing and other payments for costs of supplies and services purchased by the contractor directly for the contract may be included only if the costs:

(1) are paid in accordance with the terms and conditions of the subcontract or invoice and

(2) ordinarily will be paid within 30 days of the contractor’s payment request to the Government.

c. Direct Material. Title to materials, as defined in the progress payment clause, is vested in the Government when the material is properly chargeable to the contract. Accordingly, business concerns must have clear title before charging materials to the contract.

d. Accrued costs of contractor contributions under employee pension, profit sharing, stock ownership plans, and other post-retirement benefit (PRB) plans shall be excluded until actually paid, unless:

(1) the contractor's practice is to contribute to the plans quarterly or more frequently and

(2) the contribution does not remain unpaid 30 days after the end of the applicable quarter (any contributions remaining unpaid shall be excluded from the contractor's total costs for progress payments until paid).

e. Cost of money that would be allowable under FAR 31.205-10 shall be deemed an incurred cost for progress payment purposes.

f. Total costs for progress payment purposes shall not include any costs that are not reasonable, allocable, and allowable to the contract, or are inconsistent with generally accepted accounting principles.

14-203 Audit Responsibility - Progress Payments

a. The purpose of a progress payment audit is to:

(1) verify the amounts included on the progress payment form to the contractor's accounting books and records,

(2) evaluate the propriety of the progress payment request in accordance with the provisions of the contract, and

(3) determine whether undue financial risk to the Government will result if the request is granted.

b. Audits will usually be made upon the request of the contracting officer; however, auditors should coordinate with the contracting officer to initiate an audit whenever they have a valid reason to believe that one is necessary to protect the interest of the Government. Examples of conditions requiring coordination are:

(1) unsatisfactory financial conditions,

(2) weak or inadequate accounting and/or billing system controls,

(3) evidence of inadequate cost representations, or

(4) indications of contract losses (FAR 32.503-6(g)). To ensure adequate audit coverage, it is important to identify contractors and contracts, early in the audit planning process, where these conditions exist or where there is a high risk they will develop. The assessment of the contractor's accounting and billing system internal controls will determine areas of risk to be pursued during progress payment audits and the frequency of these audits. At major contractors this assessment is documented on the Internal Control Audit Planning Summary sheets. This assessment should be coordinated at least annually with the ACO.

14-204 Audit Scope - Progress Payments

a. The scope of a progress payment audit depends on our experience with the contractor's operations; the reliance that can be placed on the contractor's accounting and billing systems internal controls, cost representations, estimate to complete the contract, and financial condition; and whether current billing rates have been established.

b. At major contractors, accounting and billing system audits are performed on a cyclical basis and serve as the basis for determining the extent of testing needed on each individual progress payment request. The auditor should review the Internal Control Audit Planning Summary sheets for the accounting and billing systems to determine the risk associated with the systems and adjust the scope of audit accordingly. The auditor should also review prior financial condition risk assessments or financial capability audits for indicators of financial distress. At nonmajor contractors, the preaward accounting system audit and the annual updates provide the basis for determining the scope of audit needed on each request. The auditor should review the internal control questionnaire and other related permanent file data, including prior financial condition risk assessments or financial capability audits, to determine the scope of audit needed. If, during the preceding 12 months, a risk assessment or financial audit has not been performed, at major or nonmajor contractors, the auditor should perform a risk assessment under DMIS activity code 17600 and determine if the contractor's financial condition is sufficient to support future contract performance. Refer to 14-300 for guidance. As with any audit, the audit scope should also consider any specific concerns raised by the contracting officer.

c. In those cases where the auditor can rely on the contractor's systems and cost representations, and the contractor is in sound financial condition; then the risk would be con-

sidered low. The auditor may limit the audit to verification of billed amounts to amounts recorded on the contractor's accounting books and records, an evaluation of the contractor's compliance with contract provisions, and periodic verification of the contractor's estimated additional costs to complete. Often, an evaluation of the contractor's procedures for reconciling billing system data and records to the cost accounting records and a test of selected reconciliations will satisfy the verification objectives for claimed allowable costs.

d. In those cases where the contractor's accounting and billing system internal controls are inadequate or the contractor's financial condition is unstable, expanded testing of the progress payment request is often needed. However, our emphasis should be on the system rather than on each progress payment request. At those contractors with outstanding deficiencies, the auditor should recommend actions to the ACO to encourage the contractor to correct the deficiencies (e.g., suspension of costs, disapproval of system). When the contractor corrects the deficiency or changes the accounting or billing systems, the auditor should give a high priority to the audit of the system change as a basis for placing reliance on the system. The next section (14-205) discusses special areas for consideration when planning an audit of a progress payment request.

14-205 Areas for Audit Consideration

During a progress payment audit, the auditor should, at a minimum, verify amounts on the contractor's certified SF 1443 to the contractor's accounting books and records. Often, an evaluation of the contractor's procedures for reconciling billing system data to the accounting records and a test of selected reconciliations will satisfy the verification objectives for claimed allowable costs. Based on assessed audit risk and prior audit experience, the auditor should consider other issues such as indications of financial distress (untimely payments to subcontractors and/or vendor demands for cash-on-delivery), ETC/EAC amounts, the loss ratio, fair value of undelivered work, and computation of liquidation amounts, as well as issues identified by the ACO or other team members. The following paragraphs address the key amounts on the SF 1443 and related considerations. A copy of the SF 1443 is available on the Acquisition Knowledge Sharing System (AKSS) web site within DCAA Document DCAAP 7641.90, Figure 5-4-1.

a. Contract Price (Item 5) should be verified to the most current contract modification (14-202.3). This amount is important because it is used to establish the limitation of payments on future deliveries (Item 21.b) and to compute any applicable loss ratio. The auditor should determine if any part of the contract is being financed by other means (reimbursement on public vouchers or direct payment by the Government) and verify that these amounts are excluded. For example, award fees, incentive fees and value engineering change proposals (VECPs) are normally billed on separate invoices or public vouchers. These amounts should not be included in the contract price for progress payment purposes.

b. If the liquidation rate (Item 6.b) is less than the progress payment rate (Item 6.a), the auditor should coordinate with the ACO and determine the estimated profit used to establish the alternate liquidation rate. The auditor should verify that the current profit being realized on the contract (contract price less current EAC) is at least equal to or exceeds estimated profit used to establish the alternate liquidation rate. Otherwise, the contractor may retain excess profit on delivered and accepted contract items. The auditor in this case should recommend to the ACO that the alternate liquidation rate be changed to reflect the current profit estimate.

c. Paid Costs Eligible Under Progress Payment Clause (Item 9). Federal Acquisition Circular 97-16 dated 27 March 2000 revised the FAR regarding the eligibility of recorded purchased material and service cost which can be claimed for reimbursement on progress payment requests. All contractors, regardless of size are allowed to include in progress payment requests the purchased material and service costs which have been incurred but not actually paid, provided the payment will be made in accordance with the terms and conditions of a subcontract or invoice and will ordinarily be paid within 30 days of the contractor's payment request to the Government. SF 1443 has not been revised to accom-

modate the revised rules regarding purchased material and service cost. Accordingly, large contractors should not complete this item and should follow the same instructions to complete SF 1443 as provided for small contractors. All contractors should complete item 10.

d. Incurred Cost Eligible Under Progress Payment Clause (Item 10). This item includes total incurred costs, less advance payments, down payments, deposits, or progress payments, performance-based payments and commercial financing payments made to subcontractors, suppliers, or others. The auditor should also verify that any subcontract costs included here are for items delivered and accepted, which resulted in the liquidation of subcontractor progress payments, performance–based payments and/or commercial financing payments at the date of the SF 1443. The auditor should verify that:

(1) All direct costs billed reconcile to the contractor's accounting books and records, as appropriate for the reliance that is placed on the contractor's systems and controls. The auditor should use the contractor's reconciliations to the extent possible to accomplish these verifications. Also, direct material costs should be evaluated to ensure that the Government has clear title in accordance with FAR 52.232-16.

(2) Indirect costs are based on approved billing rates or available forward pricing rates, or consider the need to audit the billing rates in conjunction with the progress payment audit.

(3) Obligations such as pension, profit sharing, and employee stock ownership plan contributions are paid within 30 days after the close of the quarter to which costs are assignable.

(4) Purchased material and service costs are paid in accordance with the terms and conditions of a subcontract or invoice and ordinarily paid within 30 days of the contractor’s payment request to the Government.

e. Total Costs Incurred to Date (Item 12.a). This item includes all prime contractor incurred costs plus unliquidated subcontractor progress payments, performance-based payments and commercial financing payments (amounts paid and payable) listed on Items 14.c and 14.d. The auditor should verify any additional incurred costs on Item 12.a that were not identified on Item 10 to the contractor's accounting books and records.

f. Estimated Additional Cost to Complete (Item 12.b). Instructions on the SF 1443 require the contractor to make technical and financial estimates to complete (ETC) every six months. The auditor should verify contractor compliance with this requirement and determine that the ETC is supported with current, accurate, and complete information. If the ETC is understated, overpayment of progress payments can occur. An accurate ETC can help identify cost overrun areas which may be corrected and prevent possible default on the contract.

(1) Some contractors develop ETCs by preparing an estimate at completion (EAC) and subtracting the total costs incurred to date. EACs are best developed through rigorous methodologies such as those required under management control systems that comply with the Earned Value Management System (EVMS) guidelines specified in DoDI 5000.2 (see 11-200).

(a) The auditor should contact the Government contract administration office and program office officials to determine if they are aware of any cost or schedule problems that affect the EAC.

(b) The EAC should be reconciled with other required reports such as quarterly limitation on payments statements (11-100) and Contract Performance Reports (CPRs) (previously Cost Performance Reports) or Cost/Schedule Status Reports (C/SSR) (see 11-203.4d(2)).

(c) Subcontractor costs included in the ETC should be limited to those amounts the prime contractor will be required to pay. This amount is the difference between the amounts that are, or are estimated to be, legal obligations to pay and the amounts already included in Item 12.a. However, assist audits may be necessary to establish the validity of the ETC submitted by the subcontractor to the prime contractor (see 14-205i).

(d) The auditor should compare the ratio of the EAC to the contract price (indicated profit rate) with the ratio of the costs of items delivered to the contract price of those items

(experienced profit rate). These ratios should be similar. The auditor should also compare the indicated profit rate with the negotiated profit rate to reveal any variance from initial estimates. Any significant variance should be coordinated with the ACO. See 14-205c.

(2) The contractor's ETC/EAC should be evaluated for reasonableness using the following methodology.

(a) When CPR or C/SSR data are available, the auditor can evaluate this data to identify forecasted or actual overruns and determine if this information is consistently reflected in the EAC. Such relationships are described in the APPAYCOS audit program. Discrepancies between CPR and C/SSR data and the EAC should be discussed with the program office and the contractor.

(b) The auditor should compare the contractor's EAC's for contract billing purposes with those used for financial reporting purposes. Contractors sometimes report different EACs because of different risk assumptions and profit expectations. The contractor should be able to reconcile any material differences. The auditor should also consider comparing the EAC with other financial and management reports which may be available and show total estimated costs to complete the contract.

(c) The auditor should evaluate the contractor's detailed ETC/EAC using the guidance in 9-300 and ensure that the contractor used appropriate rates and factors and was consistent in its estimating practices.

(d) Government technical evaluations and/or assist audits should be requested if considered necessary (see D-300). When the technical review is based on an estimate of the physical completion of the contract, there must be close coordination on the timing of the estimate or the auditor will have problems using the technical results to determine an estimate to complete. The estimate of the physical completion of the contract by the technical specialist needs to be for the same period covered by the progress payment request. The auditor should coordinate with the technical specialist and document the methodology used to evaluate the ETC or the EAC in the audit working papers.

g. The Loss Ratio Adjustment discussed in FAR 32.503-6(g) is intended to protect the Government's interest when a contract is in a loss condition, that is, when the total costs incurred to date and the ETC (Items 12.a and 12.b) exceed the contract price (Item 5).

(1) Using the Loss Ratio Factor, (Contract Price divided by Total Estimated Contract Costs), the auditor should recommend that the ACO adjust the amount on Item 11 --- Total Costs Eligible for Progress Payment to exclude the elements of loss from consideration for the instant and future progress payments.

(2) When appropriate, the auditor should coordinate with the ACO to apply a loss ratio and document the ETC/EAC supporting the decision. If the loss ratio is not applied timely, the Government will pay the contractor more than it should before delivery. This does not reduce the amount the Government will ultimately pay the contractor, but it will reduce the amount of interim financing at risk.

(3) Since the ACO is required to verify and apply the loss ratio factor, the auditor should advise the contractor to submit future invoices (SF 1443's) without adjusting their figures for the loss. However, the contractor may attach the loss ratio computation as a separate schedule.

(4) Audits of loss contracts should address whether the contractor is financially capable of completing the contract (FAR 32.503-5(b)(3)). Review results of current financial condition risk assessment or financial capability audit. If a financial condition risk assessment or financial capability audit has not been performed in the preceding twelve months, perform a detailed financial condition risk assessment under a separate assignment under DMIS activity code 17600. See 14-300 for guidance.

h. Subcontractor Claims. When subcontractors are entitled to progress payments, performance-based payments or commercial financing payments under FAR 32.504, the higher-tier contractor is responsible for:

- verifying subcontractor progress payment, performance-based payment and commercial financing claims and liquidations;
- approving billings for current payments; and

- ensuring that progress payments, performance-based payments, and commercial financing payments to subcontractors conform to the standards and principles prescribed in paragraph (j) of the progress payments clause (see FAR 52.232-16). The auditor should review the prime (higher-tier) contractor's audit and verification procedures to ensure the Government's interest is protected. If the contractor's analyses of subcontract progress payment, performance-based payment, and commercial financing payment requests are considered inadequate, and these costs cannot be evaluated by other techniques (other current or historical data), the auditor, after coordination with the contracting officer, should determine whether an assist audit is required.

(1) Progress Payments Paid to Subcontractors (Item 14a). Federal Acquisition Circular 97-16 dated March 27, 2000 revised the FAR and allows prime contractors that receive progress payments to be reimbursed for performance-based payments and commercial financing payments paid to their subcontractors. Accordingly, items 14a through 14e on SF 1443 should include the appropriate amounts for progress payments, performance-based payments, and commercial financing payments paid to subcontractors. The auditor should verify that:

(a) a formal written subcontract exists and that it includes either (i) progress payment terms similar to FAR 52.232-16 and the customary rate used by the Government contracting agency, (ii) performance-based payments that meet the criteria in FAR 32.1003, or (iii) commercial financing payments that meet the criteria in FAR 32.202-1;

(b) any unpaid subcontractor progress payments, performance-based payments, and/or commercial financing payments included in the prime contractor’s progress payment are paid in accordance with the terms and conditions of the subcontract or invoice and ordinarily paid within 30 days of the prime contractor’s payment request to the Government;

(c) when subcontractor payment(s) are in the form of progress payments, the subcontractor(s) have submitted proper progress payment requests in a similar SF 1443 format;

(d) the claimed amounts are not advance payments; and

(e) title to subcontractor property will be vested to the Government.

(2) Subcontract liquidations (Item 14b) is the total progress payments, performance-based payments, and commercial financing payments liquidated from subcontractors that were made for subcontract items received, accepted, and invoiced to date.

(a) The auditor should review the higher-tier contractor's records to determine the number of subcontract items actually received, accepted, and invoiced from subcontractor(s). The auditor should verify:

(i) the price per unit and the applicable liquidation rate or amount to the subcontract terms, and

(ii) that the amount claimed was computed based on the subcontract unit price and proper liquidation rate or amount to the units received from the subcontractor.

(b) The amount of liquidated subcontractor progress payments, performance-based payments, and commercial financing payments should be included in the incurred costs eligible under progress payment clause, Item 10.

(3) Subcontract Progress Billings Approved for Current Payments (Item 14.d) represents the subcontractor progress payment, performance-based, and commercial financing requests that have been approved but not paid. The auditor should verify the amount requested to the subcontractor(s) progress payment, performance-based payment, and commercial financing payment request(s) and confirm that the contractor normally pays subcontractors in accordance with the terms and conditions of the subcontract or invoice and ordinarily makes payment within 30 days of the prime contractor’s payment request to the Government.

(4) The amounts claimed for subcontractor progress payments, performance-based payments and commercial financing payments on Item 14.e are limited to the unliquidated progress payments, performance-based payments and commercial financing payments, plus, approved but unpaid subcontractor requests for progress payments, performance-based payments and commercial financing payments on Item 14.d.

(5) Progress payments made to subcontractors in loss positions should have been reduced by application of a loss-ratio factor (FAR 32.503-6(g)).

(6) The prime contract auditor should determine if the subcontract pricing action has had reported defective pricing. If this is the case, the auditor should determine that progress payments do not include liquidation of the defective subcontract costs.

i. Total Amount of Previous Progress Payments Requested (Item 18) should be verified to the contractor's accounts receivable records. Contractors should have adequate billing system internal control policies and procedures for monitoring and reconciling progress payment requests with progress payment receipts and liquidations on Government billings (refer to 14-205.j(3)). The auditor should coordinate Item 18 with the ACO's payment records and reconcile any differences.

j. The computations of limits for outstanding progress payments (Section III) are designed to minimize the Government's risk of overpayment by integrating paragraph (a)(5) of the Progress Payment clause in FAR 52.232-16 to restrict the amount of unliquidated progress payments on Item 24. This limitation is determined by comparing the costs of undelivered items to the price of those undelivered items as discussed below.

(1) Items 20.a through 20.e are intended to determine the amount of progress payments made on undelivered items and delivered items not invoiced and accepted, including allowable unliquidated progress payments to subcontractors. The key to this computation is Item 20.a --- Cost Included in Item 11 Applicable to Items Delivered, Accepted, and Invoiced. The auditor should verify the items delivered and their cost to the contractor's books and records (see 14-205.e).

(2) If the contract is in a loss condition, i.e., Items 12.a plus 12.b exceed the contract price in Item 5, the amount on Item 20.a should be limited to the contract price of delivered items (Item 21.a). The calculation for Item 20.b should use the adjusted costs resulting from the application of the Loss Ratio Factor (see 14-205.h).

(3) Items 21.a through 21.e are intended to determine the contract price of items NOT delivered, accepted, and invoiced. The key to this computation is Item 21.a --- Contract Price of Items Delivered, Accepted and Invoiced at the date of this SF 1443. The auditor should verify the number of contract items delivered and related contract unit prices on DD Forms 250 or similar contractor invoices to the contractor's accounting books, records, schedules of contract receivables and the contract terms (for contract unit prices). A reasonableness check between delivered items and incurred costs could highlight possible cost overruns that could impact future deliveries.

(a) Contractors should maintain contra accounts or receivables schedules to reflect the amount of progress payments requested (Item 18) and received (Item 23) as compared to contract price for delivered and invoiced items (Item 21.a). The difference between the contract price and the progress payment amounts would represent the receivable when the invoice is issued on delivered items.

(b) If the contractor does not maintain records containing the needed information, the auditor should advise the ACO/PCO of this deficiency and disclose the deficiency in the progress payment request audit report and a separate flash billing system deficiency audit report.

k. Total Amount Applied and to be Applied to Reduce Progress Payments (Item 23) is the cumulative amount of previous progress payments applied to reduce the contract price of contract items delivered and invoiced, by the cutoff date of this SF 1443.

(1) The auditor should verify the amount on Item 23 to the contractor's books and records [see 14-205j(3)(a) and (b)] as previously discussed with Item 21a through 21e.

(2) A common error in completing Item 23 is to multiply the contract price of delivered and accepted units (Item 21.a) by the liquidation rate (Item 6.b). This calculation does not consider changes in the liquidation rate or other adjustments over the life of the contract. The amount on Item 23 must be verified to the contractor's books and records, otherwise the amount of unliquidated progress payments on Item 24 could be overstated.

l. The Fair Value of Undelivered Work must equal or exceed the amount of unliquidated progress payments (FAR 32.503-6(f)). The contracting officer must adjust progress

payments when necessary to assure that progress payments are commensurate with the fair value of work accomplished on the contract.

(1) The fair value of undelivered work (lesser of item 20e or 21e) must equal or exceed unliquidated progress payments (Item 24). The auditor should add back the amount of the instant progress payment invoice (Item 26) to make sure that the current payment will not cause a failure.

(2) When the fair value of undelivered work is less than unliquidated progress payments, the contract is either in a loss position or has a liquidation problem and the progress payment must be adjusted to minimize the Government's risk. On loss contracts, the application of a loss ratio (14-205h) constitutes the required adjustment to minimize the Government's risk. (FAR 32.503-6(f)). When the contract is not in a loss position, the auditor should coordinate with the contracting officer to adjust the instant and future progress payments to minimize the Government's risk.

14-206 Reports

a. The audit report should be prepared in accordance with 10-1200 and addressed to the contracting officer who requested the audit. If the audit was initiated by the auditor, the report should be addressed to the Government representative responsible for audit of the contractor's requests for progress payments. In all cases when he or she is not the addressee, the ACO should be furnished a copy of the report. The content of the report will state the amount of progress payment that is recommended for acceptance and provide clear explanations for amounts not recommended for acceptance, including any qualifications required for such items as required technical analysis was not received or access to records problems.

b. When the unpaid balance on a contract is not sufficient to cover the anticipated cost of completion (i.e., loss contract), the report must express an opinion (positive assurance) on whether the contractor has adequate resources to complete the contract (see 14-205g(4)). If the contract is not in a loss position, and specific audit tests to evaluate the contractor's financial capability were not performed, current auditing standards do not permit us to provide negative assurance. Instead, the report may include a statement within the Results paragraph advising the contracting officer that we would have reported any additional matters which might have been disclosed by the omitted procedures.

c. When the audit discloses materially adverse findings, such as the contractor's financial deterioration, allocation of inventory to the contract substantially exceeding reasonable requirements, or delinquency in payment of contract costs, these matters will be explained in detail particularly as they relate to the Government's financial risk. To ensure that all available facts have been considered in the conclusions, the auditor should contact the ACO, discuss the findings, and invite the ACO to participate in the exit conference with the contractor (see 4-300). Further guidance on reporting instances of contractor financial jeopardy is in 14-300.

d. The contractor is responsible for maintaining reliable accounting and billing systems with adequate internal controls for the proper recording and segregation of costs. If the audit discloses weaknesses or inadequacies in the systems or controls and the contractor has not taken reasonable corrective action, the auditor should recommend that the contracting officer suspend progress payments for costs, including appropriate burden, associated with the unacceptable portion of the contractor's system until the necessary changes are made and verified. These inadequacies should be described in the audit report on the progress payment request and separate reports on accounting and billing system deficiencies.

e. When a progress payment has most likely already been paid, and we find the contractor has experienced a lower profit rate than the rate anticipated at the time the liquidation rate was established, we should recommend an immediate increase in the liquidation rate with appropriate adjustment being made to billings for delivered items [FAR 32.503-9(b)(1)]. Expediency may call for the reduction to be made on the next progress payment

request unless the contractor makes an immediate refund for his prior billings on delivered items. See 14-205b.

14-207 Interest – Progress Payments

While FAR 32.608-1 provides for interest charges, interest on progress payments overpayments do not begin to run until there is a demand for repayment of the excess progress payments. Further, if the overpayment is repaid within thirty days after the demand is issued, interest is not assessed. However, the auditor should be alert to the significance of interest and, as appropriate, coordinate with the contracting officer to request a voluntary refund from the contractor for interest on overpayments or premature progress payments.

14-300 Section 3 --- Contractor Financial Capability Audits and Reporting

14-301 Introduction

a. Financial capability audits are performed to determine if a contractor is financially capable of performing on Government contracts as required by FAR 9.104-1(a) and DFARS 232.072. Contractor financial difficulties may disrupt production schedules, cause inefficient use of resources, and result in contract nonperformance. These conditions may also result in monetary loss to the Government on guaranteed loans and progress payments.

b. Many financial capability audits are performed in response to requests by the contracting officer. Occasionally, DFAS will request financial capability audits on contractors requesting installment agreements on debts owed to the U.S. Government (see 14-308). However, in all audit situations, auditors should be alert to conditions which may indicate unfavorable or adverse financial conditions or other circumstances which could impede a contractor's ability to perform on Government contracts. Field audit offices will make an annual assessment of a contractor's financial condition to determine whether there is a need to perform a financial capability audit (see 14-303). These assessments may be conducted during contractor preaward and accounting system surveys (see 5-200); progress payment audits (see 14-200); or separately.

c. Early detection of contractors in financial distress allows maximum flexibility for the Government to:

(1) avoid loss of critical products or services;

(2) increase or decrease interim financing;

(3) protect Government property and inventory with subordination agreement and prompt removal of completed items;

(4) increase or decrease volume of workload to the contractor;

(5) alert the contractor of Government concerns so extraordinary actions can be taken early;

(6) develop alternative sources; and

(7) avoid financial loss.

d. Early detection of contractors in financial distress allows maximum financial flexibility for the contractor to consider extraordinary management actions such as:

(1) liquidating assets by reducing excess plant and equipment;

(2) borrowing money, expanding lines of credit or restructuring debt;

(3) reducing or delaying capital expenditures;

(4) increasing ownership equity;

(5) eliminating unprofitable product lines;

(6) eliminating or subleasing of equipment and idle space; and

(7) reducing and reorganizing the workforce.

e. The financial capability audit places emphasis on evaluating the contractor's current financial condition and trends, near-term cash flows, and ability to obtain funds outside the normal course of operations. While the evaluation of historical financial data during the financial condition risk assessment can indicate unfavorable or adverse financial conditions, the audit focus is on the contractor's ability to maintain future cash flows to sustain performance on Government contracts.

f. In considering contractor financial capability, the auditor will encounter several terms (including terms with specific legal meaning) that are commonly used by financial analysts. Some of these terms, which will be used throughout this section, are listed below.

(1) Bankruptcy. A legal recognition of the state of insolvency, initiated for the benefit of creditors with unpaid and unsecured debts. Voluntary bankruptcy involves an assignment of assets by the debtor for the benefit of the creditors, while involuntary bankruptcy is initiated by an unsecured creditor.

(2) Business Failure. An entity's inability to succeed in selling its products or services, meet its obligations, and/or earn a satisfactory rate of return. A business failure may not lead to bankruptcy because the owners may choose to terminate or sell the business.

(3) Cash Management Plan. A corporation's procedures for monitoring, analyzing, and managing its business' cash flows.

(4) Cash Sweep. The automatic transfer of cash into a centralized bank account by the entities of multi-segmented corporations to assist the parent company in the management of the cash needs of the entire corporation.

(5) Default. The failure to do something required by duty or law. The term is normally used in context of the failure to meet the conditions of a contract.

(6) Financial Capability. The prospective financial status of a contractor based on historical and forecasted financial data of the contractor.

(7) Financial Condition. The current financial status of a contractor based on historical financial data of the contractor.

(8) Financial Distress. A condition of being under financial pressure (caused by difficulty in meeting ongoing cash obligations) which may require extraordinary management actions to obtain additional funds outside the course of ordinary operations. "Extraordinary management actions" include the ability to borrow from a variety of sources, to raise equity capital, to sell and redeploy assets, and to adjust the level and the direction of operations in order to meet changing circumstances. Financial distress can be brought on by circumstances such as reduced cash flows from operations, customer payment defaults, excessive debt and related interest expense, competition in the marketplace, adverse legal actions, and changing business environment or economics.

(9) Financial Flexibility. An entity's ability to take effective actions to control amounts and timing of cash flows so it can respond to unexpected needs and opportunities.

(10) Guaranty. A legal agreement by one party to assume the debt or perform an obligation of a second party in the event of the second party's default. Parent companies may execute a guaranty to ensure contract performance continues regardless of the default by one or more of its subsidiaries.

(11) Insolvency. Insolvency occurs when an entity cannot pay obligations as they come due. Insolvency may be a temporary condition resulting from a mismatch between cash inflows and cash outflows. Insolvency in the context of bankruptcy occurs when an entity's financial condition is such that total liabilities exceed the fair market value of assets.

(12) Liquidation. Liquidation is the process of closing a business entity, including selling assets, paying liabilities, and returning the residual to its owners. Partial liquidation would occur when an entity is involved in the piecemeal sale of a significant percentage of its assets.

(13) Long-term. Being in effect for more than one year.

(14) Near-term. Being in effect for up to one year.

(15) Off-Balance Sheet Arrangements. Off-balance sheet arrangements involve, but are not limited to, unconsolidated, non-independent, limited purpose entities, often referred to as structured finance or special purpose entities. These entities may be in the form of corporations, partnerships, limited liability companies, trusts, structured finance entities or other types of agreements, relationships or understandings. These entities may be used to provide financing, liquidity, market risk or credit support, or involve leasing, hedging, and/or research and development services.

(16) Related Party Transactions. Related party transactions are business arrangements between two or more parties if one party controls or can significantly influence the other. Examples of related party transactions include transactions between:

(a) a parent company and its subsidiaries;

(b) subsidiaries of a common parent;

(c) an enterprise and trusts for the benefit of employees, such as pension and profit-sharing trusts that are managed by or under the trusteeship of the enterprise's management;

(d) an enterprise and its principal owners, management, or members of their immediate families; and

(e) affiliates.

14-302 Responsibilities

a. DFARS 232.072 requires the contracting officer to make a determination of financial responsibility and provides suggested policies and procedures for making this evaluation. DCAA has the responsibility to provide all necessary financial advisory services to the contracting officer. An integral part of these services is the evaluation of the contractor's financial condition. A DCAA financial capability audit may be performed in response to a specific contracting officer's request or based on the results of a financial condition risk assessment of the contractor's financial condition. In either case, ensure coordination with the ACO on contractor issues to be considered in performing the risk assessment/audit as required in 4-103. To avoid duplication, request the details of any financial analyses already performed by the requestor or the ACO (e.g., financial ratio analyses, bond rating analyses). If a financial capability audit is requested and the FAO's risk assessment does not indicate any significant financial condition problems, the FAO will discuss the results of the risk assessment with the contracting officer to verify the need to perform the audit (see 14-308 for exception for audits requested by DFAS related to contractor installment agreements). If agreement is reached that a financial capability audit is not required, a memorandum confirming the discussion should be sent to the contracting officer.

b. The financial condition risk assessment and/or the financial capability audit will generally be performed by the FAO cognizant of the parent company (corporate home office), rather than at each individual subsidiary, unless DCAA does not have access to the parent company (i.e., DCAA is not responsible for performing incurred cost audits at the parent company). In these cases, the risk assessments/audits will be performed only at the subsidiary. Where DCAA performs the risk assessment at the parent company, but finds the parent does not sweep its subsidiary's cash and guarantee its subsidiary's performance, the risk assessment/audit will also be performed at the subsidiary. Refer to Figure 14-3-3 which summarizes where the reviews will be performed. Auditors at the parent company have the responsibility to request audit assistance from the subsidiary level auditors when necessary. The risk assessments and/or audits will be performed using the guidance in 14-304.

c. Many large corporations have financial departments which perform continuous assessments of financial conditions. Auditors should fully understand the work performed by these departments in their evaluation of financial conditions. The scope of the financial capability audit should consider the degree of reliance that can be placed on the work of others, including the work performed by these departments (see 4-1000).

14-303 Frequency of Performing Financial Condition Risk Assessments

a. Except as noted below, FAOs will perform an annual financial condition risk assessment of the contractor's financial condition for all contractors with Government sales over $1 million. Risk assessments of multi-segmented contractors should generally be performed at the parent company rather than at each individual segment or subsidiary. Exceptions are discussed in 14-302 and Figure 14-3-3. In addition, FAOs must perform a financial capability audit if the prior financial capability audit resulted in an audit opinion that was unfavorable or adverse. FAOs should not perform an annual financial condition risk assessment of contractors with Government sales under $1 million unless requested by the customer or determined to be appropriate based on audit risk (e.g., audit leads, results of prior reviews). Ideally, risk assessments should be performed soon after the issuance of

the contractor's audited financial statements, thereby utilizing the most current financial information available. If audited financial statements are not available, the risk assessment should be performed using reviewed, compiled, or contractor-prepared financial statements as soon as they are available after the contractor's fiscal year end.

b. FAOs will perform an annual modified financial condition risk assessment for contractors with Government sales between $1 million and $15 million, in conjunction with other field visits. If a field visit is not anticipated due to audit inactivity or to the performance of a desk review for a low-risk incurred cost contractor, a financial condition risk assessment should not be performed, unless customer requests are anticipated or indicators of financial distress exist (e.g., audit leads, results of prior reviews). Detailed financial condition risk assessments or audits will be performed only if requested or if indicators of financial distress are disclosed.

c. FAOs will perform annually either a detailed or modified financial condition risk assessment for all contractors with Government sales over $15 million. A detailed financial condition risk assessment will be performed at least once every three years with modified risk assessments in the years when a detailed risk assessment is not performed.

d. FAOs will complete a risk assessment (detailed or modified) by gathering and analyzing appropriate financial data (see 14-304). The auditor or contracting officer may become aware of contractor financial information or events that indicate contractor financial distress. This information should be incorporated into the risk assessment and a financial capability audit will be performed if the risk assessment so indicates.

e. The above guidance should not preclude FAOs from applying their knowledge and judgment regarding specific contractors in identifying circumstances where performance of financial condition risk assessments may not be warranted, such as contractors that are:

(1) no longer performing on Government contracts;

(2) reimbursable contractors and the non-DoD customer will not authorize funding for the audit;

(3) not legally liable for the financial performance on the contract since responsibility is retained at a different corporate level; or

(4) considered low risk, such as educational institutions and federally funded research and development centers (FFRDCs).

If a financial condition risk assessment is determined not to be warranted, reasons for that determination should be documented in the contractor permanent file.

f. The contracting officer may also be monitoring the contractor's financial condition. The auditor should fully understand the contracting officer's work in this area and coordinate with the cognizant DCMA Contract Management Office to discuss their planned evaluations of contractor financial capability to avoid any duplicative efforts.

14-304 Financial Condition Risk Assessment Procedures

a. The financial capability audit program contains risk assessment steps that the auditor completes to determine the need for performing a financial capability audit. The basis for the decision not to perform an audit must be fully documented and discussed with the contracting officer or ACO, if he/she had requested an audit.

b. A detailed financial condition risk assessment consists of obtaining an understanding of the contractor's internal control structure and related operations regarding financial planning and monitoring, including its cash management plan, and performing:

(1) an analysis of any significant events and audit leads that would impact the contractor's financial capability;

(2) a trend analysis of the contractor's key financial statement ratios;

(3) a trend analysis of the key financial statement elements (i.e., profit/loss, sales, etc.);

(4) an analysis of off-balance sheet arrangements and related party transactions (see 14-306);

(5) a determination that the contractor is paying its payroll taxes timely;

(6) a review of the fraud risk indicators specific to the audit (see APPS Other Audit Guidance (OAG) for Listing of Fraud Risk Indicators, Financial Capability Audits);

(7) a follow-up on any other indicators that raise questions about the financial capability of the contractor; and,

(8) if applicable, an analysis of parent company's management of subsidiary's cash.

c. A modified financial condition risk assessment consists of performing:

(1) an analysis of any significant events and audit leads that would impact the contractor's financial capability;

(2) a trend analysis of the key financial statement elements (i.e., profit/loss, sales, etc.); and

(3) a determination that the contractor is paying its payroll taxes timely.

d. Since analysis of financial statement ratios and trends are being used as one of many tools to assess risk, the auditor can use the information from audited financial statements without testing the reliability of the external auditor's work. However, if compelling reasons exist to question the financial statements, or if the statements are unaudited, the auditor should perform limited procedures to verify the financial information prior to computing the ratios or analyzing the trends. These procedures could include, for example, comparing key financial statement amounts, such as total assets, total liabilities, and sales to the general ledger and/or to the federal or state income tax returns. If a financial capability audit is performed, however, the audit report should be qualified when using unaudited financial statement data.

e. Trend Analysis of Key Financial Statement Ratios – Detailed Risk Assessment

(1) Financial statements provide a primary indication of a contractor's financial condition. The ratio analysis concept is that as a business deteriorates so too will the key ratios. At contractor locations where the majority of these ratios are experiencing a negative or unfavorable trend, the auditor will normally perform a financial capability audit. The analysis of key financial ratios is an important consideration when evaluating a contractor's financial condition; however, they must be used with care. General rules of thumb regarding acceptable ratios should be avoided.

(2) If a risk assessment is being performed at a subsidiary and the parent company sweeps the subsidiary's cash, the auditor should consider omitting the analysis of key financial ratios if the results of the ratio analysis does not provide useful data (e.g., subsidiary financial statements may have zero balances for cash and certain liabilities).

(3) The following key ratios should be calculated and analyzed during the detailed risk assessment:

Ratio	Formula	Description
Current Ratio	Current Assets/ Current Liabilities	This ratio measures a company's ability to pay its short-term liabilities from short-term assets.
Quick Ratio	Liquid Assets/ Current Liabilities	This ratio measures a company's ability to pay off its short-term obligations from assets readily convertible to cash.
Return on Investment (ROI)	Net Income/ Total Assets	This ratio is a measure of economic performance and is used as an indicator of management's effectiveness, a measure of a company's ability to earn a satisfactory return on investment, and a method of projecting earnings.
Debt to Equity Ratio	Total Debt/ Stockholders Equity	This ratio assists in determining the relative size of the claims of creditors compared to the claims of owners. High levels of debt can restrict management and increase risk to owners.
Capital Turnover Ratio	Working Capital (Current Assets - Current Liabilities)/ Total Assets	This ratio measures the net liquid assets of the company relative to its total capitalization. Ordinarily a firm experiencing consistent operating losses will have shrinking current assets in relation to total assets.
Cash Flow to Debt	Cash Flow (Net Income+Depreciation+ Depletion+Amortization)/ Total Debt	This ratio is an indicator of the adequacy of available funds to satisfy debt obligations.
Cash Flow to Sales	Cash from Operations/Sales	This ratio shows the percentage of each sales dollar realized as cash from operations.
Debt Coverage	Total Debt/Cash from Operations	This ratio estimates how many years it will take to retire all debt at the current level of cash from operations.

The auditor should also ask the contractor if there are other financial ratios that should be considered when evaluating the contractor's financial condition.

f. Trend Analysis of Key Financial Statement Elements – Detailed and Modified Risk Assessments

(1) The evaluation of financial statement elements can provide additional insight into negative financial trends and other conditions that may result in financial distress. The financial statements should be obtained for at least three fiscal years. The financial data from these statements should be analyzed and trend data developed for the following areas:

- Profit/loss
- Cash flow from operating activities
- Cash flow from investing activities
- Cash flow from financing activities
- Sales
- Working capital (current assets minus current liabilities)
- Long-term liabilities
- Net worth (total assets minus total liabilities)

(2) The auditor should be alert to any apparent lack of operating success, as evidenced by recurring net losses, negative cash flow from operating activities, deteriorating sales or significant increases to liabilities, which may impact the contractor's ability to pay costs

incurred in the ordinary course of business. Analysis of working capital trends discloses the contractor's ability to liquidate current liabilities with current assets which may indicate cash flow difficulties. In addition, contractors with little or no net worth, combined with current operating losses, make it difficult to attract equity investment or credit facilities and could present a significant risk of nonperformance on Government contracts.

(3) Determine if there is a going concern comment in the most recent financial statements. This is a high risk indicator that requires further analysis and generally requires the performance of a financial capability audit.

g. Internal Controls – Detailed Risk Assessment

The auditor should consider the adequacy of the contractor's internal control structure relating to financial planning and monitoring and its cash management plan. The contractors internal control structure should provide controls for the following:

- Written policies and procedures that require evaluation of current financial conditions in order to anticipate and avoid adverse conditions;
- Preparation of cash flow forecasts, including reasonable and supported assumptions;
- Monitoring, analyzing and managing its cash flow;
- Periodic assessments of accounts payable and receivable, including analysis of accounts payable aging and the collectibility of accounts receivable;
- Periodic assessments to ensure compliance with any loan covenants and debt payment schedules; and
- Periodic assessments of contract cost performance.

h. Timely Payment of Payroll Tax – Detailed and Modified Risk Assessments

The auditor should determine that the contractor is paying its payroll taxes timely by obtaining the contractor's Quarterly Federal Tax Returns (Form 941) for the last two quarters and tracing the payments to cancelled checks, receipts from the bank or receipts from electronic fund transfers. If the contractor uses an external payroll company to process payroll, the auditor should obtain copies of the statements for the last two quarters and verify payment. If the contractor owes the IRS for unpaid payroll taxes, determine whether there are any agreements with the IRS to make timely payments, and test to determine if the contractor is timely on payments. Failure to make timely payments of payroll taxes is a high risk indicator of potential financial distress.

i. Analysis of Parent Company's Management of Subsidiary's Cash – Detailed Risk Assessment

An analysis of a parent company's cash management plan (defined in 14-301f) of its subsidiaries should be performed. The nature and purpose of most cash management plans are to centralize the management of the cash and debt of the parent and its subsidiaries. Based on the review of the plan, the auditor may rely upon the provisions of the plan and the parent's administration of it to provide assurance that the near term financial requirements of all subsidiaries with Government contracts are met. Typically, a parent company that sweeps cash maintains a close scrutiny of a subsidiary that consistently requires cash to meet its operating expenses. Thus, the risk of a subsidiary failing to meet its near term cash needs and to financially perform on a Government contract is significantly reduced as long as the parent company is in a positive cash position, has access to needed credit facilities to supplement corporate cash reserves, and consistently supports the cash needs of its subsidiaries. The auditor's analysis of the plan should include the following:

(1) When the parent is responsible for the performance of its subsidiaries or affiliates (e.g., parent signs contract or guarantees contract performance), the parent auditor's analysis of the cash management plan should be limited to an assessment of the contractor's processes, controls, procedures, and management reporting mechanisms used for ensuring that the cash needs of any subsidiary with Government contracts are being met.

(2) When the parent is not responsible for the performance of its affiliates or subsidiaries, auditors at the parent company will also review:

- parent actions taken to support the financial needs of a subsidiary that is a consistent user of cash,
- how often a given subsidiary needs cash from the parent,
- the magnitude of the funds being used by the subsidiary, and
- how such funds are being accounted for, (e.g., as intercompany loans, equity reduction of subsidiary).

If a subsidiary is using more funds than it is generating and the parent's cash management plan does not adequately address the necessary actions to support the financial needs of that subsidiary (i.e., provide a corporate guaranty), the parent company auditors will consult with the subsidiary auditors and jointly determine the need for a risk assessment or audit to be performed at the subsidiary.

j. Additional Analysis of Parent Data by Subsidiary Auditor (Lack of Access to Parent) – Detailed Risk Assessment

In those instances where the risk assessment is being performed at the subsidiary location, perform the following:

(1) If the parent is a public company, the auditor should rely upon the contractor published financial data, presented on the U.S. Securities and Exchange Commission (SEC) website at www.sec.gov under Filings & Forms (EDGAR), to determine if there are indicators of financial distress at the parent company that may impact the subsidiary(ies)'s performance on Government contracts. The auditor should perform a limited analysis of the parent's financial statements and identify the following:

- The type of audit opinion being rendered on the financial statements by the independent public accountant (IPA),
- other comments/notes contained in the published financial statements, and
- any going concern comment (SAS 59) made by the IPA.

If analysis of the parent's published financial statements disclose that there are significant indicators of financial distress, a disclaimer of opinion on the subsidiary's financial capability should be considered.

(2) If the parent is a nonpublic company, the subsidiary auditor should generally not pursue access to the financial records of the parent company unless (1) total Government dollars at the subsidiary location(s) are significant, (2) the parent sweeps cash or guarantees the subsidiary's performance, and (3) the auditor has indicators of potential financial distress of the parent. Unless all three of these key elements exist, subsidiary auditors will only perform a risk assessment and/or audit at the subsidiary. When access to the parent company is not obtained or pursued, qualify the audit report (if an audit is performed at the subsidiary) for the lack of access to the parent. If the auditor believes access to the parent records should be pursued, refer to 1-504, Access to Contractor Records.

k. Other Indicators that Raise Questions about Financial Distress – Detailed Risk Assessment

(1) Any consideration of or actual filing for bankruptcy by a contractor requires an audit to be performed. The auditor may learn that the contractor is about to file or has filed for bankruptcy under Chapter 7 (Liquidation) or Chapter 11 (Reorganizations) of the bankruptcy laws. Filing under Chapter 11 may provide for the appointment of an independent trustee to assume control of the company for the duration of the bankruptcy proceedings. Chapter 11 proceedings cannot be considered conclusive evidence that the company will be forced to liquidate. However, any filing for bankruptcy gives rise to significant uncertainty as to the future operations of the company and the contractor's ability to perform on Government contracts.

(2) Many sources of information can provide insight into events or conditions that can significantly affect a contractor's ability to perform on Government contracts. The auditor should review financial statement notes and financial statement audit opinions and analyze this information for any unusual items or comments. Determine if there is a going concern comment in the most recently audited financial statements. If so, this should be disclosed

in the audit report. The auditor should discuss with the contractor any unfavorable or adverse financial conditions disclosed in the financial statements to obtain a full understanding of the issues. The auditor should then determine the impact on the contractor's financial capability. Further, discussions with the Contracting Officer and the contractor, and review of audit leads, may identify events or conditions that could be causes or indicators of financial distress. Significant events or conditions could include:

- Defaults on loan/line of credit agreements
- Denial of usual trade credit from suppliers
- Restructuring of debt where the contractor is charged a higher interest rate above the prime rate than the prior rate charged by the lending institution. The increase in the rate charged above the prime rate could be attributable to perceived contractor financial distress.
- Noncompliance with loan/line of credit covenants
- Contracts in a significant loss position
- Legal proceedings/pending claims
- Loss of principal customer/supplier
- Uninsured or underinsured catastrophic events
- Labor strikes
- Unpaid state, local, and federal tax liabilities
- Contingent liabilities
- Deteriorating bond ratings
- Significant dollar amount of accounts receivable
- Significant postaward or suspected irregularity conduct audit findings and other significant questioned costs that are unresolved
- Contract termination for default
- Deferral of payments to suppliers
- Failure to fund pension plans
- Loans from employees or issuing stock to employees in lieu of salary
- Environmental clean-up impact
- Significant unpaid contractor debts
- Unusual progress payments or other billing concerns
- Poor physical condition of the work facilities
- Unpaid insurance liabilities

(3) Bond ratings for publicly held companies should be evaluated. Low bond ratings or declining trends may signal problems for the company in obtaining cash outside of normal operations.

(4) The auditor should discuss with the contractor any plans to enter into significant leases, make significant capital expenditures, liquidate assets, borrow significant cash or restructure existing debt, reduce or delay expenditures, or increase ownership equity. The auditor should verify the accuracy of the discussions to appropriate supporting data, including the cash flow forecast. The auditor should also identify and analyze any unusual compensation package or outstanding loans to other company operations or company officers that would drain financial resources from an operating unit with Government contracts.

l. The auditor should perform all applicable risk assessment procedures to use as a basis for the decision to perform a financial capability audit. Only after full evaluation and consideration of the risk assessment can a decision be made to perform the audit. For contract required assignments where no risk was found, conclusions on risk assessment evaluations should be summarized in a memorandum for record and maintained as part of the FAO's permanent file. For customer requested assignments, other than those requested by DFAS on a contractor requesting an installment agreement (14-308), where no risk was found, coordinate the risk assessment results with the requestor. If the requestor agrees that further work is not necessary, confirm the coordination with the requestor in a memorandum. However, if the requestor still desires the performance of a financial capability

audit, proceed with the audit. At large multi-division/segment corporations, the results should be communicated in writing to cognizant divisions/segments.

14-305 Audit of Contractor Financial Capability

a. The purpose of the financial capability audit is to render an opinion on the contractor's financial capability to perform on Government contracts. The audit objectives include the evaluation of existing and future contractor financial capabilities to continue operations in the near-term. In some cases, contract performance may extend beyond one year and could span several years; however, the auditor should not opine on contractor performance beyond the near term.

b. The audit scope will concentrate on analyzing the contractor's financial condition and cash flow projections to determine if the contractor has or will have adequate financial resources to perform on Government contracts. The audit coverage will include an evaluation of existing financial conditions, audit of cash flow projections for the near term (up to one year), and analysis of the contractor's financial flexibility to support operations. From this evaluation, the FAO will determine if the contractor will have sufficient cash flow to continue operations in the near term (up to one year). If a reasonable doubt exists that the contractor will have sufficient cash flow to sustain operations, the auditor will need to determine whether the contractor can obtain the necessary resources (e.g., loans, sale of assets, or sale of stock) to continue operations in both the near-term and in some unusual circumstances addressing the long-term. If the contractor is experiencing financial distress, the contractor may have prepared a projected cash flow statement for the CPA's SAS 59 analysis.

c. When performing an audit of the contractor's financial capability, it is the contractor's responsibility to provide appropriate financial and accounting information. Specific information that the contractor should provide is discussed in DFARS 232.072-2. If the auditor experiences difficulty in obtaining this information, the issue should be elevated to the contracting officer. If these actions are unsuccessful in obtaining the required information, the auditor should follow the guidance on access to records discussed in 1-504. Auditors should adhere to the guidance in 4-400 in preparation of their working papers. Sensitive financial capability audit working papers are likely to be used in continuing Government analysis.

14-305.1 Evaluation of Existing Financial Conditions

a. Assess Current Financial Conditions and Follow-up on Any Prior Significant Conditions

The auditor will assess the contractor's financial condition at the time of the audit. Risk assessment financial data will be updated with interim current contractor financial data and an evaluation will be made to determine whether the contractor is currently experiencing financial distress. Information and audit leads developed during the annual planning process should be reviewed and updated, if necessary. Any significant conditions or leads should be discussed with the contractor and evaluated. To analyze future cash flows, the auditor must understand the underlying cause of any current significant conditions and their potential impact on future operations.

b. Liquidation of Accounts Payable

(1) The auditor will determine if the contractor is liquidating accounts payable on a timely basis in the ordinary course of business. This will normally be performed through an evaluation of the aging of accounts payable. Contractors may have the capability to manage accounts payable through various computer software programs. To illustrate, the contractor should provide an aging schedule, similar to the following example, to demonstrate that it is adequately managing accounts payable. In order to assure that the contractor is not recording payments while actually delaying or holding checks, review canceled checks to determine the accuracy of the number of lag days between recorded payment

dates and check cancellation dates. If the contractor is not liquidating its accounts payable in a timely manner, the reasons should be ascertained.

EXAMPLE --- SCHEDULE OF ACCOUNTS PAYABLE AGING

Trade Accts. - No. of Days Outstanding	Amount	Percentage
0-30 days	$ 191,300	14%
31-60	421,992	31
61-90	262,334	19
91-120	132,570	10
Over 120	347,062	26
Total Trade Accounts	$1,355,258	100%
Other	188,972	
Checks Held	117,174	
Bank Overdraft - Net	$ 187,567	
Total Accounts Payable	$1,848,971	

(2) In the circumstances where account balances are significant and the contractor does not perform an aging of accounts payable or similar analysis, the contractor should be asked to perform such analysis. If the contractor refuses, the auditor should report this absence of normal financial management and budgetary controls as a significant internal control weakness and consider evaluating liquidation of accounts payable.

(3) For multi-division corporations with a decentralized accounts payable function, the corporate auditor may consider requesting assist audits of segments/divisions with significant accounts payable balances.

c. Loans/Lines of Credit

The auditor will determine whether the contractor has been unable to meet debt payment schedules or has violated any covenants of its loan agreements or lines of credit. Also, an analysis of the explanatory notes to the contractor's financial statements may help determine if any conditions on financial credit requirements exist, such as a bank line of credit that requires maintenance of certain key financial ratios. If the loan covenants or financial ratios are not being met, determine if they have been waived by the financial institution. The auditor should verify that the contractor properly classifies any lines of credit as short/long-term since the improper classification would affect the calculation of some financial ratios. Review the interest rate charged by the lending institution. An increase in the rate charged above the prime rate could be attributable to perceived contractor financial distress. Review the loan/line of credit to see if it is secured by collateral. If the contractor receives progress payments, and collateral includes inventory/work-in-process, determine if a subordination agreement is necessary.

d. Chapter 11 Bankruptcy

As discussed previously (14-304k(1)), the filing of a petition with the Bankruptcy Court for reorganization under Chapter 11 gives rise to significant uncertainty as to the contractor's ability to pay debts or adequately perform on Government contracts. This event by itself requires immediate written notification to the ACO, with copies provided to the Regional Special Programs Office and Headquarters, Attention PPD. The ACO is primarily responsible for monitoring the financial condition of a contractor once an unfavorable or adverse financial condition has been reported. During Chapter 11 proceedings, a company is generally required to furnish interim financial statements and other information, such as status on actions to remain a going concern or plans to reorganize. The auditor should determine what legal provisions exist and obtain the required financial information to ascertain the company's continuing financial capability.

14-305.2 Evaluation of Cash Flow Projections

a. Evaluations of cash flow projections will form the framework for the auditor's opinion on the contractor's financial capability. The auditor needs to have a reasonable basis to assure that the contractor will be able to cover its operating costs and make appropriate payments on its liabilities in the near term (up to one year).

b. Cash flow forecasts are used for many purposes such as strategic planning, managing the contractor's day to day operations, and establishing lines of credit. At larger contractors, cash flow forecasts are generally prepared by a contractor's financial planning or treasurer's department. Since the cash flow forecast will serve as the contractor's demonstration that it has sufficient sources of cash to meet current obligations, it must be obtained and evaluated by the auditor. Similarly, projected sources of cash flow on existing Government contracts should reconcile to other internal forecasts that are contractually required to be provided to the Government (e.g., EVMS estimates-at-completion and the corollary calculations supporting progress payment requests). DFARS 232.072 provides guidance on cash flow requirements and analysis.

c. Auditors should analyze the contractor's cash flow forecasts in order to determine the contractor's ability to meet operating costs in the near term (up to one year), and any long-term liabilities coming due in the near term. There are many uncertainties surrounding a contractor's operations which may make it difficult to reasonably project cash flows beyond one year. As a result, cash flow projections beyond the current fiscal year are not usually supported by detailed estimates. For this reason, the auditor needs to concentrate the cash flow evaluations on the near term. If there is doubt about the sufficiency of the contractor's cash flow in the near term, evaluation of cash flow projections throughout the life of major contracts should be considered, if available.

d. Using the contractor-prepared schedule identifying the maximum possible liability for off-balance sheet arrangements and related party transactions (14-306.), inquire of the contractor if any of the liabilities will become due in the near term (up to one year). If any will, verify that these cash outflows are reflected in the contractor’s cash flow forecast.

e. If the contractor does not prepare a cash flow forecast as part of normal financial management, request that the contractor prepare a cash flow forecast for the audit. If the contractor fails to do so, ask the ACO to require the contractor to submit a cash flow forecast covering the duration of existing contracts (DFARS 232.072-3.) The auditor cannot give an opinion on a contractor’s financial capability without an evaluation of the contractor’s cash flow forecast (however, see exception for nonmajor contractors below). The failure to prepare cash flow forecasts will normally occur only at smaller companies. At larger companies, the auditor should report this absence of normal financial management and budgetary controls as a significant internal control weakness. Actions by a contractor to restrict or deny access should be first elevated to the ACO to require the contractor to submit a cash flow forecast covering the duration of existing contracts (DFARS 232.072). If the problem continues, it should be reported as an access to records problem (1-504). If a nonmajor contractor fails to prepare a cash flow forecast, even after requested by the auditor and the contracting officer, and if, through the audit of sufficient, competent, evidential matter it is determined that the contractor is experiencing financial distress, the auditor can issue the report giving a qualified (unfavorable) or adverse audit opinion. The scope paragraph of the audit report should be qualified due to the lack of the cash flow projection. However, the auditor cannot issue the report giving an acceptable opinion on a nonmajor contractor’s financial capability without an evaluation of the contractor’s cash flow forecast (14-307a.(4)).

f. Since a cash flow forecast is usually an internal management document, it may be presented in various formats. It may be a statement that identifies all projected sources and uses of cash, or may be presented in the same or similar format as the statement of cash flows in the annual financial statement. Forecasted cash flows in the format of the annual financial statement will normally categorize cash receipts and cash disbursements by operating, investing, and financing activities. The auditor needs to evaluate the support and

reasonableness of the contractor's cash flow forecasts --- estimates may be overly optimistic and favorable to the contractor. The auditor should, as part of the audit, perform the following procedures on major cost elements:

(1) Verify the factual data and determine the reasonableness of the underlying assumptions used to prepare the cash flow forecast;

(2) Compare previous forecasts with actual statement of cash flows to determine how reliable forecasts were in the past;

(3) Evaluate forecasts to assure they consider any significant conditions identified in the auditor's evaluation of existing financial conditions (14-304 and 14-305.1);

(4) Evaluate the logic of the cash flow forecasts --- determine if they link into any forecasted balance sheets and income statements;

(5) Determine if sales forecasts or production forecasts and related operating costs are consistent with recent financial statement trends and evaluate assumptions supporting the significant differences;

(6) Determine if the contractor's ability to achieve its cash flow forecast is dependent on the favorable outcome of one or a few key event(s). If so, the circumstances and chance of occurrence should be thoroughly explored and the impact on the cash flow projection should be considered;

(7) Determine if there are any significant events (such as a recent or potential loss of contracts) that may affect the contractor's operations. If an event is identified, the auditor should determine the impact on the analysis of cash flow projections.

g. Generally, DCAA does not confirm account balances. If the cash flow analysis is dependent on significant amounts in a particular account, the auditor will determine if reliance can be placed on contractor controls or use other analytical procedures. For example, if the cash flow analysis is heavily dependent on collection of accounts receivable, the auditor may note that independent confirmations are conducted annually by external auditors and analyze the aging schedule of the accounts receivable. If the auditor determines that confirmations are necessary, such confirmations will be coordinated with the ACO. If the ACO does not agree with the necessity for the confirmations, the confirmations will not be performed and the audit report should be qualified for these circumstances.

h. In concluding the evaluation of the cash flow projections, the auditor needs to determine whether the contractor has the financial means to meet ongoing costs of operations in the near term. This determination will be the foundation for the auditor's opinion on the contractor's ability to perform on Government contracts. When issuing the audit opinion in accordance with 14-307, the auditor should ensure the cash flow forecast represents projections for a reasonable future time period (i.e., preferably 9 months or more, however, no less than 6 months in the future from the date of the audit report). A projected shortfall in meeting short-term obligations which requires obtaining cash from outside the normal course of operations (such as liquidation of assets, significant loans, or sale of stock) is considered financial distress. Financial distress is considered an unfavorable financial condition. If a shortfall is not projected but cash flows are dependent on significant conditions or events for which there is significant doubt (such as optimistic sales of a new product, anticipated contract awards, or a negative cash flow due to a pending contingent liability), the contractor's financial condition would be considered unfavorable.

14-305.3 Analysis of Financial Flexibility

a. The auditor needs to consider the contractor's financial flexibility to perform on Government contracts in the near and long term. Consideration should be given to existing assets (net of liabilities), current bond ratings, bank lines of credit, long-term plans for liquidating assets, restructuring/increasing debt (the near term should be considered in the cash flow analysis), and plans for increasing ownership equity. Where near-term financial distress is indicated, a determination should be made as to the contractor's ability to obtain the additional resources to continue operations through extraordinary management actions.

b. Future plans to add or sell resources should be discussed with the contractor and verified. These audit procedures are critical if the contractor is in financial distress and needs additional cash to continue operations. The auditor should discuss with the contractor any planned extraordinary management actions to obtain or conserve cash and verify the supporting data, such as the following:

(1) Plans to liquidate assets. Determine possible direct or indirect effects on Government contracts of any planned disposal of assets.

(2) Plans to borrow money or restructure debt. Evaluate the availability of debt financing, including existing committed credit arrangements such as lines of credit and arrangements for factoring of receivables or sale-leaseback of assets.

(3) Plans to reduce or delay expenditures. Determine possible direct and indirect effects on Government contracts of any plans to reduce or delay capital or maintenance expenditures.

(4) Plans to increase ownership equity. Review existing or committed arrangements to raise additional capital, to reduce current dividend requirements, or to accelerate cash distributions from affiliates or other investors.

c. On completion of this part of the audit, the auditor will have better insight on the contractor's capability to obtain cash resources outside of normal operations through extraordinary management actions. When a contractor is in financial distress, analysis of the contractor's capability to obtain cash resources and repay those resources will give the auditor a reasonable basis for determining whether or not the contractor will be able to perform on Government contracts (near and long term).

14-306 Review of Off-Balance Sheet Arrangements and Related Party Transactions

a. The performance of financial condition risk assessments and financial capability audits depend heavily on the accuracy of a contractor’s financial statements. Financial statements that accurately reflect the contractor’s financial condition should incorporate the effects of off-balance sheet arrangements and related party transactions. During the financial condition risk assessment, and any subsequent financial capability audits, the auditor’s determination that these effects have been incorporated into the contractor's financial statements will be based on whether the contractor is publicly held or not.

(1) Publicly held companies are required, as a result of Securities and Exchange Commission (SEC) final rulings implementing the Sarbanes-Oxley Act of 2002, to disclose all material off-balance sheet transactions, arrangements, and obligations (including contingent obligations) that are "reasonably likely" to have a material current or future effect on financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses in each annual and quarterly financial report required to be filed with the Commission. The details regarding these off-balance sheet arrangements are to be disclosed under a separately captioned subsection of the “Management’s Discussion and Analysis” (MD&A) section of the quarterly and annual SEC filings. Furthermore, corporate executive officers, the principal financial officer or officers, or persons performing similar functions of a company filing periodic reports under Section 13(a) or 15(d) of the Securities Exchange Act of 1934 must certify in each quarterly and annual report that, based on their knowledge, the financial statements and other financial information included in the report fairly present in all material respects the financial condition and results of the operations of the company as of, and for, the periods presented in the report. As a result of the MD&A disclosure requirements and corporate certifications, audit effort required to assure that the financial statements include consideration of off-balance sheet arrangements and related party transactions should be limited to management inquiries that the company has complied with the new SEC final rulings in its SEC filings (effective for fiscal year ending on or after June 15, 2003), confirmed by a cursory review of the SEC filings themselves. Further explanatory or cost detail from the company to better understand the maximum liability connected with

any disclosed off-balance sheet arrangement or contractual obligation should be obtained as necessary.

(2) For non-publicly held companies, auditors should request the contractor to provide written confirmation that the financial statements provided during the financial condition risk assessment include disclosure of all off-balance sheet arrangements and related party transactions. The request for confirmation should be sent to, and the contractor's response should be signed by, a contractor official no lower than a vice president, chief financial officer, or chief executive officer. A shell letter requesting contractor confirmation on the financial statements is included on the intranet in the directory of audit programs, audit report shells and other audit guidance under the 17600 audit activity code, Confirm Letter – Financial Statements. The contractor should also provide a schedule separately showing the maximum liability included in the financial statements and cash flow forecast, and the maximum liability not reflected in the financial statements and cash flow forecast, when the contractor states that the maximum liability for off-balance sheet arrangements and related party transactions is not reflected in the financial statements and/or cash flow forecast. In addition to a written confirmation and schedule, the contractor should also be requested to provide:

(i) any inquiries from their public accounting firm related to off-balance sheet arrangements and related party transactions and their responses. Some contractors may not have engaged a CPA firm to audit their financial statements. In this instance, auditors may accept a response from the contractor stating that they did not engage a CPA firm to audit their financial statements; and

(ii) the results and reports of any internal audits, reviews, or other analyses of off-balance sheet arrangements and related party transactions.

(a) The auditor should obtain an understanding of the information provided by the contractor, along with the written confirmation from the contractor that the financial statements include disclosure of the maximum liability of off-balance sheet arrangements and related party transactions. A list of potential related party indicators is included in the Other Audit Guidance section of the APPS entitled Potential Related Party Indicators, and should be used to assist in identifying situations that would indicate related party arrangements.

(b) Evaluate for audit leads any inquiries from the contractor's public accounting firm related to off-balance sheet arrangements and related party transactions, and the contractor's response to these inquiries.

(c) Compare for consistency the contractor's response to its public accounting firm's inquiries concerning off-balance sheet arrangements and related party transactions to the contractor's disclosures in the confirmation letter. Follow up on any inconsistencies with the contractor.

(d) Evaluate for any audit leads, the results and reports of any internal audits, reviews or other analyses of off-balance sheet arrangements, and related party transactions.

(e) Verify that the contractor-prepared schedule, identifying the maximum possible liability for each disclosed off-balance sheet arrangement and related party transaction, is based on sufficient, competent, evidential matter and is reconcilable to the contractor's supporting documentation for each liability.

b. At the completion of the detailed financial condition risk assessment, if the non-publicly held contractor has not provided the written confirmation letter, begin performance of a financial capability audit.

c. During the performance of a financial capability audit, request the contractor (if not publicly held), to provide written confirmation that the cash flow forecast provided during the financial capability audit includes liabilities associated with off-balance sheet arrangements and related party transactions. The request for confirmation should be sent to, and the contractor's response should be signed by, a contractor official no lower than a vice president, chief financial officer, or chief executive officer. A shell letter requesting contractor confirmation on the cash flow forecast is included in the Other Audit Guidance section of the APPS entitled Confirmation Letter – Cash Flow Forecast. Unless provided

during the financial condition risk assessment (14-306a(2)), the contractor should also provide a schedule separately showing the maximum liability included in the financial statements and cash flow forecast, and the maximum liability not reflected in the financial statements and cash flow forecast, when the contractor states that the maximum liability for off-balance sheet arrangements and related party transactions is not reflected in the financial statements and/or cash flow forecast. In addition to the written confirmation and schedule, the contractor should be requested to provide:

(1) Any inquiries from their public accounting firm related to off-balance sheet arrangements and related party transactions and their responses to these inquiries. Some contractors may not have engaged a CPA firm to audit their financial statements. In this instance, auditors may accept a response from the contractor stating that they did not engage a CPA firm to audit their financial statements.

(2) The results and reports of any internal audits, reviews or other analyses of off-balance sheet arrangements and related party transactions.

d. When a contractor that is not publicly held refuses to provide a confirmation letter and/or results of inquiries from its public accounting firm and/or results of internal audits, reviews, and other analyses, the financial capability audit report should contain one of the following opinions:

(1) When the auditor has sufficient evidence, even without the confirmation letter, that the contractor's financial capability is adverse, the auditor should issue the audit report with an adverse opinion (14-307a.(3)) and include a qualification for the non-receipt of the contractor's confirmation letter. The purpose of the qualification is to notify the contracting officer that the financial capability could be even worse than presented in the audit report had the contractor provided the confirmation of the off-balance sheet arrangements and related party transactions. In this instance, the auditor has sufficient information without the confirmation letter to express the opinion on the adverse financial capability.

(2) If the contractor refuses to provide the confirmation letter and/or any of the related data, the auditor must disclaim an opinion, except when the auditor has sufficient evidence of an adverse financial condition. In the absence of sufficient evidence of an adverse financial condition, the lack of the confirmation letter and/or the related requested data limits the scope of audit. A significant scope limitation must result in a disclaimer of opinion. The confirmation letter and/or the related requested information is of such importance to the formation of the auditor's opinion that its absence is sufficient to warrant disclaiming an opinion. The Results of Audit section of the report would be worded as follows:

"(Contractor's name) refused to confirm whether the financial statements and cash flow forecast provided during the examination included the disclosure of the maximum liability of off-balance sheet arrangements and related party transactions (insert any related information the contractor refused to provide). We consider the contractor's failure to provide this confirmation to be a significant restriction on the scope of the examination. Because of the restriction on the scope of our examination, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on whether (contractor's name) has adequate financial resources to perform Government contracts in the current and near-term (up to one year)."

14-307 Opinion Criteria in Reporting on Contractor Financial Capability

a. Audit Opinions.

To report on financial capability, the auditor will express an opinion (in the results of audit) on the contractor's financial capability to perform on Government contracts. Figure 14-3-1 is a flowchart depicting the appropriate opinion to use when issuing a financial capability report. See 14-308 for modifications to the opinions for audits performed at the request of DFAS related to a contractor requesting an installment agreement. When a contractor is expected to be in financial distress, but has sufficient resources to operate in the

near term, the report will specifically address this condition and address any long-term implications. An assertion of substantial doubt about the contractor's financial capability to perform on Government contracts will be based on near-term (up to one year) expectations that the contractor will be under severe financial distress and have significant difficulty obtaining outside funding to continue performing on Government contracts. The determination that a financial distress situation exists should be based on professional judgment supported by a sufficient degree of audit evidence. Based on the conditions identified during the audit, the auditor will select and use verbatim, one of the following opinions. Following the opinion, it is appropriate to include additional detail supporting the opinion that addresses the specific contractor situation. However, the additional detail should not contradict the opinion (e.g., giving an acceptable opinion and then disclosing that the contractor has substantial debt that is not paid timely, indicating an unfavorable financial condition).

(1) When the audit discloses no financial distress (or relatively insignificant financial distress) and no indications of significant long-term problems, the contractor's financial capability is considered adequate (however, see paragraph (4) below where nonmajor contractors do not prepare a cash flow forecast for our evaluation). In this case, the audit opinion would be worded “In our opinion, the contractor’s financial condition is acceptable for performing government contracts. Our examination of (contractor’s name) financial capability disclosed that it will be capable of performing on its Government contracts in the near-term.”

(2) When the contractor is experiencing financial distress (near-term) but management can, through extraordinary action (such as loans, liquidation of assets, or sale of stock), provide adequate funds to continue performing on Government contracts, the audit opinion must state that the contractor's financial capability is considered unfavorable for the near-term. The opinion would be worded “In our opinion, the contractor is in an unfavorable financial condition. Our examination of (contractor's name) financial capability disclosed that it may have difficulty meeting its near-term financial obligations and may not be capable of performing on its Government contracts without extraordinary management actions.” This condition is reported because the contractor's financial distress in the near-term could affect the contractor's ability to continue receiving external funding. The results of audit will summarize the unfavorable conditions and management's plans to mitigate these conditions. The auditor should include the appropriate recommendations discussed in 14-307c. Specific details on audit findings may be included in the report appendixes.

(3) When the contractor is experiencing financial distress and there is reasonable doubt that the contractor will be able to obtain necessary funds to continue performance on Government contracts, the auditor’s opinion on the contractor's financial capability is adverse. The opinion in this case is worded “In our opinion, the contractor’s financial condition is adverse. Our examination of (contractor’s name) financial capability disclosed that there is a substantial doubt that the contractor will be financially capable of continuing to perform on Government contracts.” The results of audit paragraph will summarize the adverse conditions and management actions taken to mitigate these conditions. The auditor should include the appropriate recommendations found in 14-307c. Specific details on audit findings may be included in the report appendixes.

(4) A financial capability report with an acceptable opinion cannot be issued for nonmajor contractors that do not provide a cash flow forecast for our evaluation, even though the performance of detailed audit steps did not show signs of financial distress in the near term. In this case, a financial capability report disclaiming an opinion should be issued in accordance with the guidance in 10-200.

b. Audit reports at parent locations

The audit opinion will generally address the financial condition of the company as a whole. The Results of Audit should be modified for each opinion, noted above, to state that “Our examination of the financial capability of (contractor’s name) disclosed…” In those instances, where applicable, the auditor should identify any subsidiary with signifi-

cant Government contracts that is experiencing financial distress that is not being adequately monitored and financially supported by the parent and could impact performance on a Government contract.

c. Recommendations for the ACO

The following paragraphs provide the auditor with recommendations for the ACO to consider, given the seriousness of conditions discussed in 14-307a.(2) and (3). In addition to these recommendations, the auditor should advise the ACO to selectively scrutinize future progress payments requested by the contractor to ensure that they are computed in accordance with contract terms. The auditor should also report any known weaknesses in the contractor's billing procedures which would necessitate a restriction of contract financing through progress payments (see 14-200). The existence of financial distress greatly increases the Government's risk regarding billings. Consequently, the scheduling of a billing system audit should be considered.

(1) If the audit report contains an unfavorable opinion, the auditor should recommend to the ACO that the contractor be required to submit periodic status reports (e.g., monthly, quarterly, or semi-annually depending on the severity of the situation) covering the contractor's plans for mitigating the unfavorable financial conditions. The status report should include such relevant information as cash flow projections, efforts to obtain financing, status of compliance with existing loan/line of credit covenants, efforts to reduce cost, sale of assets, sale of stock, updates of significant contract estimates at completion, and status of sensitive litigation.

(2) If the audit report contains an adverse opinion, the auditor should recommend that the ACO take action to protect the Government's interests. The auditor should also recommend to the ACO that the contractor be required to submit a status report monthly (until the adverse conditions are corrected) which covers the contractor's plans for and progress towards mitigating the adverse condition.

(3) If a financial capability audit report with an unfavorable or adverse opinion is issued on a corporate subsidiary, the report should include a recommendation that the ACO obtain a guaranty from the parent corporation for the performance of all Government contracts awarded to the corporate subsidiary.

14-308 Financial Capability Audits Requested by DFAS for Contractor Installment Agreements

a. In accordance with DoD Financial Management Regulation, Volume 10, Chapter 18, when a debtor to the U.S. Government can establish sufficient justification, a series of installment payments may be approved by DFAS which will ensure liquidation of debt within a reasonable time frame. When contractors anticipate having financial difficulty repaying the debt, the contractor may approach DFAS for a repayment installment plan. Prior to approving the installment agreement, DFAS will likely request DCAA to perform a financial capability audit taking into consideration the proposed installment payments to ensure that the contractor has the financial capability to repay the installments.

b. DCAA and DFAS have coordinated and developed a procedure where DCAA will provide assistance to DFAS on the analysis of contractor financial capability for installment agreements totaling $50,000 or more. The procedure is as follows:

(1) The contractor submits a request to DFAS for an installment agreement on debt owed of $50,000 or more.

(2) DFAS provides the contractor with a proposed monthly payment amount. DFAS informs the contractor of the pending DCAA audit and requests the contractor to provide its financial statements for the past three years and a 12-month cash flow forecast reflecting the proposed monthly installment amount.

(3) The DCAA Financial Advisor at DFAS Columbus will advise DFAS which DCAA FAO is cognizant of the subject contractor.

(4) DFAS submits a request for a financial capability audit to the cognizant DCAA FAO. The audit request will include the contractor financial statements for the past three years and the 12-month cash flow forecast reflecting the proposed installment amounts.

(5) The cognizant FAO will perform a financial capability audit on the contractor, address the report to the requestor at DFAS, and include on the distribution the ACO and the DCAA FLA at DFAS Columbus.

(6) DFAS uses the information in the DCAA audit report to make a determination if the proposed installment agreement amount is acceptable.

(7) DFAS coordinates their decision on the installment agreement with the contractor.

c. When requested by DFAS to perform a financial capability audit on a contractor requesting an installment agreement, as background information, the auditor should check the contractor permanent files to determine the results of any recently completed financial condition risk assessment. Even if a risk assessment was completed in the past 12 months, a financial condition risk assessment should be performed. Moreover, after performing a risk assessment where no risk was found, continue the performance of a financial capability audit. The rationale for performing the financial capability audit is that the contractor has disclosed that it is experiencing financial difficulties to DFAS by its inability to repay in lump sum the debt owed the Government. The purpose of the audit is to determine whether the contractor has the financial capability to repay the proposed installment amounts. The audit will also determine what the contractor did with any overpayment on the subject contract and why it is currently not available to return the overpayment to the Government.

d. The financial capability audit will consist of performing a detailed financial condition risk assessment and audit as discussed in 14-304, 14-305, and 14-306. The contractor financial statements and cash flow projection used in the audit will be those provided by DFAS in its request for audit. The DCAA shell audit report for financial capability audits, tailored to reflect the request from DFAS and using the opinion paragraphs discussed below, should be used to report the audit results. A summary of reporting considerations for financial capability reports for DFAS installment agreements is shown in Figure 14-3-2.

(1) When the audit discloses no financial distress (or relatively insignificant financial distress) and no indications of significant long-term problems, the contractor's financial capability is considered adequate. The audit opinion that the contractor's financial condition is acceptable (see 14-307a.(1)) should be followed by the statement "…and should have the financial resources to make the proposed installment payments." In addition, if, while examining the contractor's financial statements and cash flow forecast, in the auditor's judgment, the contractor has other financial means of making the total lump sum payment to DFAS, these financial means should be disclosed in the report (for example: "Our examination of the contractor's financial statements as of (date) disclosed that the contractor has a cash balance of (insert amount), accounts receivable of (insert amount), and an available line of credit of (insert amount). We recommend DFAS discuss with the contractor the possibility of making the total lump sum payment of (insert amount) with these funds as an alternative to obtaining an installment agreement with DFAS. In our opinion, making a total lump sum payment will not place the contractor in an unfavorable financial condition.")

(2) When the contractor is experiencing financial distress (near-term) but management can, through extraordinary action, provide adequate funds to continue performing on Government contracts, the audit opinion must be qualified to state that the contractor's financial capability is considered unfavorable for the long term. The audit opinion would include the unfavorable opinion from 14-307a.(2) followed by the sentence "Through these extraordinary management actions, (contractor's name) should be able to repay the proposed installment amounts."

(3) When the contractor is experiencing financial distress and there is reasonable doubt that the contractor will be able to obtain necessary funds to continue performance on Government contracts, the auditor's opinion on the contractor's financial capability is adverse.

The audit opinion would include the adverse opinion from 14-307a.(3) followed by the sentence "Consequently, there is substantial doubt that (contractor's name) will be financially capable of repaying the proposed installment amounts."

(4) Since the contractor has requested an installment agreement with DFAS, the audit report should recommend that the contractor be required to submit future annual financial statements and cash flow forecasts covering the life of the installment agreement to DFAS and the contracting officer.

14-309 Financial Capability Reporting Requirements

a. Audit reports will be issued on all completed financial capability audits. The financial capability audit report should be prepared in accordance with 10-1200. If the contractor provided a cash flow forecast for our evaluation and our audit discloses no financial distress, the audit opinion should be worded as described in 14-307a.(1). The auditor needs to ensure the cash flow forecast used as a basis for supporting the audit opinion represents projections for a reasonable future time period (i.e., preferably 9 months or more, however, no less than 6 months in the future from the date of the audit report).

b. If reliance is placed on the work of others to reduce planned audit scope, the guidance in 4-1000 should be followed.

c. Coordination of and responsiveness to requested due dates is always important. However, greater emphasis and attention should be given to the issues whenever there is an indication of potential financial distress.

d. To ensure that all available facts have been considered, the auditor will discuss findings with the cognizant ACO and the contractor throughout the audit, especially as issues are identified. Other interested parties should be similarly kept abreast of audit progress, and special emphasis should be made to discuss any exception identified during verification of contractor data. The auditor will normally provide the draft report to the contractor at the exit conference, and a reasonable time will be provided for the contractor's written response. Top-level contractor management should be involved in important interim and exit conferences, especially when sensitive audit issues are presented.

e. The auditor will respond timely to customer requests to evaluate contractor submissions showing actions taken to improve financial condition. The auditor should communicate the results of these evaluations timely, in writing, to the customer. Depending on the circumstances, the written communication could be a follow-up report or a memorandum.

f. Draft audit reports on major contractors that contain an unfavorable or adverse opinion should be forwarded through the regional office to Headquarters, ATTN: PPD. for review prior to report issuance.

g. Financial capability audit reports will normally be addressed to the ACO. However, those financial capability audits requested by DFAS will normally be addressed to DFAS with a copy sent to the DCAA Financial Advisor at DFAS Columbus and the ACO.

h. Audit reports issued at the parent or corporate office will be provided to FAOs cognizant of the divisions, subsidiaries, and segments. In addition, this information should be forwarded to the cognizant contract audit coordinator (CAC) or group audit coordinator (GAC), as applicable.

Figure 14-3-1
Financial Capability Reporting Decision Flowchart

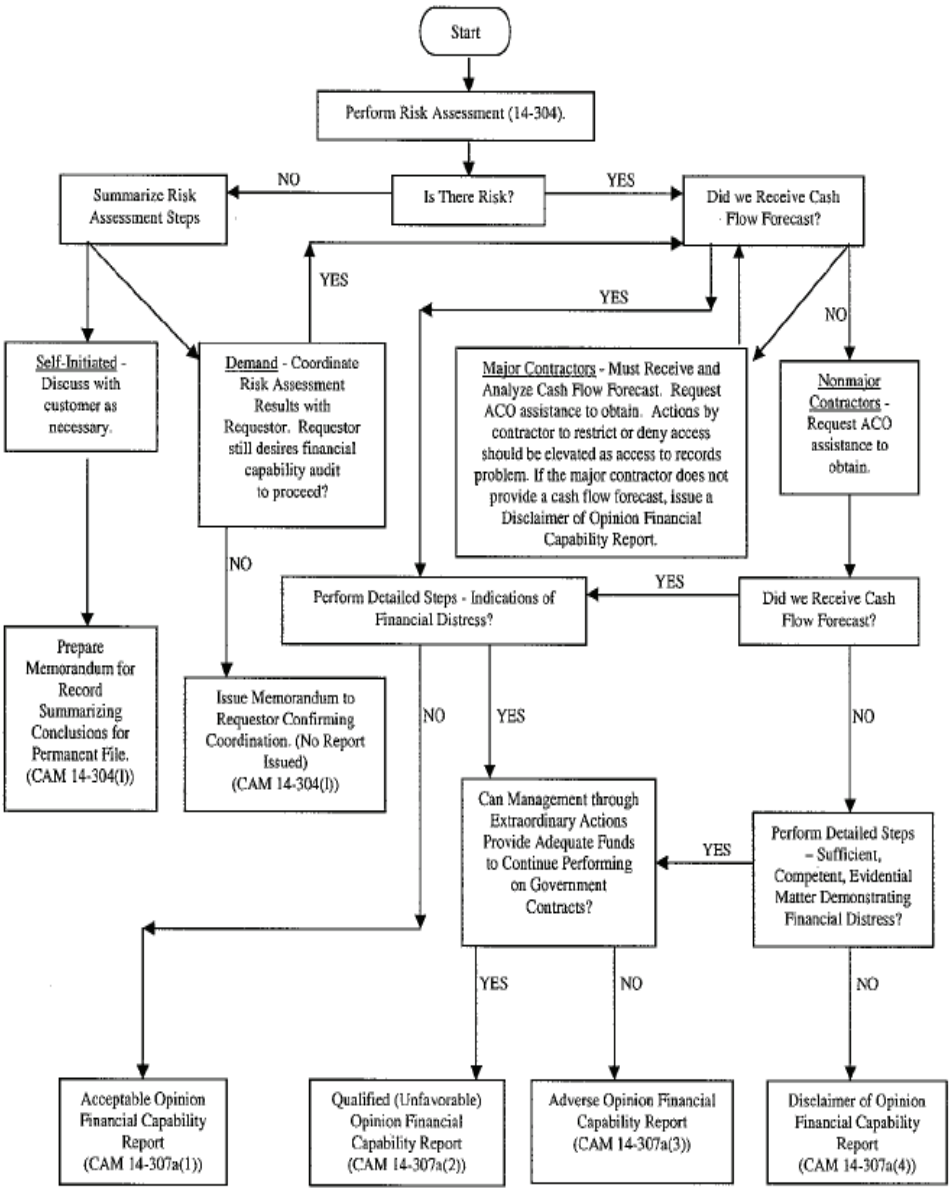

Figure 14-3-2
Summary of Reporting Considerations for Financial Capability Reports for DFAS Installment Agreements

Financial Condition	Ability to Make Payment	Report Comments
Acceptable	Can make lump sum payment without adversely affecting acceptable financial condition	Recommend DFAS discuss with the contractor the possibility of making the total lump sum payment with available funds as an alternative to obtaining an installment agreement with DFAS.
Acceptable	Can make installment payments without adversely affecting acceptable financial condition	Contractor should have the financial resources to make the proposed installment payments. The report should recommend that the contractor be required to submit future annual financial statements and 12 month cash flow forecasts covering the life of the installment agreement to DFAS and the contracting officer.
Unfavorable	Can make installment payments without further adversely affecting unfavorable financial condition, as long as extraordinary actions are taken	Contractor may have difficulty making the proposed installment payments, but should be able to make repayment if extraordinary management actions are taken. The report should include a recommendation that the contractor be required to submit future annual financial statements and 12 month cash flow forecasts covering the life of the installment agreement to DFAS and the contracting officer. The report should include a recommendation that the contractor be required to submit periodic status reports covering the contractor's plans for mitigating the unfavorable financial conditions (CAM 14-307c.(1)).

Figure 14-3-2

Financial Condition	Ability to Make Payment	Report Comments
Adverse	Substantial doubt that contractor can make installment payments	Contractor does not have the financial resources to make the proposed installment payments. (In these instances, DFAS will normally request immediate full payment of the debt amount.) The report should include a recommendation that action be taken to protect the Government's interests. The report should also include a recommendation that the contractor be required to submit a status report monthly (until the adverse conditions are corrected) which covers the contractor's plans for and progress towards mitigating the adverse conditions (CAM 14-307c.(2)).

Figure 14-3-3
Decision Table
Performing Financial Condition Risk Assessments and
Financial Capability Audits at Parent and Subsidiary Locations

Scenario	Who signs contract?	Access to Parent - Incurred Cost Performed at Parent	Parent guaranty	Cash sweep	Location to Perform Risk Assessment and/or Audit
1	Parent	√	**N/A**		Parent
2	Parent	√	**N/A**	√	Parent
3	Subsidiary				Subsidiary
4	Subsidiary		√		Subsidiary and abbreviated review at parent using publicly available data. Access to non-public parent pursued based on risk. *
5	Subsidiary			√	Same as Scenario 4 above.
6	Subsidiary		√	√	Same as Scenario 4 above.
7	Subsidiary	√			Parent and subsidiary.
8	Subsidiary	√	√		At parent since parent is guaranteeing subsidiary's performance.
9	Subsidiary	√		√	At parent, because parent's control of cash shifts subsidiary's cash dependence to parent.
10	Subsidiary	√	√	√	Same as Scenarios 8 and 9 above.

- Qualify the audit report for the lack of access to the non-publicly traded parent. Pursuit of access to records at the parent will be undertaken only if the parent is not publicly traded, total Government dollars at the subsidiary location(s) are significant, the parent sweeps cash or guarantees the subsidiary's performance, and the auditor has indicators of potential financial distress of the parent.

14-400 Section 4 --- Contract Audits of Government Property Including Government Furnished Property (GFP)

14-401 Introduction

This section covers contract audit responsibilities in connection with Government-owned property in the possession of contractors and subcontractors. It describes the various types of Government-furnished and contractor-acquired Government property, key contract regulations on such property, and the responsibilities of the Government property administrator. Related contract audit interests are divided into:

(1) considerations regarding Government property that fall within the ongoing audits of incurred costs and price proposals, and

(2) certain audits of Government property matters that are undertaken on specific request.

14-402 Types of Government Property

a. Government property in the possession of contractors may consist of:

(1) property provided or leased to the contractor by the Government, and

(2) property acquired by the contractor from other sources where upon acquisition title passes to the Government under terms of the contract.

b. Government property is further classified by FAR 45.101 and DFARS 245.301 into the following categories:

(1) equipment,
(2) real property,
(3) facilities,
(4) Government production and research property,
(5) material,
(6) nonseverable property, and
(7) agency-peculiar property,
(8) mapping, charting, and geodesy (MC&G) property.

c. Agency-peculiar property, as defined in FAR 45.301 and DFARS 245.301, may be furnished to contractors under a facilities contract, a supply or service contract containing the appropriate Government Property clause, or a special bailment agreement.

14-403 Contract Regulations on Gov't Property

14-403.1 Basic FAR/DFARS References

FAR Part 45/DFARS Part 245 contains the basic regulations regarding Government property in the possession of contractors. Both government and contractor responsibilities are set forth in this part. In addition, DoD 4161.2-M, DoD Manual for the Performance of Contract Property Administration, sets forth specific responsibilities of DoD personnel for the administration of Government property in the possession of the contractor.

14-403.2 DoD Policy on Furnishing Facilities

It is DoD policy to rely on contractors to furnish, to the maximum extent possible, the facilities necessary to perform a Government contract. Facilities includes Government property used for production, maintenance, research, development, or testing. It does not include material, special test equipment, special tooling or agency-peculiar property. Facilities having an acquisition cost of less than $10,000 shall not be provided to contractors unless:

(1) the contractor is operating a Government-owned plant on a cost-plus-fee basis,

(2) the contractor is performing onsite at Government installations,

(3) the contractor is a nonprofit institution of higher education or other nonprofit organization whose primary purpose is the conduct of scientific research,

(4) the contractor is performing under a contract specifying that it may acquire or fabricate special tooling, special test equipment, and components thereof subsequent to obtaining the approval of the contracting officer, or

(5) facilities are unavailable from other-than-Government sources. Facilities, as well as IPE and automatic data processing equipment, may be furnished to contractors as prescribed by FAR 45.302 and DFARS 245-302.

14-403.3 Use of IPE on Commercial Work

a. In conjunction with its use on Government contracts, commercial use of Industrial Plant Equipment (IPE) may be authorized by the contracting officer or contract provisions for no more than 25 percent of the total time available for both commercial and Government use during the contractor's normal work schedule. Commercial use in excess of 25 percent must have the prior approval of an Assistant Secretary of the Military Service or, where applicable, the Defense Logistics Agency Director. In addition, the approval authority may also be delegated to the head of a contracting activity, provided the redelegation is approved by the Office of the Assistant Secretary of Defense, Production and Logistics, Production Resources (OASD (P&L)(PR)).

b. When IPE items are no longer required for Government contracts, they will not be made available to the contractor solely for commercial use.

14-404 Government Roles in Audit of Government Property

14-404.1 Functions of the Gov’t Property Administrator

a. A single property administrator is designated for all contracts involving Government property at each contractor location. He or she is the Government representative primarily responsible for property administration, including the surveillance of the contractor's control of Government property. DoD 4161.2-M states procedures and techniques for the guidance of DoD personnel engaged in the administration of Government property in the possession of contractors. DoD 4161.2-M also provides guidance as to specific functional areas requiring consideration and surveillance by the property administrator.

b. As stated in DoD 4161.2-M, the property administrator is responsible for approving the contractor's property control system and for examining its actual application. In accomplishing his or her duties, however, the property administrator is to recognize the responsibilities of other Government personnel and obtain their assistance when required.

14-404.2 Related Contract Audit Functions

a. The contract auditor and the property administrator have certain related responsibilities for Government property in the possession of contractors. As a generalization, the contract auditor is primarily concerned with contractors' financial records and controls of Government property related to claimed or proposed contract costs and prices. The property administrator, on the other hand, is primarily concerned with contractors' property records and controls related to the physical existence, custody, maintenance, safeguard, usage, rental, and disposition of Government property.

b. Since the auditor and the property administrator have a substantial common interest in the contractor's Government property records, discussions and close liaison are required to avoid unnecessary duplication and obtain optimum deployment of available Government personnel. The contract auditor will accept and make full use of the property administrator's review data and evaluation reports. Consistent with this use, the

auditor will develop a program of nonduplicative audit steps designed to accomplish DCAA areas of responsibility.

c. The auditor will be responsive to requests for assistance and advice to responsible Government activities on matters involving analyses of the contractor's financial books and records pertaining to Government property.

d. Contractor operations are audited on a comprehensive basis by purpose. The auditor will not perform a separate or special audit of property under an individual contract solely to permit the retirement of the contract files and records by procurement or contract administration offices. There is no requirement for an audit of the contractor's Government property records by the contract auditor as a prerequisite to the retirement of the property administrator's contract files and records.

14-404.3 Internal Audit Functions

The DoD internal audit organizations are responsible for auditing the property administrator's activities and for evaluating the system of Government property administration. Policies governing relationships with these organizations, including those concerning requests to assist them in these kinds of reviews, are stated in 1-400.

14-405 Contract Audit Objectives and Procedures

The following audit objectives and procedures regarding Government property apply at contractor locations where audits of incurred costs are performed on a recurring basis.

14-405.1 Preliminary Planning Steps

The DCAA auditor should ascertain whether the contractor's Government property accounting and control system has the current approval of the property administrator. Review the property administrator's approval report and obtain copies of

(1) the contractor's property accounting procedures manual,
(2) reports of the property administrator's surveillance of the property, and
(3) the internal audit reports issued by Government and contractor personnel.

This information should be used by the auditor in making an initial assessment of the extent of reliance to be placed on existing property controls and procedures and the extent of transaction testing to be undertaken.

14-405.2 Audit Programs for Material Costs

Contractors normally use the same procurement practices and material control systems for both Government-owned and contractor-owned materials. The audit functions for Government materials will, therefore, be integrated to the maximum extent with the overall audit of incurred material costs. The audit programs developed in accordance with the guidance contained in Chapter 6 will be used for the evaluation of those aspects of Government property activities which are the responsibility of DCAA.

14-405.3 Testing of Purchase Costs

The auditor will determine whether recorded purchase costs are properly claimed for reimbursement by the contractor by testing purchases of contractor-acquired Government property (facilities, materials, special tooling, and special test equipment) to see if the property was:

(1) required for contract performance,
(2) properly classified and acquired with the proper contractual authority,
(3) bought in reasonable quantities at prudent prices, and

(4) received, inspected, and entered accurately in the contractor's accounting records.

Consider the guidance in 14-600 relative to the evaluation of the contractor's capital asset acquisition program and 7-2106 on capital items as contract costs.

14-405.4 Evaluation of Material Handling and Usage

The evaluation of the contractor's stockage, issuance, and usage of Government material is the primary responsibility of the property administrator. The evaluation of these same functions for contractor-owned material used in performing Government contracts is the primary responsibility of the contract auditor. In those cases where the contractor uses the same system, procedures, and personnel for contractor-owned and Government-owned material, the auditor may test the effectiveness of each of these functions on a comprehensive basis by selecting transactions without distinction as to material ownership (see 6-300). The results of these tests may be applied to the functions as a whole.

14-405.5 Final Audit Reports

Prior to the issuance of a closing statement or final report on each cost-reimbursement type contract or subcontract, the auditor will review the contract to determine if potential credits may result from the disposition of Government property. If necessary, coordinate with the property administrator as to whether there are any credits relating to the quantity, condition, use and/or disposition of Government property that are to be applied to the total cost of contract performance. The auditor will use the information in preparing the contract audit closing statement.

14-405.6 Evaluation of Residual Materials and Intercontract Transfers

a. Transfers of Government materials between contracts and the disposition of residual inventories should be carefully evaluated. The contract auditor should assure that intercontract transfers of inventory and related costs comply with FAR 31.205-26 for inventory and costing purposes.

b. Audit recommendations for adjustments to contract cost, price, or fee should be considered:

(1) when residual materials from completed cost-reimbursement type contracts are transferred to follow-on incentive type contracts on a no-cost basis and such use was not anticipated, or

(2) when amounts of Government material authorized for use under the contract are changed significantly without any related contract price or fee adjustment.

14-405.7 Evaluation of Physical Controls

The evaluation of physical control of recorded Government property, both Government-furnished and contractor- acquired, is primarily the responsibility of the property administrator. The auditor will, however, be alert to any unauthorized or improper use of these items or to the existence of idle equipment. Such disclosures may arise from labor floor checks, physical inventory observations, plant perambulations, or other normally performed contract audit procedures. Where extensive repairs or maintenance activities are observed, the auditor will coordinate with technical personnel, as required, to determine whether such practices are necessary and result in reasonable costs to the Government.

14-405.8 Allocation of Depreciation and Rental Charges

a. Contractor-owned and Government-owned facilities and equipment may be used in a single cost center which performs Government and commercial work. In these cases, the contract auditor should carefully review the allocation of depreciation costs to Government and commercial work to ensure that it is equitable. If, for example, the Government-owned equipment is used wholly on Government work on a no-charge basis, and other similar items of contractor-owned equipment are used for commercial work, it may be proper to charge all the depreciation costs on such equipment to the commercial work.

b. Rental expense for use of Government-owned equipment and facilities on commercial work as authorized in the contract should normally be charged to such commercial work rather than be included as part of overhead allocated to both government and commercial work.

14-405.9 Use of Gov't Property on FMS

Prior to February 1, 1991, when authorized in the contract, rental expense for use of Government-owned equipment and facilities on foreign military sales (FMS) contracts were normally charged to such work. On February 1, 1991, DFARS 245.4 was changed to permit rent-free use of U.S. Government property on FMS contracts. In accordance with Public Law 101-165, the change was made retroactive to November 21, 1989. Because of the retroactive application of the policy, FMS contracts issued between November 21, 1989 and February 1, 1991 may have been overcharged. However, reimbursements for such overcharges are limited to the amount of rental use charge contained in the affected "Letter of Agreements" and must be approved by the contracting officer.

14-406 Government Property Audits Upon Specific Request

14-406.1 Audit of Contractor Reports on Gov't Property

The contractor is required by FAR 45.505/DFARS 245.505, to prepare and submit financial reports on the amount of Government-owned facilities and Government material in its possession. The auditor will evaluate these reports if specifically requested to by the contracting officer or property administrator.

14-406.2 Audit of Rental Charges for Use of Gov't Property

The Director, Defense Procurement, Acquisition Policy, and Strategic Sourcing (DPAPSS) issued a DoD Class Deviation on Use and Charges Clause. The class deviation is effective from September 6, 1996 through September 30, 1999, or until FAR Part 45 is revised to include these provisions, whichever occurs first. The detailed guidance can be found at 14-4S1. The deviation clause, guidance, and prescribed language is to be used in lieu of the clause at FAR 52.245-9 and its guidance and prescribed language at 45.202-1, 45.205(c), 45.302-6(c), and 45.403(a) and (b).

The clause makes the time property is actually used for commercial purposes the rental basis. This permits contractors to:

(1) obtain property appraisals from independent appraisers, and

(2) use appraisal-based rentals for all property.

This allows contracting officers to consider alternate bases for determining rentals. The rental policy changes are intended to encourage dual use of Government property. The guidance noted should be substituted where applicable below.

a. The monthly percentage rental rates for the facilities and equipment (including IPE) furnished a contractor are set forth in the Use and Charges Clause (FAR 52.245-9)

in the contract. The rates apply to the acquisition costs of the facilities and equipment, plus the cost of transportation to and installation in the contractor's plant, if such costs are borne by the Government. The contractor may, however, be authorized by the contract or by the contracting officer, in writing, to use the facilities and equipment on a no-fee basis for specific contracts, subcontracts, or other work. If any item is used during a rental period without authorization, the contractor is liable for the full period rental for such item without any credit for no-fee use. The Secretary concerned, however, may waive, in writing, the contractor's liability for such unauthorized use if he or she determines that circumstances would justify the waiver.

b. After the close of each rental period, the contractor submits to the contracting officer a written statement of use made of the facilities and equipment and the rental due the Government. The rental amount is reduced by a credit for no-fee usage during the rental period. The credit is computed by multiplying the full rental rate by a fraction in which the numerator is the amount of no-charge usage and the denominator is the total amount of usage during the rental period. The unit used in determining usage will be direct labor hours, sales, hours of use or any other equitable basis approved by the contracting officer.

c. The DCAA auditor will be responsive to specific requests from the contracting officer for the audit of contractor's rental statements. Generally, such requests will relate to the verification of:

- the basis of the rental computation, and
- the propriety of the procedures for controlling, recording, and reporting usage in accordance with contract provisions.

In accomplishing the requested audit, the results of facilities utilization reviews made by the property administrator will be appropriately used.

(1) A determination of proper rental amounts requires audit consideration of a variety of factors incorporated in facility agreements, including the proper base. The rates applied to base costs are set forth in the contract clause set forth in FAR 52.245-9. The auditor should determine that all facilities acquisition costs are in the base including leasehold improvements for which the Government holds title.

(2) The auditor should assure that the unit used to determine facilities utilization is equitable. The unit used should be representative of the actual facilities utilization, regardless of whether the usage is rent-free. Rent-free facilities should not be excluded from the base and included in computing the credit for rent-free usage.

14-406.3 Gov’t Property Audits at Other Locations

At contractor locations where incurred costs are not performed on a recurring basis, the DCAA auditor will audit Government property only upon the specific request received from the contracting officer or the internal auditor. Such audit assistance would relate to Government property areas similar to those outlined in 14-405 above. Where a large number of such requests are received and performance would have an impact upon accomplishing other audit workload, guidance will be requested from Headquarters.

14-407 Audit Discussions

Deficiencies or unsatisfactory conditions disclosed by the auditor should be discussed with the contractor to the extent necessary to assure the validity of the findings. Further, any adverse conclusions or recommendations for changes in the contractor's property procedures and controls will be discussed with the property administrator and included in the report to the administrative contracting officer.

14-408 Audit Reports on Gov't Property

a. Findings and recommendations relating to Government property will be reported as appropriate in system survey reports, audit reports on individual contracts, and in reports on significant functional areas.

b. Deficiencies requiring immediate attention and findings on significant functional areas involving Government property should be reported promptly in a separate report to the administrative contracting officer, with a copy to the property administrator.

c. Audit reports in response to specific requests from the administrative contracting officer or internal auditors will be addressed to the requesting office.

d. Where the property administrator requests DCAA assistance on a specific matter or problem, the response will be addressed to the property administrator, with a copy to the administrative contracting officer.

14-4S1 Supplement --- FAR 52.245-9

52.245-9 Use and Charges (Deviation)
Use the following clause when Government property and real property is to be used for commercial purposes:

USE AND CHARGES (APR 1984) (DEVIATION)

(a) Definitions.
As used in this clause-

Acquisition cost means the acquisition cost recorded in the Contractor's property control system or, in the absence of such record, the value attributed by the Government to a Government property item for purposes of determining a reasonable rental charge.

Government property means property owned or leased by the Government.

Real property means land and rights in land, ground improvements, utility distribution systems, and buildings and other structures. It does not include foundations and other work necessary for installing special tooling, special test equipment, or equipment.

Rental period means the calendar period during which Government property is made available for commercial purposes.

Rental time means the number of hours, to the nearest whole hour, rented property is actually used for commercial purposes. It includes time to set up the property for such purposes, perform required maintenance, and restore the property to its condition prior to rental (less normal wear and tear).

(b) General.

(1) Rental requests must be submitted to the administrative Contracting Officer, identify the property for which rental is requested, propose a rental period, and calculate an estimated rental charge by using the Contractor's best estimate of rental time in the formulae described in paragraph (c) of this clause.

(2) The Contractor shall not use Government property for commercial purposes, including Independent Research and Development, until a rental charge for real property, or estimated rental charge for other property, is agreed upon. Rented property shall be used only on a non-interference basis.
(c) Rental charge.

(1) Real property and associated fixtures.

(i) The Contractor shall obtain, at its expense, a property appraisal from an independent licensed, accredited, or certified appraiser that computes a monthly, daily, or hourly rental rate for comparable commercial property. The appraisal may be used to

compute rentals under this clause throughout its effective period or, if an effective period is not stated in the appraisal, for one year following the date the appraisal was performed. The Contractor shall submit the appraisal to the administrative Contracting Officer at least 30 days prior to the date the property is needed for commercial use. Except as provided in paragraph (c)(1)(iii) of this clause, the administrative Contracting Officer shall use the appraisal rental rate to determine a reasonable rental charge.

(ii) Rental charges shall be determined by multiplying the rental time by the appraisal rental rate expressed as a rate per hour. Monthly or daily appraisal rental rates shall be divided by 720 or 24, respectively, to determine an hourly rental rate.

(iii) When the administrative Contracting Officer has reason to believe the appraisal rental rate is not reasonable, he or she shall promptly notify the Contractor and provide his or her rationale. The parties may agree on an alternate means for computing a reasonable rental charge.

(2) Other Government property. The Contractor may elect to calculate the final rental charge using the appraisal method described in paragraph (c)(1)of this clause subject to the constraints therein or the following formula in which rental time shall be expressed in increments of not less than one hour with portions of hours rounded to the next higher hour-

$$\text{Rental charge} = \frac{(\text{Rental Time in hours})(.02 \text{ per hour})(\text{Acquisition Cost})}{720 \text{ hours per month}}$$

(3) Alternate methodology. The Contractor may request consideration of an alternate basis for computing the rental charge if it considers the monthly rental rate or a time-based rental unreasonable or impractical.

(d) Rental payments.

(1) Rent is due at the time and place specified by the Contracting Officer. If a time is not specified, the rental is due 60 days following completion of the rental period. The Contractor shall calculate the rental due, and furnish records or other supporting data in sufficient detail to permit the administrative Contracting Officer to verify the rental time and computation. Unless otherwise permitted by law, payment shall be made by check payable to the Treasurer of the United States and sent to the contract administration office identified in this contract or by electronic funds transfer to that office.

(2) Interest will be charged if payment is not made by the specified payment date or, in the absence of a specified date, the 61st day following completion of the rental period. Interest will accrue at the "Renegotiation Board Interest Rate" (published in the Federal Register semiannually on or about January lst and July lst) for the period in which the rent is due.

(3) The Government's acceptance of any rental payment under this clause, in whole or in part, shall not be construed as a waiver or relinquishment of any rights it may have

against the Contractor stemming from the Contractor's unauthorized use of Government property or any other failure to perform this contract according-to its terms.

(e) Use revocation. At any time during the rental period, the Government may revoke commercial use authorization and require the Contractor, at the Contractor's expense, to return the property to the Government, restore the property to its pre-rental condition (less normal wear and tear), or both.

(f) Unauthorized Use. The unauthorized use of Government property can subject a person to fines, imprisonment, or both, under 18 U.S.C. 641.

(End of clause)

14-500 Section 5 --- Operations Audits

14-501 Introduction

This section provides guidance on the audit of operations of major contractors. Additional assistance may be obtained from the Special Programs Branch of the Technical Audit Services Division (OTS). OTS maintains a database of positive operations audit findings titled Operations Audit Summary Information System (OASIS). A synopsis of the reported audit findings in a selected area may be obtained from OTS.

14-502 Audit of Operations of Major Contractors

14-502.1 Audit Plan

When evaluation of the factors influencing the extent and scope of the audit effort (3-104) discloses that the Government has a significant interest in a contractor's operation at any major organizational level, the audit plan should provide for continuous auditing of related areas of the contractor's management system. The audit plan should be developed in a manner to permit the timely accumulation and reporting of information in areas of cost that have managerial significance and will contribute to a more economical and efficient operation. It should be sufficiently comprehensive to accord broad coverage of the contractor's complete operations as they affect performance of Government contracts.

14-502.2 Audit Approach

a. That portion of a contractor's cost representations which indicate actual experience, generally is taken from the contractor's books of accounts which are the end product of the accounting system element of its internal control structure. The cost so recorded reflects the results of management policies and decisions and the degree of control exercised over operations and expenditures. On the principle that the whole equals the sum of its parts, it follows that data taken from books of account and other records may be accepted based on minimum or reduced verification and testing if costs and financial data are based on:

(1) prudent management policies and decisions,

(2) an efficient organization reflecting effective management control over operations, and

(3) a sound and reliable system of accumulating accounting and financial data.

b. Predicated on this principle, the total audit concept places major emphasis on the degree of prudence exercised by management in establishing policies and making management decisions, methods of controlling costs, and the extent of reliance that can be placed on the accounting information and other financial data.

14-502.3 Audit Program (Operations Audit)

a. A basic requirement in the development of the audit program is an evaluation of the contractor's overall organization chart, the management policies, procedures, and controls developed for operations, and the accounting system and other records designed to control, record, and measure the results of operations. Typical areas of coverage are presented in Chapters 6 and 9, e.g. purchasing and subcontracting, bid estimating procedures, employee utilization, and indirect cost audits. From knowledge and understanding obtained from the evaluations, auditing procedures should be developed in such manner to provide a basis for repeated evaluations of the operations related to the overall plan and operations of the organization.

b. The audit program should be sectionalized to cover specific functions or areas of the contractor's operations and the various phases of the system as they relate to the accumulation and recording of accounting, financial, and other management data. The

auditing procedures to be applied under each of the sectionalized portions of the audit program should be logically arranged to enable an evaluation and reporting of the conditions found for each of the areas programmed.

14-503 Planning Considerations

a. The audit plan for major contractor operations is primarily designed to seek out and identify those areas where the contractor's practices are wasteful, careless, inefficient and result or may result in unreasonable costs and unsatisfactory conditions in performing Government contracts; and to report such matters to those responsible for taking action to correct or improve the condition.

b. FAR 31.201-3 defines ""reasonable" as it applies to the cost of performance of Government contracts. The responsibility placed upon the auditor to disclose unreasonable costs requires serious consideration and a clear understanding of the internal operations of the business, and the practices of the industry as a whole. The auditor should keep in mind that the interest of the contractor may not be compatible with the interest of the Government. For example, from the contractor's viewpoint it may be more prudent for the contractor to rent rather than purchase an item of equipment even if the action results in greater contract cost.

c. The auditing procedures need to be designed and applied in such a way as to provide the auditor with full knowledge of the methods by which the contractor controls its production and research; the bases for the contractor's make-or-buy decisions, including decisions relating to the specific components entering into the end item, and the acquisition of facilities and production equipment; the manner in which employees are recruited and in which materials are acquired; whether or not the employees and materials and facilities are effectively utilized; and what constitutes a reasonable level of expense. In short, the auditor should be in a position to know that expenses are necessary, that business practices are sound, and that actions are prudent and in line with established practices. Therefore, the auditor should be completely familiar with the basis upon which the management decisions are made by the contractor.

d. In terms of an audit technique, this approach must be geared to inquire into those management and operational decisions which affect the nature and level of costs being proposed and incurred under Government contracts. The knowledge gained forms the basis for constructive recommendations to improve the contractor's internal control structure and the economy and efficiency of contractor operations.

e. A procurement agency's special interest in certain areas of the contractor's operations should be considered in audit planning (see 3-104 and 4-103).

14-504 Conferences and Reports on Operations Audits

a. See 4-300 for guidance on entrance, interim, and exit conferences with the contractor.

b. Promptly after completing each operations audit, prepare and distribute a report in accordance with 10-400, regardless of findings. Shell reports are available for all operations audit assignment codes except follow-up audits.

c. Issue a follow-up report when the contractor agreed to take corrective action on reported cost avoidance but has taken an unusually long time (six months or more) without any effective action. The follow-up report should recommend that the ACO make further efforts to obtain the needed contractor corrective action(s). If there is a pattern of contractor failure to take corrective action in such cases, emphasize this fact in the report.

d. Also include the impact of cost avoidance recommendations as questioned costs in reports on audits of price proposals in accordance with the criteria in 9-308.

14-600 Section 6 --- Audit of Contractor Capital Investment Projects

14-601 Introduction

This section provides guidance for auditing the planning, budgeting, implementation and benefits evaluation of contractor capital investment projects.

14-602 General

a. Contractors have a responsibility to maintain their competitiveness and increase productivity through the efficient management of capital investment.

b. The capital budgeting process often involves long-term planning decisions for capital investments. The auditor, in conjunction with other members of the procurement team, has an excellent opportunity to assess these management decisions. In performing an operations audit of the contractor's capital investment program, the auditor should identify capital utilization and investment opportunities which may ultimately benefit the Government. Recommendations to contractor representatives and administrative contracting officers (ACOs) should emphasize the cost avoidance aspects of capital investments and look for fast-pay-back opportunities (capital investments which produce cost benefits equal to the original cash outlay over the shortest time frame); however, non-financial benefits such as improved quality, mobilization capability, and enhanced competitiveness should not be overlooked. For purposes of this section, a contractor's capital investment program includes areas such as make-or-buy decisions, ADPE acquisitions/leasing, equipment and building acquisitions/leasing, relocations, plant reorganizations and high cost research and test equipment, etc. Recommendations resulting from an operations audit of the contractor's capital investment program may be of particular value in the performance of special procurement studies, such as Should Cost Audits, since they often require audit of the contractor's capital investment program to insure that alternate manufacturing methods, equipment and procedures have been adequately considered for the specific procurement under consideration.

c. Contractor capital expenditures involve resource commitments which, in many instances, are irreversible. Therefore, it is essential that the contractor's capital investment policies and procedures provide management with prompt and comprehensive information on investment decisions. A reliable, logical and documented method of evaluation should be established by the contractor to ensure that broad company objectives are being considered and the proposed capital expenditures are prioritized. Contractor decisions in this regard are affected by a myriad of factors, some of which may not result in the most equitable treatment of Government work. For example, due to limitations on funds available for capital investments, the contractor might be required to choose between purchasing a piece of equipment for a commercial division or for a division working primarily on Government cost reimbursement type contracts. The contractor will undoubtedly attempt to produce increased profits and cash flow. Since the contractor will continue to recover its incurred costs in the Government division, it may be less inclined to increase the efficiency of that division. Thus, priorities should be audited carefully to ensure that the Government is afforded the benefit of the most economical and efficient capital investment options available to the contractor.

d. The contractor's written procedures for a capital investment program should provide for the following:

(1) A well-defined organization with established decision authority and responsibility for aggressively pursuing capital investment opportunities which will improve the efficiency of operations, affect long-term economies, and make timely identification and replacement of deteriorated and obsolete items.

(2) A systematic approach for auditing processes, organizations and methods, affecting improvements and detecting deteriorated, obsolete, and underutilized items.

(3) A standard procedure for identification of potential capital budgeting projects, estimation of project benefits and costs, evaluation of proposed projects, and development of the capital expenditure budget based on project acceptance criteria.

(4) A documented review and approval process which assures that the assumptions are correct, all relevant factors have been considered, and proposals are consistent with organization objectives.

(5) A systematic follow-up to insure that project implementation is prompt and within estimated costs.

(6) A system for tracking and comparing planned to actual benefits.

14-603 Methods for Evaluating Capital Investment Proposals

a. A capital investment evaluation system is necessary to ensure proposals are evaluated in light of organizational goals so that the most desirable investments are undertaken. The financial attractiveness of capital investment proposals must be judged by comparing the cost (investment) required with the benefit (increased revenues) expected.

b. The methods commonly used to evaluate capital investment proposals are presented below. Depending on circumstances, some methods are preferred over others. Auditors should refer to managerial accounting and financial text books for detailed descriptions as to how these methods are applied and ensure that the method selected by the contractor is appropriate to the circumstances.

14-603.1 Payback Method

The payback method is the most widely used approach to capital investment. It measures the length of time required for the flow of cash benefits produced by the investment to equal the original cash outlay, and is calculated by dividing the original cost by the annual cash savings. The resultant calculated payback period is usually compared to a predetermined payback period which is preferred by the company. This method is easy to use since it measures the project's desirability in terms of quick cash. However, it does not consider the time value of money or cash flows after the payback period.

14-603.2 Accounting Rate of Return Method (ARR)

The ARR method is frequently used. It evaluates a project by computing a rate of return on the investment using accounting measures of net income rather than cash flow, as used in all other evaluation methods. Annual project expenses are subtracted from annual revenues of the project; the resultant amount is divided by the project investment. The project investment (investment base) may be the initial cost or the average investment for the life of the project. Since depreciation is used in determining income, it is considered in this method. The ARR method is criticized because it totally ignores the timing of cash flows, the duration of cash flows and the time value of money.

14-603.3 Payback Reciprocal

This method is a simple way of estimating the internal rate of return. It is determined by dividing 1 by the payback period. It should be used only if cash flows are expected to be uniform and the life of the project is at least twice the payback period; otherwise the estimated internal rate of return is very poor.

14-603.4 Discounted Cash Flow Methods

a. All discounted cash flow methods are based on the time value of money, meaning that an amount of money received now is worth more than an equal amount of money received in the future. For example, if money can be invested at 6 percent and $100 dollars is invested now, it will accumulate to $106 dollars by the end of one year ($100 + ($100 X .06)). Thus $100 dollars received today is worth more than $100 dollars received one year from today. The time value of money is a very important concept involving compound interest.

b. To simplify the process of evaluating proposals using discounted cash flows, the assumption is often made that any cash flows or cost savings from a project occur at the end of an accounting period. Although the assumption is sometimes unrealistic, because a project may offer cash flows or cost savings throughout the year over its lifetime, the assumption simplifies calculations and allows the use of present value tables. The results obtained are usually close enough to those that might be obtained by more realistic estimates of the precise timing of cash flows.

c. Some technique for comparing present values is necessary. Accordingly, one of the discounted cash flow methods described below is preferred. However, the methods described above are acceptable provided substantially the same results are achieved.

(1) Net Present Value Method (NPV). Under the NPV method, all cash inflows and outflows are discounted at a minimum acceptable rate of return, which is usually the firm's cost of capital. The NPV is the difference between the present value of the project cash inflows and outflows discounted at the cost of capital. If the present value of cash inflows is greater than the present value of cash outflows, the project is acceptable. This method is simple to use and especially convenient for non-uniform cash flows since they are all discounted at the firm's cost of capital.

(2) Internal Rate of Return (IRR). The IRR is the interest rate that discounts an investment's future cash flows to the present so that the present value of those cash flows exactly equals the cost of the investment. It is not given; it must be computed. Once found, management can decide whether the rate is high enough to warrant acceptance of the project. Management must have a minimum acceptable rate of return in mind, below which projects are not acceptable. The IRR can be compared to the cost of capital which is typically expressed as an interest rate; an IRR greater than the cost of capital should be considered favorably by the contractor. The IRR method specifically addresses the time value of money and the timing of cash flows. Depreciation plays no role in the evaluation of projects.

(3) Profitability Index (PI). Other things being equal, larger investment proposals yield larger net present values. The PI is the ratio of the present value of the cash inflows to the present value of the cash outflows (present value of cash inflows divided by the present value of cash outflows) thereby providing a basis for comparison between projects of different sizes. The higher the profitability index, the more desirable the project in terms of return per dollar of investment.

14-604 Audit Objectives

The primary objectives of the audit are:

(1) to ascertain that the contractor has a reliable, efficient and cost-effective capital asset acquisition/leasing program;

(2) to report any significant deficiencies in the program or practices to responsible contractor and Government procurement representatives; and

(3) recommend improvements.

14-605 Audit Procedures

The audit procedures below are not intended to be all inclusive. They are designed to help identify those contractor capital investment areas where improvements are needed. These procedures include steps to determine whether the contractor has the necessary poli-

cies and procedures to identify and implement capital investments on a timely and cost-effective basis.

a. Review Board of Directors or other management level minutes for discussions on proposed and/or considered capital investments and ascertain rationale for acceptance or disapprovals. Be alert to circumstances where management may be so engrossed in improving the economy and efficiency of commercial segments that Government segments are not accorded adequate attention.

b. Examine contractor budgets and forecasts for information on capital investment planning.

c. Review budget committee minutes for proposed capital investments; ascertain company rationale for selection, alternatives, or rejection of acquisitions.

d. Scrutinize capital expenditures for equipment to be used primarily on Government contracts. Be alert for instances where capital equipment acquired for use on Government contracts is later transferred to a commercial division after the costs have been substantially recovered over a relatively short period of time.

e. Ascertain if the contractor's organization is staffed with personnel who have capital investment decision authority and responsibility.

f. Evaluate the contractor's capital investment program to determine that it provides for a continuing input regarding existing asset utilization and new investment opportunities.

g. Verify that there are established procedures for the preparation and documentation of economic analysis for all proposed capital investment projects.

h. Evaluate the economic analysis of selected investment proposals using the methods described in 14-603.

i. Determine if the contractor has performed studies to ascertain plant capability and whether consideration is given to making rather than buying, at less cost, if the contractor acquired additional equipment.

j. Determine whether the contractor is reviewing selected items of machinery and equipment for excessive down time which may indicate a need for overhaul or replacement.

k. Assure that the contractor is reviewing circumstances leading to production bottlenecks from an obsolete equipment perspective.

l. Ascertain if the contractor is reviewing large backlogs to assure that they do not result from insufficient capital equipment to meet the current level of business activity.

m. Determine whether the contractor is reviewing plant and equipment ledgers to establish the age of existing equipment and the frequency of its replacement.

n. Determine if the contractor is examining maintenance and repair costs for selected items of equipment and ascertain whether decisions are being made regarding the economy of continued repair as opposed to the long run economy of replacement.

o. Determine if the contractor's procedures for identifying deteriorated or obsolete equipment are effective and that recommendations for replacement are appropriately carried out.

p. Ascertain whether the contractor reviews usage records in order to determine if equipment is being fully utilized. Should extensive idleness exist, make certain the condition is noted for follow-up with the ACO/plant representative. A technical review should be requested to determine whether the equipment is excess to the contractor's needs.

q. Review the contractor's system for evaluating scrap and rework accounts to assure that such costs are not a result of improper or inadequate capital equipment.

r. Determine if the contractor is regularly reviewing procedures for controlling the handling of material, tools, and equipment to establish whether excessive losses may be averted by investment in an improved materials control system, e.g., counting devices, measuring devices, and material handling equipment.

s. Consult with contractor cost accountants and industrial engineers to determine if, they have submitted sound investment ideas which were not approved by management. Evaluate management's reasons for rejecting these ideas. Ideas with merit should be pursued with contractor management and the ACO.

t. Be alert for capital investment opportunities during perambulation.

14-606 Coordination with ACO

In view of the technical aspects involved in most capital investment reviews it is essential that audit plans be coordinated with the ACO (see 14-400 for Government property). Also, recommendations should be coordinated with the/ACO for technical feasibility as well as cost savings and increased productivity. A joint recommendation by the ACO's representative and the auditor will probably receive more favorable consideration by both the contractor and the ACO.

14-700 Section 7 --- Audit of Production Scheduling and Control

14-701 Introduction

This section contains audit guidance for the audit of the contractor's production scheduling and control, which comprise the basic system and management procedures for planning, scheduling, and control of the day-to-day operations and for the coordination of the material, labor, and facilities required. The contractor's system of production scheduling and control has a substantial impact on the cost incurred and therefore requires some attention. Evaluations of this kind must be closely coordinated with other Government personnel having responsibilities in this phase of the contractor's operations.

14-702 General

Production scheduling and control comprise the contractor's basic system and management procedures for planning, scheduling, and the control of the day-to-day operations and for the coordination of the material, labor, and facilities required. The contractor's system of production scheduling and control should provide for the continuous management control and appraisal of the work performed. The objective in the evaluation of the system is to determine whether the controls effectively enable the contractor to obtain and use material, labor, and facilities so that production goals and contract delivery schedules are met efficiently and economically. Duplication of the efforts of others should be avoided where possible, and full use should be made of the results of reviews performed by production specialists or other contract administration personnel. Where appropriate, the auditor's evaluation should be coordinated with other Government personnel having responsibilities in this phase of the contractor's operations.

14-703 Audit Objective

The objective in the evaluation of the system is to determine whether the controls effectively enable the contractor to obtain and use material, labor, and facilities so that production goals and contract delivery schedules are met efficiently and economically.

14-704 Audit Procedures

a. Evaluation of Organization. The auditor should obtain, where available, or prepare independently, organizational charts reflecting the contractor's operating elements engaged in production control activities. Based on evaluation, personal observations, and discussions with contractor personnel the auditor should determine whether:

(1) responsibilities for the various aspects of the production control have been assigned to organizational elements and specific individuals, and

(2) the various aspects of production control have been organized to promote efficient performance of these functions.

b. Evaluation of Procedures. The auditor should evaluate the production control activities for overall adequacy of coverage in the areas listed below:

(1) Preparation of master production schedules. These schedules should reflect the production period starting and completion dates for each manufactured component, subassembly, and final assembly so that plant delivery requirements can be established for raw materials and subcontract components. Master production schedules are also used for production control activities related to engineering labor, manufacturing labor, and facility requirements and utilization.

(2) Preparation and distribution of periodic production reports to management during contract performance. These reports should disclose the status of operations and areas of difficulty if established production goals are not being met.

(3) Revision of production and operational plans and schedules for contract changes and modifications processed during the period of contract performance. The prompt processing of revisions to production plans and schedules on the basis of such contract changes is an important factor in minimizing resulting additional costs.

14-705 Testing the Procedures

Guidance with respect to the evaluation of material and labor is in 6-300 and 6-400. The following paragraphs contain additional guidelines for testing procedures relating to production scheduling and control.

14-705.1 Material

The auditor should consider the audit steps listed below as the basis for developing an audit program:

a. Evaluate the procedures used for the preparation of detailed bills of material and other media which show the individual raw materials, common items, and purchased parts required for the end item; and evaluate the time schedules which indicate when these items are required at the production line.

b. Evaluate the reliability and timeliness of the procedures for the preparation of work orders, job orders, and other production authorizations. These authorizations are issued to production supervisory personnel as authority for work performance and usually contain a listing of materials to be used in the manufacture and assembly processes; any discrepancies between material requirements and the quantities actually received should be apparent.

c. Review the procedures for the coordination of procurement, engineering, manufacturing, and other functions within the contractor's plant to ascertain whether all problem areas with respect to delinquent deliveries by suppliers and subcontractors, substandard items, production breakdowns, quantity cutbacks, and specification changes are properly coordinated for management's attention and solution. Changes in decisions involving materials from in-house manufacture (make) to subcontract procurement (buy) without proper coordination may result in both the manufacture and procurement of the same item to meet a single requirement.

d. Review the production control reports prepared for management for the status and effectiveness of material operations. Those items which appear to deviate from the established norm should receive further emphasis.

14-705.2 Production Control Activities

The steps listed below should be considered for inclusion in the audit program:

a. Verify the effectiveness of the contractor's production control activities for material by selectively testing the application of these procedures to particular contracts and associated component parts.

b. Review the documentation of a number of selected items to ascertain whether requirements were properly determined and scheduled for either receipt or manufacture in accordance with the master production plan for the overall contract.

c. Trace the sequence of the selected items in b. above with the applicable documentation through production control and, for those items purchased, through procurement, receiving and inspection, storage, issue, and the manufacturing process. Ascertain whether the production cycle was accomplished in accordance with the established schedules and whether the schedules were properly developed. When the scheduled sequence of material was not timely, determine whether the delays were reported to management and whether action taken corrected the problem or whether the production schedule was revised.

d. When contract changes have occurred, evaluate the production control activities to determine whether timely and appropriate action was taken to revise the production con-

trol schedules and plans to accommodate the contract changes. Also determine whether the revised plans were furnished to all interested company activities as soon as possible so that the cost of contract changes could be kept to a minimum.

14-705.3 Progress Planning

This subparagraph makes reference to such terms as ""master release schedules," ""master plan," and ""engineering parts list." When these terms are used, the auditor should be aware that the specific terms may not be applicable to a particular contractor, but similar controls should be in effect, and the audit procedures will be equally applicable. The following audit steps should be considered as a minimum during the evaluation of the progress planning activity:

a. Evaluate the method used to transcribe or convert the data from the engineering package to the production planning report. Examine the controls and procedures for developing the data in the engineering package from which make-or-buy decisions are made.

b. Select a number of master release schedules related to the contract end item and compare with the corresponding engineering parts lists. When deviations exist, determine the reasons for the deviations and the effect on production, and ascertain the reasonableness of added costs required to make the changes.

c. Schedule the time phasing between the date the engineering package was received from the engineering section and the date the master release schedule was reproduced and distributed. Inordinate time lags should be evaluated, and further audit effort should be accorded those situations where significant differences exist between the planned time and the actual time experienced.

d. Determine whether all excess parts applicable to canceled assemblies are removed promptly from the engineering parts list.

e. Determine whether the production planning report is maintained on a current basis and contains additions and deletions resulting from engineering changes.

14-705.4 Release of Shop Orders

The procedures listed below should be considered for inclusion in the audit program:

a. Evaluate the contractor's procedures for:

(1) analyzing the data on the master release schedule (are the controls and methods used adequate for the preparation of shop orders),

(2) determining quantities to be produced on each shop order to provide lot costs on a timely basis, and

(3) coordinating the release of shop orders to ensure contract end items unit costs on a timely basis.

b. Select a number of completed shop orders and:

(1) Determine the propriety of the cost codes by comparing them with the master cost code.

(2) Schedule and compare the actual operation time with the standard time and investigate significant variances for shop overloading, production delays, and the effect of such delays or other failures to meet planned schedules.

(3) Determine causes and reasonableness of variations in actual production from scheduled production, such as :

(a) failure to receive materials on time,

(b) machine breakdowns,

(c) improper dispatching,

(d) nonavailability of special tools, or

(e) employee absenteeism.

(4) Review shop orders reflecting small unit quantity releases, emphasizing those units in which the relationship of setup time to actual production time appears disproportionate,

and review the contractor's efforts to determine economical lot size releases and the manner in which small lot sizes are consolidated for more economical runs.

(5) Determine that rework of defective materials received from vendors is properly authorized and approved.

14-705.5 Shop Forecasting and Loading

The procedures which follow should be considered for inclusion in the audit program:

a. Evaluate the procedures and methods used to determine production capacity, machine output, and shop loading. Determine whether the information made available for forecasting shop production is realistic. Review all reports, charts, and records used to compare the actual production loading with the forecast and determine whether the data used for the contracts under audit are current and reliable.

b. Compare the production load forecast charts with actuals for selected departments to determine the extent that peaks and valleys occur for the operation over an extended period of time. When production peaks and valleys persist, determine the action taken, if any, particularly if the situation is the result of loading factors.

c. Evaluate the loading factor used for machine utilization and compare with actual utilization records to determine the extent of machine idleness. Emphasis should be accorded idle time resulting from improper loading practices involving the more expensive machines. Further, consideration should be accorded idle machine time caused by factors such as repairs, employee absenteeism, nonavailability of tools or fixtures, or delays occasioned by untimely material deliveries.

14-800 Section 8 --- Advanced Cost Management Systems (ACMS)

14-801 Introduction

a. This section provides guidance concerning the effect of technological advancements in manufacturing on cost accounting systems and contractor's efforts to implement an Advanced Cost Management System (ACMS). As auditors evaluate costs incurred on contracts and evaluate estimates of costs supporting price proposals, they should be aware of the implications of technological modernization and ACMS.

b. ACMS can affect audits of costs incurred on contracts and estimates of costs supporting price proposals. Specific guidance related to these areas appears in Chapters 5, 6, and 9 with appropriate notations referencing ACMS. It is important to develop a better understanding of the contractor's manufacturing processes and monitor the trends in manufacturing practices and processes. Therefore, auditors should tour contractor manufacturing facilities periodically.

14-802 Description of Technological Modernization

Technological modernization involves the introduction or expanded use of automation in manufacturing processes. Technological modernization is not just a humanless, robotic, lights-out factory. It can be a gradual process toward a machine orientation of the factory floor. Examples are the use of common numeric control machines and machine cells and the evolution of technical processes that can reduce labor hours and equipment hours in developing a better product.

14-803 Indicators of Technological Modernization

Auditors should be aware of the following factors which may indicate the presence of technological modernization:

a. Changing cost patterns (e.g., a shift from direct to indirect costs).
b. Introduction of major new products and program requirements.
c. Increased competition.
d. Increased capital expenditures.
e. Introduction of new high-efficiency machines.
f. Introduction of islands of automation (i.e., computer-controlled sections of the manufacturing process with little or no human involvement).
g. Introduction of new technologies.
h. Introduction of new, more sophisticated information systems.
i. Increased expenditures for manufacturing and production engineering.

14-804 Effect of Technological Modernization

a. Some contractors are accomplishing substantial technological advancements on the factory floor. These advancements (in machinery, processes, and practices) can change how products are made and can cause changes to the flow of costs. Technological advancements should reduce the amount of direct labor. In addition, large expenditures are often required to purchase advanced equipment which can increase the amount of depreciation and consequently the overhead pool expense. Thus, if direct labor comprises the allocation base for the manufacturing overhead pool, a declining labor base combined with an increasing overhead pool will cause a significantly higher overhead rate.

b. As technology has evolved, cost accounting systems have not always kept pace. Technological advancements can highlight accounting system weaknesses that result in inconsistent and inequitable cost accounting representations and allocations. Accordingly, the effect of technological modernization on contract costs must be carefully evaluated.

c. If the cost accounting system does not keep pace, the following potential problems may increase costs to the Government:

(1) Products are not costed accurately.

(2) Costs are not allocated accurately.

(3) Existing products support the cost associated with developing future product technology.

(4) Improved manufacturing operations and technological advancements are not reflected in the cost estimating systems on a timely basis.

(5) The current accounting system does not support equipment/technological investment justification, i.e., savings beyond time and material, such as reduced cycle time, scrap, rework, and quality.

14-805 Definition of an ACMS

a. The main objective of an ACMS is to achieve better information to determine product cost so that management can make business decisions based upon more accurate information.

b. A fully developed ACMS is an integrated system which operates from one database and is capable of supporting cost management functions such as product cost reporting, performance measurement, investment justification, and life-cycle reporting (see below for additional discussion of terms). In most cases, ACMS initiatives are not a revolution; i.e., they are not developed and implemented overnight. ACMS initiatives, for the most part, are an evolution. Contractors will continue to evolve their accounting systems in various stages of progress during the journey to an ACMS. ACMS initiatives also encompass various accounting concepts, such as activity based costing (ABC), which focuses the assignment of costs to the activities of a business. The first stages of ACMS implementation can be as simple as a reexamination of cost pools and allocation bases.

c. Some points which are critical to understanding ACMS are identified as follows:

(1) Activities are those actions needed to achieve the goal and objectives of the function.

(2) Product cost reporting can be viewed as identifying the cost of performing significant activities of the business.

(3) The goal of performance measurement is to determine the efficiency and effectiveness of activities.

(4) The purpose of investment management is to identify, evaluate, and implement new activities, or alternatives for performing existing ones, to improve the future performance of the firm.

(5) Life-cycle costing is the accumulation of costs for activities that occur over the entire life cycle of a product, from inception to abandonment by the manufacturer and consumer.

14-806 Role of the Auditor

a. The auditor, in his or her advisory accounting capacity, should evaluate the adequacy and compliance of the proposed accounting change to implement an ACMS in accordance with current regulations using materiality and risk criteria. In fact, auditors should encourage contractor consideration of Government needs beyond minimum adequacy. Contractors, making changes for their own needs, are often receptive to considering customer needs that they could readily accommodate and which they might otherwise ignore.

b. The establishment of an early and effective dialogue between the contractor and the Government about the planned ACMS is essential to successful implementation. This dialogue should begin after the feasibility study but before the system design. At a minimum, contractors with CAS-covered contracts must notify the Government at least 60 days prior

to a voluntary change to an accounting practice (or on a mutually agreeable date) as required by FAR 52.230-6(a)(2). In the beginning, the contractor will typically brief the Government representatives about reasons for the change, description of the new system, the implementation plan, and the timetable for implementation. If the auditor hears about the proposed transition through alternative sources (for example, the company newspaper), the auditor should raise the question with the contractor as soon as possible.

c. Auditors should monitor the contractor's progress as the change evolves. Monitoring the transition progress entails meeting with the contractor for periodic briefings which focus on the system requirements and capabilities, implementation plans, and proposed timetable; fact-finding potential issues; discussing audit concerns; and recommending improvements on a timely basis. Auditors should be proactive and take the initiative to make the contractor aware that auditors are available for periodic progress briefings. In addition, if the internal auditors are not acting as members of the implementation team, DCAA auditors should take the initiative to consult with them on system auditability. When auditors discuss audit concerns and issues, they should address the ability of the system to operate in the Government contracting realm; for example, audit trails and system controls. Auditors should provide timely input as they foresee possible ramifications that could arise from the change.

d. It is the contractor's responsibility to design and develop the system. Monitoring the transition progress should not include the auditor becoming part of the creation and development process of the system. At no time should the auditor take on any specific responsibility for the system or give up future audit rights when the system starts to function.

14-807 ACMS IT Audit Approach

a. The best and most logical approach to auditing the sophisticated computer systems which underlie an ACMS is the establishment of a team comprised of cognizant FAO auditors (including the IT specialist), and, whenever appropriate, the regional IT auditor (with OTS serving as technical consultants). This team can then interface, under the overall leadership of the FAO manager, with the contractor's own implementation team. If support of the regional IT auditor is needed, that support should be brought into the process at the earliest possible time; i.e., when the contractor first notifies the Government of the approved plan for a new system. In this way, the IT auditor will be in a position to monitor significant contractor activities in this area throughout the change process. It is important for both the FAO auditors and the regional IT auditor to understand the fundamental concepts upon which the accounting system is based.

b. When a new cost accounting system is installed, the contractor must validate that the system is operating as designed and developed. The auditor should verify that the system is operating in an auditable and controllable environment. The most effective audit approach is to monitor the contractor's validation process and to coordinate with the contractor's implementation team and internal auditors, thereby avoiding unnecessary duplication of effort and maximizing resource utilization.

c. During periodic contractor briefings, auditors should discuss the design of the audit trail, discuss potential issues, and recommend improvements for the audit trail when appropriate. IT auditors can assist the FAO auditors in evaluating the reliability of system output by assessing the transaction processing and the controls over it. In addition, FAO auditors should also coordinate efforts with the contractor's auditors who will also be interested in the reliability of the audit trail.

14-808 Consistent Charging of Cost

a. The introduction of advanced manufacturing technology may make it possible for the contractor to directly identify machine-related costs normally charged as overhead expense (such as depreciation and machine maintenance costs) to the products using the services of the machinery. Consequently, similar costs may result in both indirect and di-

rect charges to final cost objectives which is a potential CAS 402 noncompliance. 48 CFR 9903.202 requires contractors to disclose/describe their accounting practices, including cost pool composition, associated allocation bases, and the charging of costs direct and indirect. The Disclosure Statement should also describe specific criteria and circumstances when costs are sometimes charged directly and sometimes indirectly. The Disclosure Statement then becomes determinative as to whether or not costs are incurred for the same purpose (see CAS 402-50(b)).

b. One objective of CAS 402 is to preclude overcharging of some cost objectives as may occur when similar costs are charged both directly and indirectly to final cost objectives. This can be accomplished by tracking the flow of parts through the manufacturing floor as a basis for determining what costs are being charged to those parts. In addition, the contractor can purify the affected cost pools to avoid double counting. Auditors should closely scrutinize the applicable section of the Disclosure Statement that deals with the contractor's criteria for defining the circumstances under which costs may be charged sometimes directly and sometimes indirectly. Auditors should verify that the disclosed practices are in compliance with CAS 402.

14-809 ACMS Pilot Tests

a. If the contractor determines to run the new ACMS simultaneously with the existing system as a test, it is important from both the Government and contractor perspectives that the contractor disclose the plan for dual systems as soon as top management makes the decision. As part of the disclosure the company can and should explain that the pilot system is a test, subject to change, and that the output is uncertain.

b. Output from the new system being run simultaneously as a pilot test meets the definition of cost or pricing data, even if the contractor does not plan to install the new system as part of its official accounting system but intends to use it only as a management tool. Compliance with the Truth In Negotiations Act (TINA) requires contractors to provide accurate, complete, and current cost or pricing data concerning a covered procurement. FAR 2.101 provides that ""cost or pricing data are more than historical accounting data; they are all the facts that can be reasonably expected to contribute to the soundness of estimates of future costs and to the validity of determinations of costs already incurred." It includes all data that have a bearing on price whether or not the data are used to construct the cost estimate or are thought to be important. Official estimating, accumulating, and reporting of costs will continue under the old, existing system while the new system is simultaneously used as a management tool. Timely contractor disclosure of the dual systems to the ACO/PCO will be the key to avoiding problems with the Truth in Negotiations Act.

c. For a contractor planning to install the new system as part of its official accounting system, CAS rules (FAR 52.230-2 and 52.230-5) would govern the change process and ensure that the Government is adequately protected during the transition process. Contractors will continue to estimate and report based upon the old system while simultaneously testing the new system. Subsequent to the change, the cost impact proposal will be used to adjust any contracts that were priced using the old system.

d. The auditor should be meeting periodically with the contractor to discuss the pilot system's implementation and progress. During those meetings one of the topics for discussion should be the new system's output. Disclosure by the contractor of the output in the format provided by the system should be sufficient. The auditor should then analyze the system output (i.e., evaluate system data, reports, and report format) with the contractor. Potential audit issues and recommendations should be discussed, including comments on the form system output should take to be useful for Government needs.

e. The contractor should reconcile the dual systems on an overall basis. The auditor should evaluate the contractor's reconciliation to determine if both systems are allocating the same total costs to contracts (costs per contract, cost structure, and allocation process may differ, but total costs should not). If the two systems are not reconcilable on an overall basis, auditors should inform the contractor, so that corrective action can be taken.

14-900 Section 9 --- Other Special Purpose Audits

14-901 Introduction

This section provides procedures and audit guidelines for certain special purpose audits which are infrequently encountered by the DCAA auditor. General audit procedures that are equally applicable to these audits are in other chapters of this manual.

14-902 Contract Audit Services for TRICARE

14-902.1 TRICARE Program Background

a. The Dependents' Medical Care Act (PL 84-569) provides in part for the establishment of a uniform program of medical and dental care for eligible dependents of members of the uniformed services. The act was amended by PL 89-614 to authorize an improved health benefits program and to extend health care benefits to retired members of the uniformed services and to eligible dependents of deceased, retired, and active duty personnel. Section 613 of PL 93-82, Veterans Health Expansion Act of 1973, expanded coverage to dependents of totally disabled veterans, living or deceased. In the 1980's, the search for ways to improve access to top-quality medical care, while keeping costs under control, led to several Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) "demonstration" projects in various parts of the United States. Foremost among these was the "CHAMPUS Reform Initiative" (CRI). Beginning in 1988, CRI offered Service families a choice of ways in which they might use their military health care benefits. Five years of successful operation and high levels of patient satisfaction convinced DoD officials that they should extend and improve the concepts of CRI, as a uniform program nationwide. The new program is known as TRICARE.

b. TRICARE is a regionally managed health care program for active duty and retired members of the uniformed services, their families, and survivors. TRICARE brings together the health care resources of the Army, Navy, and Air Force and supplements them with networks of civilian health care contractors.

c. Under TRICARE, seven managed care support contracts covering DoD's 12 health care regions were awarded to civilian health care contractors. Contracts are awarded for 5 years (1 year plus 4 option years). The Office of the Assistant Secretary of Defense (Health Affairs) sets TRICARE policy and has overall responsibility for the program. The civilian health care contractors are overseen by the TRICARE Management Activity (TMA), a part of Health Affairs. TMA has the responsibility for administering the TRICARE contracts.

14-902.2 Contract Audit Procedures

a. Contract audit services will be provided, upon contracting officer request, in accordance with applicable RFP or contract clauses and audit procedures contained in the applicable chapters of CAM.

b. Specific consideration will be given to the following areas when applicable to the contract audit:

(1) Administrative costs claimed by the contractor in its proposal should be evaluated and tested for allowability, reasonableness, and allocability to the program. A large part of the contractor's total administrative costs claimed will consist of allocated salary costs. The bases for allocation of the salary expenses and other elements of administrative costs claimed should be evaluated for propriety. The proposed administrative rate should be evaluated for overall reasonableness (compare it with the provisional amount authorized, the prior year's experience, etc.). Significant rate changes should be analyzed and their causes commented on in the audit report.

(2) Health care costs claimed by the contractor in its proposal should be evaluated for allowability, reasonableness, and allocability based on the auditor's knowledge of the contractor's basis of the estimate.

14-902.3 Audit Reports

Prepare audit reports in accordance with the applicable section(s) of Chapter 10, including any supplementary financial information required by the contracting officer.

14-903 National Guard Bureau Agreements with the States and Possessions

14-903.1 Background

a. The National Guard Bureau enters into training site agreements (TSA) between the Federal Government and the States and Possessions (including political subdivisions thereof) of the United States for the maintenance and operation of National Guard training facilities. Such agreements are awarded under the provisions of 10 U.S.C. Chapter 133 which provides for the acquisition, use, and maintenance of facilities needed for reserve component training. The agreements are usually cost-sharing arrangements which provide partial reimbursement of the costs incurred. The agreements are funding devices and are not written as contracts. They lack FAR clauses, including disputes and allowable cost provisions. The United States Property and Fiscal Officer (USP&FO) is the administrator for the Federal Government; the Adjutant General or equivalent official generally serves as the representative of the State or Possession.

b. In addition to the usual cost-sharing agreements, there are a limited number of facility construction or operation agreements which provide for direct payment by the Federal Government of the allowable costs. Under these agreements, no reimbursements are involved since the State does not disburse its own funds for costs incurred in performance. Certifying officers appointed by the States send approved payroll data and original copies of vendors' invoices through the administrator to the designated Air Force Accounting and Finance Center or Army Finance Center where payment checks are issued directly to the employees and vendors.

c. All State National Guard activities, including the Air National Guard Bureau activities, are under the jurisdiction of the National Guard Bureau, run jointly by the Departments of the Army and the Air Force.

14-903.2 Basic Audit Responsibilities

a. The use of DCAA audit services is at the option of the USP&FO. Audits will be made only when requested.

b. The DCAA auditor should coordinate visits to State National Guard units with the State audit office.

c. Audits will be performed in accordance with arrangements mutually agreed upon between DCAA and the USP&FO. Since the agreements are issued on an annual basis and are of relatively small dollar value, audits of the records at completion (end of fiscal year) will ordinarily suffice.

14-903.3 Audit Procedures

a. Prior to starting the audit, arrange with the USP&FO and/or the State National Guard representatives for access to the necessary records, vouchers, and supporting documentation.

b. Audit procedures in Chapter 6 will be used as a guide in the audit. The procedures may be modified to fit particular circumstances, however, the objectives of the audit are the same as in cost-reimbursement type contracts. If a concurrent audit of transactions

is not made, appropriate emphasis will be placed on the evaluation of the effectiveness of the contractor's internal controls.

14-903.4 Allowability of Costs

The allowability of costs will be determined on the basis of the terms and conditions included in the agreement.

14-903.5 Audit Reports

a. Upon request, a contract audit closing statement will be issued to the USP&FO as of the agreement completion date in accordance with 10-900. The Contractor's Release of Claims and Assignment of Refunds, Rebates, Credits, etc. is not required. Therefore, issuance of the contract audit closing statement should not be delayed for this reason. It should be noted, however, that the agreements prescribe the cost sharing of common-use space, and provide for disposition of net income derived from leasing facilities or from other arrangements.

b. Unallowable costs not previously reported will be set forth on DCAA Form 1, letter or audit report, as appropriate, and furnished with the contract audit closing statement.

14-903.6 Correspondence

Correspondence pertaining to agreements intended for either the State or the administrator may be mailed to the Adjutant General or equivalent official of the State concerned. When appropriate, the correspondence should be marked for the attention of the administrator (USP& FO). To expedite delivery in those instances where the respective offices are in different parts of the State, such correspondence may be addressed directly to the administrator and a copy forwarded to the Adjutant General or equivalent State official.

14-904 Contract Audits of Advance Payments

14-904.1 Background

Advance payments may be authorized by the Government. Funds authorized must be deposited in a special bank account and withdrawals must be closely supervised by the Government. The contractor is usually required by contract terms to furnish a periodic accounting of all funds disbursed from the special bank account.

14-904.2 Audit Responsibility – Advance Funds

Audits of advance funds will be made only when requested by the contracting officer.

14-904.3 Audit Procedures

The scope of the audit will be in accordance with generally accepted auditing procedures appropriate under the circumstances. Audit procedures to be considered include:

(1) Direct confirmation of the special bank account fund balance.

(2) Reconciliation of the confirmed bank balance with contractor's records and most recent statement of accountability of funds furnished the Government.

(3) Proof of the disbursement and deposit transactions reflected on bank statements with disbursement and deposit transactions shown in the contractor's records.

(4) Evaluation of the use of the funds withdrawn from the advance fund bank account to insure propriety thereof. Funds improperly used, including payments of unallowable costs, should be redeposited by the contractor.

(5) Determining whether Government payments are properly deposited within a reasonable time.

(6) Determining whether advances made to subcontractors are in accordance with basic agreements and are properly authorized and approved.

(7) Determining whether the amount of the fund is excessive considering the needs of the contractor to finance performance of the contract.

14-904.4 Audit Reports

Audit reports on advance funds will be prepared and distributed in the same manner as for progress payments (see 14-200 and 10-200).

14-905 Contract Audit Services for Nonappropriated Funds

14-905.1 Background and Authority

a. DoD Instruction 7600.6 establishes policies and procedures for audits of nonappropriated funds and related activities. Under this Instruction, DCAA is authorized to furnish appropriate audit services in connection with nonappropriated funds contracts.

b. The matter of reimbursement for such audit services will be based on the criteria set forth in DoD Instruction 7600.6.

c. The types of audit service that DCAA will render include

(1) the evaluation of price proposals where negotiated contracts, estimated to amount to $500,000 or more, are to be awarded on the basis of cost or pricing data submitted by the offerors,

(2) the audit of costs incurred under cost reimbursement or incentive type contracts, where the amount to be paid is, except for fee or profit, to be determined by cost incurred by the contractor, and

(3) on a limited basis, the evaluation of contracts that include clauses guaranteeing that prices will not exceed those offered other customers.

14-905.2 Audit Responsibility – Nonappropriated Funds

a. Price proposal evaluations and incurred cost audits in connection with nonappropriated fund contracts will be made only upon the specific request of the cognizant DoD component, for example, Office of the Secretary of Defense, Organization of the Joint Chiefs of Staff, a Military Department, or a Defense Agency.

b. Requests for audit service are to be sent directly to the cognizant DCAA regional office, except in overseas areas, where requests may be sent directly to the cognizant DCAA branch office.

14-905.3 Audit Procedures

The nature of the audit effort authorized for proposed awards and contracts financed by nonappropriated funds is similar to the service normally provided by DCAA with respect to contracts financed from appropriated funds. Consequently, audits involving nonappropriated fund contracts and proposed awards will be performed in accordance with the appropriate sections of this manual.

14-905.4 Audit Reports

Prepare reports for nonappropriated fund activities in accordance with the applicable section of Chapter 10. Generally the requesting official would be the appropriate addressee.

14-906 Special Audits Related to Government Rights in Inventions

14-906.1 Background

a. FAR 27.3/DFARS 227.3, Patent Rights Under Government Contracts, emphasize the necessity for the Government to be in a position to know and exercise its rights under the Patents Rights-Retention by the Contract Clause. The contracting officer or designated representative has the primary responsibility for maintaining the proper controls to assure timely reporting by contractors.

b. The patent rights clause entitles the Government to certain rights in inventions which are either conceived or first reduced to practice during the performance of a Government contract containing the clause. However, the Government may find itself in disagreement with a contractor on the question of whether an invention was actually conceived or reduced to practice under a Government contract. Resolution of these questions may depend on the ability to demonstrate that contract funds were applied to the development of the invention.

14-906.2 Contract Audit Responsibility

a. Field audit offices will be responsive to requests for contract audit services under the patent rights clause.

b. The audit request should provide the contractor's statement as to:

(1) the specific individuals involved in the conception of the invention,

(2) the time period during which the work was performed, and

(3) the reason the Government was not given license-free use of the invention.

14-906.3 Audit Procedures

a. The auditor should determine how the salaries of the individuals responsible for the invention were charged during the period involved.

b. An evaluation should also be made of the contractor technical reports issued in connection with the invention to determine if any individuals, other than those disclosed by the contractor, were instrumental in the invention development. The time charges of the additional individuals revealed should also be analyzed to determine the accounts or contracts to which their time was charged during this time period.

c. During the normal audit of the contractor's operations, the auditor should be alert to instances where the Government may not have received proper rights to contractor inventions. The auditor should advise the administrative contracting officer of the contractor's apparent failure to comply with the patent rights contract clause.

14-906.4 Audit Reports

Follow the guidance in 10-1200 in preparing the audit report.

14-907 Evaluations of Information Other Than Cost or Pricing Data in Support of Requests for Exception From Cost or Pricing Data Requirements

14-907.1 Background

a. The Federal Acquisition Streamlining Act of 1994 (FASA) changed the traditional exceptions (called exemptions prior to FASA) from the requirements of submitting cost or pricing data at FAR 15.403-1. FASA also added two new commercial item exceptions from submitting cost or pricing data. The Clinger-Cohen Act of 1996 [also known as the Federal Acquisition Reform Act of 1996 (FARA)] also changed the exceptions by combining the catalog or market price exception with the commercial item exception. In the past, exceptions were discretionary, now they are mandatory, i.e., cost or pricing data shall not be obtained if an exception applies. Any information requested from an offeror to support an exception is now categorized as "information other than cost or pricing data." Contracting officers, although still tasked with the responsibility of purchasing supplies and services at a fair and reasonable price, are instructed not to obtain more information than is necessary. A hierarchical preference for obtaining information is provided at FAR 15.402.

b. FASA eliminated the SF 1412, Request for Exemption from the Submission of Cost or Pricing Data, and provided an SF 1448, Proposal Cover Sheet, Cost or Pricing Data Not Required. As of January 1, 1998, as a result of the FAR Part 15 Rewrite, the SF 1448 was eliminated. FAR 15.403-5(b)(2) now provides that information other than cost or pricing data may be submitted in the offeror's own format unless the contracting officer requests a specific format and describes it in the solicitation. The SF 1411, Proposal Cover Sheet, Cost or Pricing Data Required, was also eliminated and the contracting officer may now require submission of cost or pricing data in the format indicated in FAR 15.408, Table 15-2—Instructions for Submitting Cost/Price Proposals When Cost or Pricing Data are Required; specify an alternate format; or permit submission in the contractor's own format. When using Table 15-2, the offeror is still required to summarize specific information on the first page of the proposal, some of which was previously provided on the SF 1411.

14-907.2 Audit Objective and Procedures

This section addresses all of the exceptions provided at FAR 15.403-1. FASA and Clinger-Cohen have provided the contracting officer maximum flexibility to determine that the price is fair and reasonable. Therefore, much of the standardization previously found in requests for exceptions, e.g., catalog or market price, is gone. The auditor's participation, and the amount of support provided, will be at the discretion of the contracting officer. However, the auditor has a responsibility to communicate to the contracting officer any information he or she has that may render granting an exception inappropriate. In accordance with 9-207, auditors may either perform examinations or applications of agreed-upon procedures on proposals supported by cost information other than cost or pricing data. Auditors may only perform applications of agreed-upon procedures on proposals supported only by price or sales data. The auditor must communicate with the requestor prior to starting the evaluation to ensure a clear understanding of the requested services. An acknowledgement letter is used to confirm agreement on the services to be provided (see 4-103d). Since the audit effort will vary from procurement to procurement, CAM does not provide detailed audit steps to be followed. However, sections 14-907.3 through 14-907.6 discuss the exceptions at FAR 15.403-1 to identify the requirements that must be met for each.

14-907.3 Adequate Price Competition

a. FAR 15.403-1(b)(1) discusses the requirements for granting an exception based on adequate price competition. Price competition is adequate if at least two responsible offerors, competing independently, submit priced offers that satisfy the Government's expressed requirement and if:

(1) award will be made to the offeror whose proposal represents the best value where price is a substantial factor in source selection; and

(2) there is no finding that the price of the otherwise successful offeror is unreasonable. Any finding that the price is unreasonable must be supported by a statement of the facts and approved at a level above the contracting officer.

b. Price competition will also be considered adequate even though only one offer has been received when certain criteria are met. The contracting officer must be able to reasonably conclude that the offer was submitted with the expectation of competition, for example, the offeror believed that at least one other offeror was capable of submitting a eaningful offer and that the offeror had no reason to believe that other potential offerors did not intend to submit an offer. The determination that the proposed price is based upon adequate price competition and is reasonable requires approval at a level above the contracting officer.

c. Price competition will also be considered adequate if price analysis clearly demonstrates the proposed price is reasonable in comparison with current or recent prices for the same or similar items, adjusted to reflect changes in market conditions, economic conditions, quantities, or terms and conditions under contracts that resulted from adequate price competition.

14-907.4 Prices Set By Law or Regulation

FAR 15.403-1(b)(2) discusses prices set by law or regulation. This includes pronouncements in the form of periodic rulings, reviews, or similar actions of a governmental body; or embodied in the laws that are sufficient to set a price. The contracting officer ordinarily does not require DCAA assistance to make a determination on this claim for exception.

14-907.5 Commercial Items

a. This exception is granted for an item that meets the commercial item definition in FAR 2.101, or any modification as defined in paragraph (3)(i) or (ii) of the commercial item definition that does not change the item from a commercial item to a noncommercial item. This exception also includes catalog or market price items. FAR previously defined commercial items as supplies and services regularly used for other than Government purposes and sold or traded to the general public in the course of normal business operations. The definition, now provided at FAR 2.101, has been significantly expanded. A commercial item means any item, other than real property, that is of a type customarily used for nongovernmental purposes and that:

(1) has been sold, leased, or licensed to the general public;

(2) has been offered for sale, lease, or license to the general public;

(3) has evolved from a commercial item that is sold or offered for sale as a result of technological advancement (even if it is not yet available);

(4) requires either modifications of a type that is customarily available in the commercial marketplace or minor modifications for unique Government purposes;

(5) or any combination of the above.

The definition now includes items with the potential to be offered for sale to the public, e.g., an item in the development stage, if the item evolved from a commercial item and if it will be available in the commercial marketplace in time to satisfy Government delivery

requirements. The definition also encompasses modifications if they are minor or customary in the marketplace; and ancillary services, like installation, training, or technical support and updates. The item could still meet the definition of a commercial item if a modification that is unique to the Government is made to a commercial item, if the modification is minor.

b. If an item meets the definition of a commercial item at FAR 2.101, it is excepted from the requirement to obtain cost or pricing data. A contract for a commercial item must be awarded as firm-fixed-price or fixed-price with economic price adjustment and is exempt from Cost Accounting Standards (CAS) coverage.

c. The determination of whether an item meets the definition of a commercial item is generally done in the presolicitation stage, through market research as detailed in FAR Part 10, which traditionally was prior to DCAA's involvement. However, the auditor sometimes is asked to assist the contracting officer in making this determination. Furthermore, after the commerciality determination has been made, the contracting officer may request our assistance in his/her determination of the reasonableness of the price. Various types of support the auditor can and has provided the contracting officer in the presolicitation and price analysis stages are:

(1) Verification of sales history to source documents,

(2) Identification of special terms and conditions for the commercial item,

(3) Identification of customarily offered discounts for the item,

(4) Verification of the item to an existing catalog or price list, and

(5) Verification of historical data for an item previously not determined commercial that the offeror is now trying to qualify as a commercial item.

d. If requested, our role is to support the contracting officer in granting a commercial item exception by verifying the information to the contractor's books and records or other sources of financial data such as surveys, financial studies, or audit history of the same or similar items produced by other suppliers. Sometimes there are many factors that go into this decision to which the auditor does not have access, for example, price history on the same or similar items produced by other offerors or other information obtained through market research. As previously stated, an item can be "of a type" customarily used for nongovernmental purposes. The commerciality does not have to be determined on the basis of the specific item being offered, rather whether the requirements can be met by an item "of a type" available in the marketplace. This gives the contracting officer considerable latitude in determining an item to be commercial. Therefore, the auditor is not in a position to state whether an item does or does not meet the requirements in the definition. In addition, the auditor should not state whether the price of the item is fair and reasonable. This is the contracting officer's responsibility as well. What the auditor can do is apply certain agreed-upon procedures to sales, price, or cost information, and report the results of those procedures to the contracting officer to assist in his or her decision-making.

14-907.6 Modifications to Contracts for Commercial Items

The exception at FAR 15.403-1(b)(5) applies when modifying a contract for commercial items. The standards for granting a commercial item exception at FAR 15.403-1(c)(3) also apply for modifications.

14-907.7 Waivers

a. FAR 15.403-1(b)(4) authorizes the head of a contracting activity (HCA) to waive the requirement for submission of cost or pricing data in exceptional cases. The FAR provides that the HCA may consider granting a waiver if another exception does not apply, but the contracting officer can determine that the price is fair and reasonable without submission of cost or pricing data. Only the HCA may grant a waiver, and this authority is nondelegable. For DoD contracts, the Director, Defense Procurement, Acquisition Policy, and

Strategic Sourcing (DPAPSS), issued guidance in February 2003, incorporating provisions contained in Section 817 of the National Defense Authorization Act for Fiscal Year (FY) 2003, regarding the granting of exceptional case waivers. The DPAPSS guidance requires that the granting of an exceptional case waiver shall be made only upon a determination that:

(1) the property or services cannot reasonably be obtained under the contract, subcontract, or modification, without the grant of the waiver;

(2) the price can be determined to be fair and reasonable without the submission of certified cost or pricing data; and

(3) there are demonstrated benefits to granting the waiver.

b. For purposes of subcontract pricing, a contractor or higher-tier subcontractor granted a waiver shall be considered as having been required to make available cost or pricing data. Consequently, award of any lower-tier subcontract expected to exceed the cost or pricing data threshold requires the submission of cost or pricing data unless an exception otherwise applies to the subcontract. The appropriate price reduction clauses at FAR Part 52 would be included in the prime contract for the purpose of flow down to the subcontract.

c. If the contracting officer is considering granting a waiver from cost or pricing data requirements, there are various types of support that the auditor can provide during the price and cost analysis stages, such as:

(1) verification of submitted data to source records,

(2) actual and negotiated contract unit price trends,

(3) unit price trends from other programs,

(4) trends of company profits,

(5) effects of accounting changes on historical cost comparisons,

(6) effects of contractor cost reduction initiatives on future costs,

(7) effects of significant inefficiencies or problems, and

(8) if parametric techniques were used, verification of inputs, outputs, and major cost drivers.

d. Auditor assistance to the contracting officer on waivers can be critical to ensure the Government obtains a fair and reasonable price absent cost or pricing data. In those cases where the auditor is aware of problems or issues that would significantly impact future procurements, he/she should be alert to future buys by maintaining contact with the Procuring Contracting Officer (PCO), and meeting with the PCO prior to issuance of the solicitation to offer DCAA's financial and advisory services.

14-907.8 Reports

a. Auditors may perform either examinations or applications of agreed-upon procedures on cost information other than cost or pricing data (see 9-207). Guidance in 9-210 and 10-304.6 should be used to prepare an appropriate opinion or to disclaim an opinion when an examination is performed. The support the auditors provide on information other than cost or pricing data, which is price or sales data, is an application of agreed-upon procedures. The application of agreed-upon procedures report will be issued with a disclaimer of opinion (see 10-1000). Since the auditor is not performing an examination, no opinion of any type should be given, including a qualified or adverse opinion.

b. Cost or pricing data are not required when an exception from cost or pricing data applies or a waiver is being contemplated. Therefore, there should be no reference in the report to cost or pricing data. However, contracting officers can obtain information other than cost or pricing data, which includes cost information, if required to determine the price reasonableness.

c. There should rarely be a need for technical assistance on these types of audits. Usually if a contracting officer believes that technical input is necessary to support the determination of a fair and reasonable price, the contracting officer can request that input directly from the technical specialist and provide the results to the auditor. When performing

applications of agreed-upon procedures, rather than become involved in obtaining technical assistance, the usual course of action for the auditor would be to suggest modifying the agreed-upon procedures. If the requestor will not modify the procedures, any restrictions or unavailability of technical assistance should be described in the report. However when performing applications of agreed-upon procedures, lack of a technical review will never result in a qualified opinion since we do not issue an opinion on these types of evaluations (see 10-1008).

d. The auditor should not express an opinion on whether an item qualifies for an exception from cost or pricing data requirements. For example, if requested to verify catalog or market price items, the auditor should only verify the information provided, not express an opinion as to whether the item meets the definition of a commercial item or qualifies for an exception. When catalog or market prices are used, the regulations no longer provide percentage guidelines nor define "substantial quantities." Therefore, the contracting officer will take the information the auditor has verified and the results of the market research and make the determination.

14-908 Compliance Audit for the Defense Security Cooperation Agency [DSCA]

14-908.1 Introduction

This section explains (i) the role of the Defense Security Cooperation Agency (DSCA) in foreign military financing and (ii) the auditor's role in evaluating contractor compliance with DSCA's financing terms and conditions under the Foreign Military Financing (FMF) Program. These terms and conditions are presented in the Contractor's Certification and Agreement signed by both the contractor and DSCA.

14-908.2 Types of Foreign Military Financing

a. DSCA's basic responsibilities are explained in its Security Assistance Management Manual (SAMM), DoD 5105.38-M. They include directing, administrating and supervising the Security Assistance Program. Included within the Security Assistance Program is the Foreign Military Financing (FMF) Program, which provides loans and financing for Foreign Military Sales (FMS) and Direct Commercial Contracts (DCC).

b. Foreign Military Sales. FMS encompasses Government-to-Government transactions as defined by the SAMM. The U.S. Government acts as the agent for the purchasing foreign government. DoD policy provides that procurements made for FMS will comply with Federal acquisition regulations and procedures, including audit oversight (see 7-1307).

c. Direct Commercial Contracts. Under a DCC, the sale of articles and services is between a U.S. firm and a foreign government. DCCs are financed with loans issued under the Arms Export Control Act. In consideration of receiving DSCA administered financing, the contractor agrees to comply with specific elements contained in a signed document titled "Contractor's Certification and Agreement with Defense Security Cooperation Agency (Certification and Agreement)." A DCC and Certification and Agreement are not subject to the FAR or Cost Accounting Standards. However, those contracts financed by a U.S. loan or grant administered by DSCA are subject to DSCA oversight.

14-908.3 General Oversight Requirements

a. The DSCA Guidelines state that on all contracts of $750,000 or more, the foreign government is required to contract with DCMA for contract administration. DCMA, with DCAA's assistance, will provide field pricing support, and monitor contractor performance to ensure compliance with the DSCA Certification and Agreement. Requests for field pricing support on direct commercial contracts from foreign governments are processed by DCMA Headquarters International and Federal Business Team. DCMA requests for field pricing support and interim oversight effort should be treated as reimbursable assignments.

b. In addition to receiving foreign government requests via the DCMA Headquarters, DSCA may directly request DCAA to evaluate and report on contractor compliance with its Certification and Agreement. These requests are processed through DCAA's financial liaison advisor assigned to DCMA Headquarters. Included as an enclosure to DSCA's request is the contractor's Certification and Agreement, relevant correspondence and audit leads. DSCA requests for DoD oversight services should be handled as nonreimbursable assignments.

c. The Certification and Agreement (element numbers 2 and 6) provides the U.S. Government the right to examine any of the contractor's directly pertinent books and records involving transactions related to the DCC. The right to examine contractor records expires three years after final payment under the contract. Therefore, if requested to perform a DSCA compliance audit, the auditor should plan to complete the examination before the right to access expires.

14-908.4 Audit for Contractor Compliance with Certification and Agreement

a. A memorandum issued by the DoD Comptroller on November 4, 1991 outlines the responsibilities of DSCA and DCAA regarding evaluations of direct commercial contracts. Only certain elements of the Certification and Agreement are subject to DCAA audit. Those elements are noted in the Agency's standard audit program for evaluating contractor compliance with its Certification and Agreement.

b. Contracts receiving DSCA financing and the applicable Certification and Agreements are not subject to the FAR, including its provisions on cost allowability. The allowability of costs will be determined on the basis of the terms and conditions included in the Certification and Agreement.

c. During the normal audit of the contractor's operations, the auditor should be alert to the risk of inappropriate shifting of costs between DoD contracts and direct commercial contracts financed through DSCA.

14-908.5 Reporting Results of Audit (DSCA)

a. Prepare the report using DCAA's audit report shell developed specifically for the DSCA compliance evaluation and the guidance in 10-1200. The report shell is available on the DCAA Intranet and the APPS.

b. Distribution of reports in response to specific requests from DSCA will be limited to DSCA. Reports issued in response to requests from DCMA should be addressed to DCMA and if there are findings, include DSCA Headquarters on distribution.

14-909 Evaluations of Other Transaction (OT) Agreements

14-909.1 Background

a. OTs are instruments other than contracts, grants, and cooperative agreements that are used to stimulate, support, or acquire research or prototype projects. OTs were authorized to encourage commercial firms to join with the DoD to advance dual-use technology and to broaden the technology and industrial base available to DoD. Unless otherwise provided for, OTs are not subject to the requirements of the acquisition laws and regulations established for contracts, including FAR, DFARS, and CAS.

b. Congress has authorized the following two types of OTs: Section 2371 Research OTs and Section 845 Prototype OTs.

(1) Section 2371 Research OTs. In 1989, Congress enacted 10 U.S.C. 2371, "Research Projects: Transactions Other Than Contracts and Grants," which authorized the use of OTs for basic, applied, and advanced research projects. It was enacted as a 2-year pilot program for the Defense Advanced Research Projects Agency (DARPA). The National Defense Authorization Act for Fiscal Year (FY) 1991 broadened the authority to include military departments and made the authority permanent. 10 U.S.C. 2371 prescribes that DoD fund-

ing should not exceed that provided by non-Government parties to the maximum extent practical (i.e., contractors should provide at least 50 percent of the costs for the research project). Section 2371 OTs may be referred to as "Consortium Agreements" (those issued by DARPA), "Cooperative Agreements Under 10 U.S.C. 2371" (used by the Military Departments), Technology Reinvestment Projects (TRPs) (issued between 1993 and 1995), and most recently, Technology Investment Agreements (TIAs). TIAs were originated by the Directorate of Defense Research and Engineering (DDR&E) and are intended to replace the consortium agreements and cooperative agreements under 10 U.S.C. 2371. The regulations governing the award and administration of TIAs are covered under the DoD Grant and Agreement Regulations (DoDGARs) Part 37. There is no significant difference in the types of agreements. OTs for research may be used when it is not feasible to use a standard contract, grant, or cooperative agreement. Section 2371 OTs are usually issued to a consortium consisting of commercial companies (including traditional DoD contractors), not-for-profit companies, and universities. When an OT is awarded to a consortium, one contractor is designated as the lead to coordinate on behalf of the consortium and takes on the primary administrative responsibility. The lead consortium member will normally serve as the Consortium Program Manager and the Consortium Administrator and performs such functions as preparing the consolidated consortium billings to the Government based on the individual billings prepared by the consortium members.

(2) Section 845 Prototype OTs. The National Defense Authorization Act for FY 1994, Section 845, augmented the OT authority for prototype projects directly relevant to weapons or weapon systems. Section 803 of the National Defense Authorization Act for FY 2001 provided clarification on the appropriate use of OTs for prototype projects. Section 803 states that any new OT entered into for prototype effort must have at least one nontraditional defense contractor participating to a significant extent, or at least one-third of the cost of the OT must be provided by the contractor, unless a waiver is granted by the senior procurement executive. Section 803 defines a nontraditional contractor as an entity that is neither subject to full Cost Accounting Standards (CAS) coverage, nor has entered into or performed on a contract in excess of $500,000 for prototype effort or basic, applied, or advanced research, within the past twelve months. The National Defense Authorization Act for FY2009, Section 824, extended the authority to use OTs for prototypes until September 30, 2010. Section 823 of the National Defense Authorization Act for FY 2006 amends the OT authority requiring a written determination by the senior procurement executive for prototype projects over $20 million, but not exceeding $100 million. For prototype projects over $100 million, a written determination from the Under Secretary of Defense for Acquisition, Technology, and Logistics is required along with congressional notification.

14-909.2 Audit Responsibilities

An agreed-upon procedures evaluation may be performed to assist the Agreement Officer in determining the reasonableness of the OT prior to award. However, the primary purpose of an OT evaluation is to apply agreed-upon procedures to determine compliance with the financial aspects of the agreement. In the event the requested scope is significant enough to warrant performing an audit, an opinion may be rendered. Specific objectives of the evaluation typically are to determine whether the contractor's (or consortium of contractors'):

- incurred costs follow the terms of the OT;
- billed costs comply with the terms of the OT; and
- cost share (contribution) amounts are being provided in accordance with the terms of the OT.

14-909.3 OT Documentation

a. Documentation in an OT differs from that found in a contract. Key documents often included in Section 2371 OTs, and to a limited extent in Section 845 OTs, are as follows:

(1) Schedule of Payments and Payable Milestones – generally includes a description of the payable milestones and dates, the consortium contribution amount by milestone, and the Government contribution amount;

(2) Funding Schedule – identifies the consortium members and their respective cost sharing amounts by the type of contribution (i.e., cash, IR&D, in-kind); and

(3) Business Status Report – includes status of contributions by consortium members and identifies incurred costs compared to forecasted expenditures identified in the program plan.

b. Other documents/information considered useful during the evaluation of a Section 2371 or Section 845 OT may include:

(1) Payable Events/Milestones Report – identifies accomplishment of the payable events/milestones; and

(2) Annual Program Plan Document – includes a description of the forecasted expenditures and describes the payable events/milestones.

c. Information contained in paragraphs a. and b. should be available at the individual consortium member location. However, if the information is not available at the consortium member company, contact the auditor at the lead contractor.

d. Other information considered useful during the evaluation of both Section 2371 and Section 845 OTs is as follows:

(1) Audit Access clause – This clause identifies the auditor (i.e., Government auditor or independent public accountant (IPA)) that has primary responsibility for evaluating compliance with the OT and the time period in which an evaluation can be performed. However, if the OT is cost type with anticipated payments in excess of $5 million and was entered into on or after June 19, 2003, see 14-909.4. If the OT identifies that an IPA will perform an evaluation, and has done so, the auditor should review 4-1000, "Relying on the Work of Others." The evaluation procedures should be adjusted as necessary to preclude duplication by building upon the work performed by the IPA. If the audit clause does not provide sufficient access for the auditor to perform the agreed-upon procedures, the auditor should work with the requestor to ensure adequate access is granted. Auditors are also requested to notify DCAA Headquarters, Pricings and Special Projects Division, of any access limitations encountered.

(2) Financial Management clauses – These clauses identify the accounting and billing requirements. OTs typically require that the contractor's accounting system comply with generally accepted accounting principles (GAAP) and that the contractor maintain adequate records to account for federal funds received under the agreement. The American Institute of Certified Public Accountants (AICPA) Audit and Accounting Guide titled "Audit of Federal Government Contractors," Section 2.46, Applicability of GAAP, states that GAAP provides little guidance for cost accounting purposes in the Government contracting industry. GAAP contains some guidance on cost measurement and assignment; however, it provides no guidance for cost allocations. Auditors should perform sufficient procedures on the contractor's cost accounting system to assure themselves that the accounting treatment for the OT results in a fair and equitable allocation of costs (see 14-909.5d.). DoDGARS 37.630 require a for-profit contractor to utilize the same agreed-to indirect rates for its cost-type TIAs as being used on its DoD procurement contracts.

(3) Cost Principles clause – This clause, if included, will identify the cost principles that are applicable to the OT.

(4) Pre-Award Costs clause – This clause, if included, will identify a dollar value and time period under which costs may be incurred to support the OT prior to the actual signing of the OT.

14-909.4 Applicability of Dollar Thresholds (Section 845 OTs)

a. 32 C.F.R. Section 3.8 gives DoD audit access to awardees' and subawardees' records on cost type OT agreements for prototype projects.

b. DCAA or an IPA (as identified in the agreement) shall have audit access for cost type OTs that provide for total Government payments in excess of $5 million (including options). The Agreements Officer has the discretion to include DoD access to records below this threshold. The dollar threshold applies to new solicitations issued on or after June 19, 2003 and may be applied to new prototype awards resulting from solicitations issued prior to that date. Cost type OTs include agreements where:

(1) payments are based on amounts generated from the awardee's financial or cost records;

(2) at least one third of the total cost is to be provided by non Federal parties; or

(3) financial or cost records/reports are required to be submitted to determine whether additional effort can be accomplished for the fixed amount.

c. DCAA will perform the audit if, at the time of the OT award, the awardee or subawardee is not subject to the Single Audit Act (see 13-207), and is performing a procurement contract that is subject to the FAR cost principles and/or to CAS.

d. If the awardee or subawardee is not performing a contract subject to the FAR cost principles and/or to CAS, either DCAA or a qualified IPA may perform the audit, as stated in the audit clause of the individual OT agreement.

e. In the event of a termination, DCAA will have access to fixed priced OT agreements in excess of $5 million if the agreement states that the potential termination settlement amounts may be based on amounts generated from cost or financial records.

f. Audit access deviations, both above and below the threshold, may occur. These will be documented in the agreement.

14-909.5 Audit Procedures

a. Accounting Treatment. Section 2371 OTs require that the contractor contribute at least 50 percent of the costs for the OT (contractor cost share). Although not mandatory, Section 845 OTs may also require a contractor cost share. All costs incurred in support of the OT, including both the contractor and Government cost share, should be accounted for consistently. OTs should be accounted for either solely as an IR&D project, or solely as direct effort (accounted for similar to a contract). FAR 31.205-18(e) states that costs incurred by a contractor, pursuant to cooperative arrangements that are entered into under Section 2371, should be considered allowable as IR&D if the work performed would have been allowed as contractor IR&D had there been no cooperative arrangement. While OTs are generally not subject to CAS, CAS-covered contracts receiving an allocation of IR&D costs would be affected if a portion of the OT were accounted for as an IR&D project. CAS 402, Consistency in Allocating Costs Incurred for the Same Purpose, requires that all costs incurred for the same purpose, in like circumstances, are either direct costs only or indirect costs only with respect to the final cost objective. The purpose of CAS 402 is to ensure that each type of cost is allocated only once, and on only one basis, to any contract or other cost objective. If the contractor accounts for the costs incurred under the OT partially as direct effort (final cost objective accounted for as a contract) and partially as indirect effort (IR&D project), then the contractor is in noncompliance with CAS 402. Auditors should follow 8-302.7 when deciding whether to report the noncompliance.

b. Cost Share. Cost share includes both cash and/or in-kind contributions. DoD Grant and Agreement Regulations (DoDGARs) 34.2 require that in-kind contributions may be in the form of real property, equipment, supplies and other expendable property, and the value of goods and purchased services directly benefiting and specifically identifiable to the project or program. Issues to consider when evaluating any claimed cost share include pre-agreement costs, indirect costs, prior IR&D cost, and in-kind valuation/usage.

(1) Pre-Agreement Costs – The auditor should verify that the amount claimed as cost share, whether it is cash or in-kind contributions, includes only cost incurred after the date of the OT, unless pre-agreement costs were authorized under the agreement. Costs incurred prior to entering into an OT are unacceptable for satisfying the contractor's required cost share. Costs incurred under current Government-funded research and development contracts, grants, or cooperative agreements, such as awards made by NASA, are also unacceptable for satisfying the contractor's cost share. This position is supported by the DoDGARs Section 34.13(a) and 37.545, which states that claimed cost share is unacceptable if it was either (1) included as a contribution under any other federally-assisted project or program, or (2) paid by the Federal Government under another award.

(2) Indirect Expense – The contractor may not claim, as a direct cost to the OT, an indirect expense that is more appropriately allocable to other cost objectives, for example, claiming depreciation expense on a current asset being used on the OT as a direct cost to the OT or claiming manufacturing product support as a direct cost, typically an indirect expense allocable to the programs using that specific production line. In both cases, a contractor's claim of an indirect expense as its cost share, separate and distinct from any appropriate indirect expense allocation to that OT, will represent unacceptable cost share. This practice may also result in a CAS 402 noncompliance and have an impact on the contractor's CAS covered contracts. A final cost objective must have charged to it (a) all of its direct costs, and (b) its allocable share of indirect costs. While the contractor may not claim as cost share any costs appropriately assignable to another cost objective as a direct or indirect expense, such as depreciation expense on a current asset, the contractor may claim a usage fee on fully depreciated equipment (see FAR 31.205-11(f), Depreciation).

(3) Prior IR&D Costs – IR&D costs incurred prior to the contractor being awarded the OT are unacceptable. On May 13, 1996, the Senate Armed Services Committee specifically addressed this issue in the U.S. Senate Report No. 104-267 addressing Research Projects: Transactions Other Than Contracts and Grants under the National Defense Authorization Act for Fiscal Year 1997. The report stated that the committee had intended that the sunk cost of prior research efforts not count as cost-share on the part of the private sector firms. Only the additional resources provided by the private sector needed to carry out the specific project should be counted. This position is consistent with policy issued by the DDR&E in its December 2, 1998 guidance, as well as guidance included in the Guide for Section 845 OTs for prototype projects.

(4) In-Kind Valuation / Usage – The auditor should apply procedures to evaluate the valuation of the in-kind contributions and determine if they are reasonable and/or allowable. This may require the assistance of technical personnel. The auditor also needs to verify that these in-kind costs are not being claimed (either directly or indirectly) on any other DoD contracts, grants, or cooperative agreements. Furthermore, the auditor should verify that any in-kind contributions were used on the OT. This may also require that technical assistance be requested.

c. FAR / DFARS. OTs are generally not subject to FAR or DFARS. However, if the award is a cost-type TIA with a for-profit contractor that has existing FAR and/or DFARS covered contracts it must use these same regulations for identifying allowable costs for the OT (DoDGARs 37.625). In addition, if the contractor accounts for the OT as an IR&D project and allocates those costs to Government contracts, the costs must comply with applicable FAR and DFARS provisions. Therefore, as part of the incurred cost audit of IR&D/B&P, auditors should ensure that any unallowable OT costs that are included in the IR&D pool have been properly excluded and have not been reimbursed under Government contracts. In addition, as part of the evaluation of a specific OT, auditors should ensure that the contractor equitably accounts for the Government payments as a credit to the IR&D account and should verify that only allowable unreimbursed IR&D costs are allocated to Government contracts.

d. Accounting Practices. OTs are sometimes awarded to contractors that already do substantial business with DoD. While it is expected that the contractor will use the same accounting system for Government contracts and the OT, the evaluation procedures should

determine if the same system was used. The auditor should perform the necessary steps to determine if incurred costs (i.e., direct labor, material, other direct costs, and indirect rates) were accounted for using the same accounting practices used to account for DoD contracts. Limited steps should be performed to determine the potential cost impact on other Government contracts if the contractor did not use its normal accounting practices (i.e., contractor did not use DoD approved indirect rates for the OT).

e. OT Billings. Government financing on an OT may be based on milestone payments or actual cost incurred. OT financing based on payable milestones may be structured in a manner that milestones need not be adjusted for actual expenditures (fixed price). Alternatively, the OT may require that milestones reasonably track with actual cost incurred (cost type). Under payable milestones, the consortium is entitled to bill for the milestone payment identified in the Schedule of Payments and Payable Milestones when it accomplishes an identified milestone. If the milestone payment schedule is subject to adjustment based on actual cost incurred, the auditor should compare billed costs by milestone to incurred costs by milestone, if possible, to determine if any significant differences exist. The auditor should also compare total billed costs to total incurred costs to determine if there is any significant difference in total. In the event that incurred costs differ significantly from the milestone payment amount, the Agreement Administrator may adjust future milestone payment amounts. Regardless of whether the milestone payment is subject to adjustment, the auditor should confirm, on a selective basis, that the milestone was accomplished and accepted by the Government prior to the milestone being billed. When evaluating a Section 2371 or Section 845 OT, the auditor should verify that the contractor used its DoD provisionally approved overhead rates, and when available, final negotiated overhead rates to report/record indirect costs. If the DoD approved rates were not used, auditors should determine, to the extent possible, the cost impact to the Government.

f. Preaward Evaluations. In the event the auditor is requested to perform a preaward evaluation of an OT proposal, the evaluation of the overhead rates should include an analysis of the contractor's anticipated workload. Depending on the significance of the proposed OT, the auditor should verify that the contractor has included the impact of the OT on its proposed overhead rates. The auditor should also comment on the proposed accounting treatment for the OT and identify whether the contractor estimated the OT costs in accordance with its procedures used to estimate costs on its DoD contracts. When the contractor estimates an OT as both an IR&D project and a contract, the guidance at 8-302.7 for citing a CAS 402 noncompliance should be followed.

g. Advance Agreements. FAR 31.109 encourages participants to negotiate advance agreements regarding cost treatment prior to the execution of certain financial instruments that include special or unusual costs. Various contractors may attempt to enter into advance agreements regarding their accounting treatment of the OT as it relates to CAS 402 requirements. Contractor requests for an advance agreement should be coordinated with the cognizant regional office. When requested to comment on OT advance agreements where the contractor plans to account for the OT costs as IR&D, the auditor should recommend that the advance agreement include a requirement for the use of the contractor's existing Government contract accounting system for accumulating the OT costs. Since the OT costs would be classified as IR&D, they would already be part of the contractor's government contract accounting system. Thus, the use of any other system to account for the OT costs would only increase the amount of contractor and Government resources needed to audit the costs being allocated to the other Government contracts.

h. Order of Precedence. In the event of a conflict between the terms of the OT agreement and other governing documents, the auditor should analyze the OT to determine if an order of precedence has been established. Precedence may be established for the DoDGARs, the articles of the OT, the attachments to the OT, or the consortium's articles of collaboration.

i. Additional Areas for Evaluation. In addition to the detailed discussion of OT evaluation areas identified above, auditors may be requested to perform any of the following steps. This list is not all-inclusive and evaluation procedures may be requested

that are not identified here. The auditor should also analyze the OT to identify any discretionary clauses and suggest the requestor include procedures to evaluate compliance.

(1) Accounting Changes. When the contractor has reclassified OT costs (i.e., direct to indirect), possibly as a result of an inconsistent accounting treatment, determine the cost impact on DoD contracts.

(2) Compliance with Other Regulations. Verify that the contractor's treatment of the OT is in accordance with OMB Circular A-110 or A-133, and DoD Directive 3210.6-R, DoDGARs.

(3) Consortium-Lead Costs. Verify that the consortium lead is not separately charging its administrative costs to the OT, unless specifically provided for. These costs are usually considered to be an indirect expense. In addition, the lead should not be allocating these costs to the lower level consortium members. If the inclusion of the OT administrative costs in the indirect cost pool results in a disproportionate allocation of indirect costs, then a special allocation in accordance with CAS 418, Allocation of Direct and Indirect Costs, may be appropriate.

(4) Cost Savings or Other Benefits Achieved. Inquire of the contractor whether any cost savings or other benefits were achieved as a result of being granted statutory/regulatory relief under the OT.

(5) Facilities Capital Cost of Money (FCCOM). Verify that the contractor is not inappropriately claiming FCCOM when it was not included in its preaward proposal.

(6) General & Administrative (G&A) Costs. Compare the proposed accounting treatment for the OT to the actual treatment being used. The contractor may have proposed all or a portion of the OT as IR&D effort. The contractor would not have applied G&A expenses to those costs. However, the contractor may be accounting for the OT costs as a contract and applying G&A.

(7) Government Property. Verify the existence of Government property.

(8) Interest. If advance payments are authorized, the OT may require that a separate interest bearing bank account be established to account for the Government funds. Any interest earned should be remitted annually to the Government. Identify whether the lead consortium member has earned interest on the Government funds for the specific OT, and if so, whether it was subsequently credited to the Government. This could result from the Government paying out funds to the lead consortium member, who in turn does not pay out the funds to the consortium members on a timely basis.

(9) Profit. Verify whether the contractor is inappropriately applying profit to the Section 2371 OT. Profit is normally not provided for under a Section 2371 OT for basic, applied, and advanced research.

(10) Program Income. Verify that income from such sources as royalties on patents and copyrights is being credited to the agreement.

(11) Special Clauses. Analyze the OT for any special clauses.

(12) Termination. Perform an evaluation on a terminated OT.

14-909.6 Evaluation Program

A standard program, 17900 Other Transactions (OT), for performing applications of agreed-upon procedures to both Section 2371 and Section 845 OTs is available on the APPS and DCAA's Intranet. Regardless of the type of OT being evaluated, the program should be tailored to meet the specific objectives of the evaluation to be performed. Additional tailoring will be required if it is determined that an examination will be performed.

14-909.7 Reporting

A report "shell" is available for reporting the results of the application of the agreed-upon procedures, for both Section 2371 and Section 845 OTs. This report shell should be modified, as appropriate, to reflect the scope and results of the evaluation being performed. The report shell, 17900 Other Transactions (OT), is available on the APPS and DCAA's Intranet. Auditors should also consider the guidance contained in 10-1000.

14-910 Performance-Based Payments (PBPs)

14-910.1 Introduction

a. FAR 32.1001(a) provides that PBPs are the preferred financing method when the contracting officer finds them practical, and the contractor agrees to their use. PBPs are not authorized for use in conjunction with other methods of contract financing except advance payments and guaranteed loans (FAR 32.1003(c)). PBPs may be based on:

(1) performance measured by objective, quantifiable methods;

(2) accomplishment of defined events; or

(3) other quantifiable measures of results (FAR 32.1002).

b. The procedure for establishing PBPs is a two-part process comprised of establishing the performance bases (events or criteria) and establishing the performance-based finance payment amount. A PBP amount may be established on any rational basis including (but not limited to):

(1) engineering estimates of stages of completion;

(2) engineering estimates of hours or other measures of effort to be expended in the performance of the event or achievement of a performance criterion; and

(3) the estimated projected cost of performance of particular events (FAR 32.1004(b)(4)).

14-910.2 Administration and Payment of Performance-Based Payments

FAR 32.1007(c) states that the contracting officer is responsible for determining what reviews are required for protection of the Government's interests when using PBPs. The contracting officer should consider the contractor's experience, performance record, reliability, financial strength, and the adequacy of controls established by the contractor for the administration of PBPs. Based upon the risk to the Government, post-payment reviews and verifications should normally be arranged as considered appropriate by the contracting officer. If considered necessary by the contracting officer, pre-payment reviews may be required. The contracting officer may also reduce PBPs when the contractor fails to comply with a material requirement of the contract, fails to progress on the contract, is in unsatisfactory financial condition, or is delinquent in payment of any subcontractor under the contract (FAR-32.1008).

14-910.3 Role of the Auditor

a. A user's guide has been developed to facilitate the establishment of performance-based events and PBP amounts. The guide instructs contracting officers to use DCAA and DCMA when establishing PBP events and values. The guide notes that representatives of DCAA and DCMA will have special familiarity with the program as well as with the contractor's operations and organization. This experience and familiarity can be a valuable asset for the contracting officer and the program office when selecting and defining appropriate PBP events. Contracting officers are encouraged to seek the input of DCAA and DCMA representatives and to build in their continuing involvement when negotiating and structuring performance-based events and PBP amounts. Finally, the guide notes that using all of the experience and specialized expertise of DCAA and

DCMA can often make a substantial difference in the practicality and success of a performance-based financing approach in a major contract activity. A copy of the PBP User's Guide in PDF format can be obtained at http://www.acq.osd.mil/dpap/Docs/PBPGuideNov2001.pdf.

b. Auditors and financial liaison advisors (FLAs) can provide valuable financial advice to those contracting officers and buying commands considering the use of PBPs. Since FAR 32.1007(c) makes the contracting officer responsible for determining what reviews are required when using PBPs, auditors should be fully responsive to requests from contracting officers for audit assistance in both pre-payment and post-payment PBP reviews. Auditors should acknowledge contracting officer requests in accordance with 4-103.

c. Pre-payment auditor assistance may be sought in establishing and valuing PBP events. PBP events should be established to allow the contractor a reasonably consistent cash flow during the period of performance. Enough PBP events should occur during contract performance to avoid long periods of no or insufficient cash flow for the contractor when the rate of expenditures is significant. PBPs cannot, in total, exceed 90% of the price of the contract or delivery item to which they apply (FAR 32.1004(b)(2)(ii)). Because the use of PBPs is limited to definitized fixed-price type contracts, the final payment (which will liquidate all prior PBPs) will occur only after the Government has accepted the contractor's performance.

d. Post-payment reviews may include verification of incurred costs on performance-based contracts. Although post-payment reviews of incurred costs will not impact previously negotiated PBP amounts, post-payment reviews can provide invaluable documentation and support to both the Government and the contractor in establishing PBPs on follow-on and/or future contracts. The objective of such reviews is to provide expenditure profile information required to ensure that PBPs established on future contracts are commensurate with the value of the performance-based event or performance criteria and do not result in an unreasonably low or negative level of contractor investment in the contract (FAR 32.1004(b)(3)(ii)).

14-910.4 Reporting

Audit reports will be issued on all completed PBP audits. The PBP audit report should be prepared in accordance with 10-1200 and addressed to the contracting officer who requested the audit. When the audit discloses materially adverse findings, these matters will be explained in detail. To ensure that all available facts have been considered in the conclusions, the auditor should contact the contracting officer, discuss the findings, and invite the contracting officer to the exit conference with the contractor (see 4-300).

14-1000 Section 10 --- Application of Agreed-Upon Procedures

14-1001 Introduction

a. This section contains guidance on the performing agreed-upon procedures engagements. An agreed-upon procedures engagement is one in which an auditor is requested to issue a report of findings based on specific procedures, agreed-upon by the auditor and requestor, performed on an assertion (usually a contractor submission) or a subject matter. An agreed-upon procedures engagement is appropriate for situations where the requestor wants information on a subject matter or assertion, generally relative to specific criteria, but does not require an opinion, recommendations or negative assurance. Instead, users of the report assess for themselves the procedures and findings reported by the auditor and draw their own conclusion based on the auditor's work.

b. Under Generally Accepted Government Auditing Standards (GAGAS), DCAA may perform an agreed-upon procedures engagement for any assignment if (1) the subject matter or assertion to which the procedures are to be applied is subject to reasonably consistent measurement, (2) the requestor and DCAA agree on the nature, timing, and extent of the procedures to be applied, including the criteria to be used and (3) the requestor assumes responsibility for the sufficiency of the procedures. GAGAS incorporate the Statements on Standards for Attestation Engagements (SSAE) Section 201 covering fieldwork and reporting on applications of agreed-upon procedures and the general attestation standard on criteria.

14-1002 Agreed-Upon Procedures

In an agreed-upon procedures engagement the requestor assumes responsibility for the sufficiency of the agreed-upon procedures since the requestor determines, based on their specific needs, what procedures should be performed. The auditor is responsible for carrying out those procedures. In planning an agreed-upon procedures engagement the auditor should:

- Understand the requestor's objectives,
- Understand the difference between appropriate and inappropriate agreed-upon procedures, and
- Establish an agreement with the requestor on the terms of the engagement.

14-1002.1 Understanding the Requestor's Objectives

a. Requests for DCAA services vary, depending on specific circumstances and customer needs. The auditor should inquire about the requestor's objectives and then discuss with the requestor the procedures which will accomplish those objectives. The auditor should clarify exactly what the requestor needs and structure the assignment appropriately. Other types of audit services may be more appropriate to satisfy the requestor's objectives. Requests for procedures that require the auditor to make determinations based on auditor judgment (e.g., reasonableness), or pro-

vide recommendations or opinions should not be performed as an agreed-upon procedures engagement. Agreed-upon procedures acknowledgement letters delivered through APPS include a list of sample questions the auditor may use to assist in determining the appropriate engagement.

b. If applicable, the auditor and requestor should also explicitly discuss the use of a technical specialist. The auditor should document the discussion.

14-1002.2 Appropriate Agreed-Upon Procedures

Auditing standards limit the type of work that can be performed as agreed-upon procedures. In determining the procedures to be performed, the auditor and requestor must only agree to procedures that do not require the auditor to form an opinion or make recommendations. Auditors should not agree to perform procedures that are overly subjective and open to varying interpretations. Terms of uncertain meaning (e.g., fair and reasonable, review, and evaluate) should not be used in describing the procedures unless such terms are defined within the procedures. The procedures to be applied to the subject matter are expected to result in consistent findings using the established criteria. Examples of inappropriate and appropriate procedures are presented below.

Inappropriate Procedures	Why Procedure is Inappropriate	Appropriate Procedures
Verify hours billed by ABC Company under Contract No. 4500-6702.	Procedure is too vague. It isn't specific regarding the subject matter and does not state what criteria the billed hours are verified against.	Using ABC Company's April 20X6 invoice for Contract No. 4500-6702, compare hours invoiced to the contractor's April 20X6 labor distribution reports and report any differences.
Review contractor estimates for escalation.	"Review" is too vague and subjective. It implies that an opinion will be given. In addition, the specific subject matter and criteria are not stated.	Compare proposed escalation for direct labor costs with the June 30, 20X6 Global Insights Cost Analyzer indices for Professional and Technical Workers and report any differences.
Compare proposed rates to actual rates for past years.	The procedure is not specific regarding the subject matter or the criteria against which it will be measured.	Compare the proposed indirect rates for Manufacturing Overhead, Fringe, and G&A to rates for Fiscal Years 20X4 and 20X5 contained in the contractor's actual year end cost reports and report any differences.
Read the contractor's timekeeping policies and procedures to obtain an understanding of those policies and procedures.	Merely reading a document to obtain an understanding is insufficient. What procedures will be performed? What are the criteria?	Determine if the contractor's timekeeping policies and procedures require work authorizations to be issued prior to employees performing the work.

14-1002.3 Establishing an Agreement on the Terms of the Engagement

a. GAGAS require auditors to establish a clear understanding regarding the terms of the engagement. DCAA auditors should accomplish this through an acknowledgement letter that clearly defines the specific procedures agreed-upon for the assignment, including the definition of materiality, if materiality limits are agreed to by the auditor and requestor (see 10-1002). The acknowledgement letter should not be issued until after DCAA and the requestor have discussed the requirements and reached an agreement on the procedures to be applied. The auditor should not perform an agreed-upon procedures engagement when the auditor and requestor do not agree upon the procedures to be performed or when the requestor does not take responsibility for the sufficiency of the procedures. The acknowledgement letter should be prepared in accordance with the applicable guidance in 4-103. In some circumstances, the procedures initially agreed-upon may be modified over the course of the engagement. In such cases, the requestor's acknowledgement of responsibility for the revised procedures should be documented in the working papers. A revised acknowledgement letter should be prepared if the modifications to the procedures are significant.

b. The auditor should inform the requestor of any relevant systems that were previously reported as inadequate and the related internal control deficiencies, as well as known CAS or FAR violations that might significantly affect the objective of the agreed-upon procedures. However, the auditor is not required to perform procedures beyond those agreed to. Such discussions should be documented in the working paper file, reiterated in the acknowledgment letter, if known at the time, and included in the audit report as "Other Matters to be Reported" (see 10-1011).

c. When circumstances impose restrictions on the performance of the agreed-upon procedures, the auditor should attempt to obtain agreement from the requestor for modification of the agreed-upon procedures. If an agreement cannot be reached, the auditor should describe the restrictions in the report (see 10-1008) or, if the restrictions significantly impact the extent of the procedures, withdraw from the engagement.

d. Before an auditor agrees to convert an examination to an application of agreed-upon procedures, the auditor should consider the guidance on disclaimer of opinion in CAM 2-104. An examination cannot be converted to an application of agreed-upon procedures merely to avoid disclosing a scope limitation encountered during the course of the examination.

14-1003 Agreed-Upon Procedures Reports

The format and content of application of agreed-upon procedures reports will comply with the general requirements of Chapter 10. Specific guidance on preparation of these reports is contained in 10-1000.

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CHAPTER 15

15-000 Other DCAA Functions

15-001 Scope of Chapter

This chapter presents audit policies, procedures, and support requirements relative to other DCAA functions, including contract audit services for non-DoD agencies, the contract audit coordination, financial advisory services, support of negotiation conferences, the contract audit follow-up system, and board of contract appeals cases.

15-100 Section 1 --- Special Procedures for Non-DoD Agencies

15-101 Introduction

a. This section presents policies and procedures relating to audit services rendered to non-DoD organizations other than Educational Institutions (Chapter 13), TRICARE (14-902) and National Guard Bureau (14-903).

b. General requirements associated with servicing non-DoD organizations are stated in 15-102. Procedures for processing reimbursement vouchers are discussed in 15-103. Supplemental requirements developed by and tailored to the needs of specific non-DoD organizations are presented in 15-104 through 15-120.

15-102 General Requirements

The Contract Audit Manual is the determining guide for the conduct and administration of audits for non-DoD as well as DoD contracts. In addition to general guidance provided throughout CAM, specific comments concerning non-DoD audits are contained in various sections of CAM under the audit area being discussed. Presented below is a recapitulation of pertinent CAM guidance as well as a synopsis of procedures unique to non-DoD organizations. For more detailed information, the auditor should refer to the Reimbursable Audit Program Pamphlet, DCAAP 7230.1.

15-102.1 Establishing Audit Cognizance and Processing Non-DoD Audit Requests

a. Cross-servicing arrangements have been made with various non-DoD organizations. Section 1-300 provides guidance for performing audit services for non-DoD organizations, including the rules for establishing audit cognizance and accepting or rejecting non-DoD requests.

b. Requests from non-DoD organizations not listed in the DMIS User Guide, must be coordinated through Headquarters, as described in 1-303 g and h.

c. An increasing number of non-DoD organizations require their activities to submit requests through their Office of Inspector General. In those cases the DCAA field office will honor all reasonable administrative procedures specified by the requesting Office of Inspector General.

d. The cross-servicing arrangements provide for the non-DoD organizations to send the audit requests to the cognizant DCAA field office. Audits performed without a current audit request could result in disagreements regarding reimbursements for the audit services. When an auditor observes non-DoD contracts subject to audit coverage, for which audit requests have not been received, they will be brought to the attention of appropriate non-DoD officials (contracting officer or Office of Inspector General) to facilitate issuance of requests for audit.

15-102.2 Performing Contract Required Audits when Customer Funding is not Available

a. This guidance supplements information contained in 15-102.7, Audit Reporting, to address those situations in which a non-DoD customer does not have the necessary funds to pay for contract required audit services. The following procedures apply in the event that an FAO has programmed an audit that includes DoD and non-DoD effort and the FAO is advised that there is no funding available to cover one or more non-DoD contracts. If the auditor has been informed by a non-DoD contracting officer that no funding is available and no authorization is provided, the auditor should consider deferring all audit effort until the following fiscal year. However, if deferral is not a viable option, the auditor should proceed as follows:

(1) Notify the contracting officer(s) that their agency's contracts will not be included in the audit and no audit report will be issued to their office.

(2) Adjust the Auditable Dollar Volume (ADV) and scope of audit as necessary.

(3) For billing purposes, audit effort should be allocated to DoD and other participating non-DoD agencies.

(4) Exclude the presentation of information on applicable non-DoD contracts from the audit report.

(5) The contracting officer(s) should be advised when the audit discloses significant weaknesses in the contractor’s system of internal controls or adverse conditions that cause the contractor to be high risk. Through discussions with the contracting officer(s), the auditor should identify the weaknesses and/or adverse conditions and state that these deficiencies may impact their agency's contracts. In accordance with 15-102.11, auditors should not expand effort to specifically address issues for non-DoD agencies that are not paying for audit services. However, DCAA has a professional responsibility to advise all affected agencies of conditions or situations that may place the Government at significant risk. Accordingly, audit reports that identify such high risk conditions shall be distributed to all affected agencies.

b. If, after the audit report has been issued, a reimbursable customer approaches the FAO to request audit services for which funding authorization is subsequently made available, the following procedures apply:

(1) The FAO should obtain funding authorization from the contracting officer.

(2) The FAO should set up a separate assignment and perform the necessary audit steps and testing procedures to cover the requested non-DoD contracts. The assignment should be treated as contract required and scheduled considering risk and all workload priorities.

(3) Additional audit effort should be billed to the non-DoD customer.

(4) A separate audit report should be issued that includes indirect rate information as well as direct costs on applicable non-DoD contracts.

15-102.3 Non-DoD Cost Principles and Procedures

The Federal Acquisition Regulation (FAR) is the primary regulation for use by all Federal executive agencies in acquiring supplies and services with appropriated funds. Agencies are authorized to issue supplemental regulations tailored to their organizational needs. Thus, the cost principles and procedures applicable to a specific non-DoD organization consist of the FAR together with that agency's supplemental regulation, if any. The auditor should contact the appropriate non-DoD official (requestor, Office of Inspector General, or acquisition office) to determine whether that organization has issued supplemental regulations for agencies not listed below. The following table identifies selected non-DoD agencies that have issued FAR Supplements and identifies those specific FAR cost principles that have been supplemented:

Agency	FAR Supplement	FAR Cost Principles Supplemented
Agency for International Development	AIDAR – Agency for International Development Acquisition Regulations	• 31.205-6 • 31.205-46 Additional AID Cost Principles: • 731.205-70 • 731.205-71
Department of Agriculture	AGAR – Agriculture Acquisition Regulations	None
Department of Commerce	CAR – Commerce Acquisition Regulations	None
Department of Energy	DEAR – Department of Energy Acquisition Regulation	• 31.205-18 • 31.205-19 • 31.205-32 • 31.205-33 • 31.205-47
Department of Health and Human Services	HHSAR – Health and Human Services Acquisition Regulations	None
Department of Homeland Security	HSAR – Homeland Security Acquisition Regulation	31.205-32
Department of Housing and Urban Development	HUDAR – HUD Acquisition Regulation	None
Department of Justice	JAR – Justice Acquisition Regulations	• 31.205-32
Department of the Treasury	DTAR – Department of Treasury Acquisition Regulation	None
Department of Transportation	TAR – Department of Transportation Acquisition Regulation	• 31.205-32
Environmental Protection Agency	EPAAR – Environmental Protection Agency Acquisition Regulation	None
National Aeronautics and Space Administration	NFS – NASA FAR Supplement	• 31.205-32
National Science Foundation	National Science Foundation FAR Supplement	• 31.205-32
Veteran's Administration	Veteran's Administration Acquisition Regulations (VAAR)	• None

15-102.4 Final Indirect Cost Rates for non-DoD Contracts

a. Subpart 42.7 of the Federal Acquisition Regulation provides that final indirect cost rates will be established on the basis of auditor determination where contracting officer determination procedures are not applicable. For non-DoD contractors, contracting officer determination applies to business units under the cognizance of a corporate or resident administrative contracting office or where the predominant contract dollar amount is with an agency whose procedures require contracting officer determination.

b. The non-DoD organization may issue supplemental regulations that modify the designation of auditor versus contracting officer responsibility for final indirect cost rate determination. The DCAA auditor should comply with the designation in the agency's supplemental regulations. Contact the non-DoD contracting officer to clarify the designation of responsibility if there are any questions on this subject.

c. The format and content of audit reports on annual indirect cost rates, prepared in accordance with 10-500, are the same for non-DoD contracts as for DoD contracts, whether the auditor-determined or contracting officer-determined method applies.

15-102.5 Applicability of CAS to non-DoD Contracts

Cost Accounting Standards (CAS) apply to non-DoD contracts effective April 17, 1992. For further guidance on applicability of the CAS Board's rules, regulations, and standards, see 8-100, 8-200, and 8-300.

15-102.6 Obtaining Technical Evaluation of Non-DoD Proposals

Some non-DoD organizations do not routinely furnish technical reports on contractors' price proposals. In those cases, the auditor should inform the requestor of the need for a technical report (9-306).

15-102.7 Audit Reporting

a. As stated in 15-103d, e, and f, DCAA Forms 1 and 1c or their equivalents will not be used to report suspended and/or disapproved costs to certain contracting organizations. Such reporting will be accomplished promptly after disclosure of the suspended or questioned item by means of a letter or audit report.

b. Interim audit status reports will be issued in all cases where required or requested by the contracting organization in its request for audit of the contract. Audit reports will also be issued in all cases where interim audits disclose any adverse conditions or weaknesses in the contractor's management practices that the auditor feels should be brought to the attention of the contracting officer.

c. Audit reports will be addressed in the manner prescribed by 10-206. A number of non-DoD organizations have requested supplemental distribution of audit reports which frequently includes distribution of the original or one or more copies to their Office of Inspector General. The requested supplemental distribution is commented on in various sections of CAM under the audit area being discussed. The table presented in 15-1S6 lists, by organization and by type of report, the additional distribution requirements for these non-DoD organizations.

d. In conjunction with the above, the non-DoD address lists presented in 15-1S1 through 15-1S5 will provide guidance in identifying the cognizant non-DoD offices which commonly request our services.

e. When a non-DoD organization submits an audit request through its Office of Inspector General, the non-DoD organization assignment number or other identifier will be included in the “References” section of the cover sheet (Figure 10-2-1) and the first one or two sentences of the audit report (10-206.1c).

f. Guidance on release to the GAO of audit reports and records pertaining to non-DoD organizations is given in 1-200.

15-102.8 Suspected Irregularities

Procedures for referring suspicions of irregularity with respect to non-DoD contracts are included in DCAAR 7640.15.

15-102.9 Boards of Contract Appeals - Non-DoD Agencies

General comments on audit services provided to assist in hearings before boards other than the ASBCA appear in 1-406.2.

15-102.10 Non-DoD Postaward Audits

DCAA's standard memorandum of understanding states that the customer may provide the DCAA Office of Assistant Director, Operations, a list of all contract pricing actions for which the customer wants DCAA to perform a postaward audit in the next fiscal year. This list will constitute specific authority by the customer for DCAA to perform, and bill for, these specific postaward audits.

15-102.11 High Risk Conditions

Funding constraints now limit the ability of some non-DoD customers to request and pay for routine DCAA audit services for their contracts. However, when performing audits auditors sometimes become aware of high risk conditions (e.g., financial distress or non-performance of Government contracts) that may impact these non-DoD agencies. Although DCAA auditors should not expand efforts to specifically address issues for non-DoD agencies that are not paying for audit services, DCAA has a professional responsibility to advise all affected agencies of conditions or situations that may place the Government at significant risk.

Audit reports that identify such high risk conditions shall be distributed to all affected agencies. This does not include audit reports addressed to administrative contracting officers (e.g., CAS noncompliance reports) since these contracting officers are responsible for resolving the issues and the results will apply to all Government contracts.

15-102.12 Reimbursable Billings

Field activities will input reimbursable billing information in the DMIS Reimbursable Module in accordance with the requirements of the DMIS User Guide.

15-103 Procedures for Processing Non-DoD Cost-Reimbursement Vouchers

a. The processing of reimbursement vouchers under cost-reimbursement type contracts awarded by non-DoD organizations can be accomplished by one of five methods, depending upon which method the organization has selected. These methods are discussed in paragraphs c. through g. below. Paragraph 15-104 identifies the method designated by each of the non-DoD organizations. Common to all methods and contrary to DoD contract voucher processing procedures, reimbursement vouchers under non-DoD agency contracts must be signed by an authorized certifying officer of the contracting organization prior to payment.

b. Certain particular procedures have been adopted by the National Aeronautics and Space Administration (NASA) for its cost-reimbursement type contracts. Since the volume of auditable NASA contracts is substantial, the procedures are described separately in detail in 15-105.

c. Under the first method, interim vouchers will be prepared by the contractor and forwarded directly to the cognizant auditor. They will be evaluated by the auditor and provisionally approved for payment in the same manner as interim vouchers received on DoD cost-reimbursement type contracts. They will then be forwarded to the finance office of the Government organization which awarded the contract for certification and payment. Completion vouchers and necessary supporting documentation will generally be received by auditors and processed in the same manner as DoD completion vouchers. Any suspended or disapproved costs resulting from audit will be reported by use of DCAA Forms 1 and 1c, or equivalent forms as specified by the contracting organization. The procedures for preparation and distribution of the notice of costs suspended and/or disapproved and appeals by the contractor will be as prescribed in 6-902 through 6-908. The auditor will make appropriate deductions on the contractor's submitted vouchers for suspended or disapproved costs.

d. The second method is the same as the first with respect to receipt of vouchers, provisional approval of interim vouchers, and processing of completion vouchers by the auditor. It differs from the first method in that the auditor will report suspended and/or disapproved costs in writing with a recommendation that the amount questioned be deducted from the next available voucher. Vouchers approved for provisional payment, together with the written notification, if any, will be forwarded to the contracting organization's fiscal office. That office should be requested to notify the cognizant audit office of the action taken with respect to any recommended suspension or disapproval. The contracting organization's fiscal office will refer the vouchers and audit reports to the contracting officer, who will certify the vouchers for payment. The contracting officer will also make the determination with respect to the auditor's recommendations for suspended and/or disapproved costs and notify the contractor as appropriate.

e. The third method is the same as the first with respect to receipt of vouchers and provisional approval by the auditor. The vouchers will, however, be forwarded to the contracting organization's contracting officer for final approval, rather than being forwarded to that organization's finance office. Similarly, any notification of suspended and/or disapproved costs will be forwarded to the contracting officer for final approval and notification to the contractor. Such notification will be made in writing with a request that the auditor be advised of the contracting officer's decision. Since the approval of the contracting officer is required before the suspension or disapproval becomes effective, the auditor will not notify the contractor of any such recommendations and should not make any deductions from vouchers for costs suspended and/or disapproved.

f. Under the fourth method, the contracting organization will instruct its contractors to forward interim and completion vouchers directly to the administrative contracting officer or other designated official of the organization. This official will certify the voucher and process it for payment. The cognizant auditor will receive a paid copy of the voucher. In some cases, however, the contractor may forward an information copy of the voucher to the auditor at the time of its initial submission to the contracting organization. Procedures for reporting questioned costs or fee will be the same as in 15-103d.

g. Under the fifth method, the contractor will forward the first and the final vouchers on each cost-reimbursement type contract to the cognizant auditor. All other vouchers will be submitted directly to the contracting officer's representative. The cognizant auditor will evaluate the initial voucher in accordance with paragraphs 6-1007c and 3-2S1. However, costs will be determined by the cost principles and procedures in the Federal Acquisition Regulation together with agency supplemental regulations. If acceptable, the voucher will be provisionally approved and submitted to the contracting officer's representative. If the evaluation discloses deficiencies in the contractor's internal control or billing procedures which the auditor cannot resolve with the contractor, an audit report will be issued to the contracting organization's Office of Audit. The report should state the deficiencies and the recommendations for corrective action. In addition, the initial voucher should be attached to the audit report. The cognizant auditor

will receive a paid copy of each voucher processed under the contract. The final voucher, together with the required documentation submitted by the contractor to the cognizant auditor, will be processed in the same manner as DoD completion vouchers (Section 9 of Chapter 10). DCAA Forms 1, or equivalent forms as specified by the contracting organization, will be prepared for any suspended or disapproved costs. The original and four copies of the form will be forwarded to the contracting organization's Office of Audit with a request that the DCAA auditor be advised of the action taken. However, the original and four copies of DCAA Forms 1 pertaining to contracts awarded by the Department of Transportation will be forwarded to the contracting officer.

15-104 Non-DoD Organizations to which Various Procedures are Applicable

Listed below are the non-DoD organizations to which various procedures are applicable. NASA procedures and requirements are discussed separately in 15-105 and 15-106. The various procedures described in 15-103 apply to all other non-DoD organizations. The list designates which procedure applies to each organization. This list comprises all the non-Department of Defense organizations with which arrangements have been made for audits by DCAA of contracts awarded by such organizations.

Organization	Procedure Prescribed by	Notes
Agency for International Development	---	(5)
Department of Agriculture	15-103f	
Department of Commerce	15-103e	
Department of Education	15-103f	
Department of Energy	15-103f	
Department of Health and Human Services	15-103f	
Department of Homeland Security	---	(5)
Department of Housing and Urban Development	15-103f	
Department of the Interior	15-103f	
Department of Justice	---	(5)
Department of Labor	15-103f	
Department of State	15-103d	
Department of Transportation	15-103g	(1)
Department of the Treasury	15-103d	
Department of Veterans Affairs	15-103f	
Environmental Protection Agency	15-103f	(2)
Government Accountability Office	15-103c	
General Services Administration	15-103f	
National Aeronautics and Space Administration	15-105, 15-106	
National Science Foundation	15-103f	(3)
Nuclear Regulatory Commission	15-103d	
U.S. Postal Service	15-103c	(4)
All Others	---	(5)

Notes:

(1) The DCAA auditor will not make any deductions on public vouchers. For cost-reimbursement type contracts awarded by the Department of Transportation, the vouchers and audit reports will be submitted to the cognizant contracting organizations listed in 15-1S4.

(2) Contractors will forward the original interim voucher directly to the finance office with copies for the project office and contracting office. The finance office processes the

vouchers for payment which includes Project Officer review and approval of costs and identification of any suspended costs. Costs which may be disallowed are referred to the Contracting Officer. Paid vouchers are provided to the contracting office. The contractor will be provided with the EPA Form 1900-68 which explains any suspended or disallowed costs. Any costs that are disallowed will also be referred to the cognizant audit office at that time for inclusion in the annual incurred cost audits. Completion invoices are submitted along with an interim cumulative claim and reconciliation statement which summarizes costs claimed at the point of completion. After receipt of these documents, the Contracting Officer requests that a final contract audit be performed through the EPA Office of Acquisition Management who prepares a request to the EPA Office of the Inspector General and the cognizant audit offices. As Contract Audit Closing Statements are requested, the requesting office will obtain a Contract Payment System Report showing invoice payments and adjustments and identify any suspended or disallowed costs in the audit request.

(3) For interim vouchers, NSF will instruct its contractors to submit the vouchers to the NSF finance office. They are then forwarded to the contracting officer's technical representative for approval. This official certifies the voucher and returns it to the finance office for approval. Contractors are required to send completion vouchers to the NSF contracting officer. When NSF is the cognizant agency, the NSF contracting officer will either discuss with or send vouchers to the NSF Cost Analysis/Audit Resolution Branch to incorporate final overhead rates in all contracts that have post determined rates. If another agency is cognizant, the NSF contracting officer will discuss with or send completion vouchers to the NSF Office of Inspector General (OIG) to consider for final audit. If it is determined that a final audit is desired, the NSF OIG may forward the vouchers to the cognizant auditor.

(4) Interim and completion vouchers should be sent to the cognizant U.S. Postal Inspection Service requesting the audit, with one copy to the contracting officer.

(5) See information under specific customer in DCAAP 7230.1, DCAA Reimbursable Audit Program Pamphlet.

15-105 Procedures Applicable to Cost Reimbursement Contracts Awarded by National Aeronautics and Space Administration (NASA)

15-105.1 General

a. NASA contracting officers will furnish DCAA branch managers or resident auditors with a separate letter of delegation of authority to perform audits to cover each cost-reimbursement type contract for which an audit is requested. The letter will be accompanied by:

(1) an attachment setting forth the details of the audit services to be performed and

(2) a form designated "Acceptance of Delegation of Audit Services Function," which is to be acknowledged and returned to the contracting officer.

This form also provides for an estimate of the cost of audit performance by fiscal year for each contract, including related auditable subcontracts. The FAO should complete the form, except for the section on estimated cost of audit performance, and transmit it directly to the contracting officer. The estimated cost of audit performance will not be entered, since DCAA Headquarters will furnish such estimates to NASA on an agency-wide basis rather than by individual contract.

b. Vouchers under cost-reimbursement-type NASA contracts will be processed in accordance with procedures described below. These procedures are applicable only to vouchers for reimbursement of costs. Claims for fees are submitted by contractors on separate vouchers directly to the NASA contracting officer for evaluation and administrative approval. If the audit discloses any information concerning fees which should be brought to the attention of the contracting officer, this information will be promptly furnished by letter or audit report.

(1) Interim reimbursement vouchers for incurred costs can be submitted either directly to disbursing offices or to the auditor. (See 6-1003b) When interim vouchers are submitted to the auditor, he/she will approve them for provisional payment and send them directly to the designated NASA Center for certification and payment. Final vouchers will be submitted by the contractor directly to the auditor for appropriate evaluation and transmittal to the responsible administrative contracting officer. The procedures applicable to DoD contracts will be utilized in processing these vouchers. The auditor therefore will not sign final vouchers. The contractor will submit, as a minimum, enough copies of vouchers to accommodate the distribution requested in the attachment to the letter of delegation received from NASA contracting officers (see 15-105.1a), as well as one copy each for retention by the cognizant auditor and the administrative contracting officer.

(2) NASA Form 456, Notice of Costs Suspended and/or Disapproved, will be used in lieu of DCAA Forms 1 and 1c. When an issue covered by the Form 456 also affects other contracts not included on the Form 456, such as DoD, other civilian agencies, or other NASA contracts, include a schedule of the affected contracts, showing the contract number, suspended/disapproved amount, and contracting officer's name and phone number. This information is very helpful for the NASA contracting officer to facilitate Government-wide consistency on dispositioning the issue.

(3) After preparation of the NASA Form 456, the auditor will submit it to the NASA contracting officer for review, approval, and countersignature in the number of copies requested by the attachment to the NASA letter of delegation referred to in 15-105.1a. One copy of this form will also be retained by the auditor. After approval and countersignature, the NASA contracting officer will send two copies of the approved NASA Form 456 to the contractor to advise of the suspension or disapproval and will return three copies to the cognizant auditor. The auditor should offer to obtain the contractor acknowledgment of the approved Form 456 and distribute the form copies according to the NASA instructions, if doing so would expedite the procedures. The auditor will attach two copies of the approved Form 456 to the next subsequent voucher provisionally approved. If the contractor has not made a deduction on this voucher for the amount shown thereon, the auditor will make the necessary deduction.

c. If there are NASA cost-reimbursement-type contracts which provide for use of actual indirect cost rates, NASA Forms 456 for each such contract will be submitted with the indirect cost report to NASA (10-506) to adjust any excess of indirect costs previously claimed on such contracts over the amount allowable.

15-105.2 Contract Audit Closing Statements

Upon completion of the audit of each NASA cost-reimbursement-type contract, issue a contract audit closing statement to the cognizant contracting officer. The closing statement will conform to the format and content prescribed in 10-900.

15-106 Supplemental Requirements for NASA Contracts

To meet the needs of special local situations, departures from procedures described in this section may be arranged by DCAA Headquarters, ATTN: OAL, and the cognizant NASA contracting officer.

15-106.1 NASA Cost Principles and Procedures

a. The cost principles and procedures prescribed by the Federal Acquisition Regulation (FAR) together with the NASA FAR Supplement (NFS) apply to NASA contracts. Each FAO responsible for audits of NASA contracts should maintain a current copy of applicable parts of these regulations.

b. When costs are allocable to a contract, but are unallowable under NASA cost principles, they will not be charged directly or indirectly to any other contract.

15-106.2 Audit Services for NASA

a. The policy for establishing cognizance and accepting or rejecting non-DoD audit requests stated in 1-300 does not apply to NASA. DCAA will perform all contract audit work requested by NASA (1-303i).

b. Although not subject to the provisions of DoDI 7640.02, Policy for Follow-up on Contract Audit Reports, NASA has elected to use the DCAA monthly reports, as described in 15-604.3, for all contract audit reports reportable under 15-603.2.

c. Refer to Chapter 13 for policies and procedures relating to OMB circular A-133 Audit services rendered to NASA.

15-106.3 Programming Operations Audits at NASA Locations

a. NASA has requested that certain specified areas which may significantly affect the level of costs incurred be given selective audit emphasis as part of the normal evaluation of contractors' activities. These areas are listed in Supplement 3-S20.

b. The selection of systems/operations audits to be performed will be based on such factors as the dollar value of NASA contracts, type of contract, performance requirements, prior audit experience, and special matters of particular concern to NASA. The DCAA auditor should confer with the cognizant NASA contracting officer (see Supplement 15-1S2) prior to establishing the annual audit plan. The auditor should also communicate with the NASA contracting officer thereafter when major changes are being made or when other circumstances so warrant, to identify those functions which are of particular interest to NASA and to determine whether the audit service rendered is sufficient for NASA procurement purposes.

c. Promptly after completing each operations audit prepare and distribute a report in accordance with 10-400.

15-106.4 Special Information Reports for NASA

a. A special report will be submitted promptly to NASA when underruns or overruns, terminations, unexpected changes, inadequate contractor controls, or any other unusual circumstances will have an immediate and significant impact on the costs of NASA contracts.

b. Prepare such reports in a letter format in accordance with 10-1200. Usually a standard scope of audit statement would not be applicable in providing information of this nature. Rather than using terms such as "report," "audit (examination)," "review," or "application of agreed-upon procedures," the subject should refer to the information being provided for NASA. For example, a report subject might begin: "Information for NASA on Contractor's Internal Controls."

c. If there is a NASA administrative contracting officer or contracting officer's representative assigned to the contractor facility, the report may be addressed to that official. Otherwise, address the report to the NASA procurement contracting officer having the major NASA interest in the contractor's operations.

15-106.5 Indirect Cost Audit Reports for NASA

a. The Federal Acquisition Regulation together with the NASA FAR Supplement provide that final indirect cost rates will be established on the basis of auditor determination when contracting officer determination procedures are not applicable. Contracting officer determination applies at business units under the cognizance of a NASA administrative contracting officer or when NASA has the predominant contract dollar

amount (FAR 42.705-1). For contractors subject to indirect cost rates determined by DCAA, NASA treats the DCAA report rates as final. If NASA is responsible for the rate determination, the DCAA report is advisory and will be addressed accordingly.

b. In view of the foregoing, the formats and contents of audit reports on annual indirect cost rates, prepared in accordance with 10-500, are the same for NASA contracts as for DoD contracts, whether the auditor-determined or contracting officer-determined method applies. Provide additional distribution for NASA per 10-507.

15-106.6 Audits of Progress Payments for NASA

a. Audits of progress payments under NASA fixed-price contracts will be initiated as requested by NASA procurement offices. The cognizant NASA contracting officer will provide the responsible DCAA branch manager or resident auditor a letter of delegation for each contract selected. Each letter of delegation will be accompanied by a form designated "Acceptance of Delegation of Audit Services Function," which should be completed by the DCAA office and returned to the originating NASA office.

b. Audits of progress payments and preparation, addressing, and distribution of related audit reports will be governed by 14-206.

15-107 Supplemental Requirements for Agency for International Development (AID) Contracts

Special AID audit and reporting requirements are stated in 13-310. These requirements, although applicable primarily to contracts awarded to educational institutions, also apply to contracts awarded to other nonprofit and commercial contractors and should be noted in such cases.

15-108 Supplemental Requirements for Department of Agriculture Contracts

Audit services will be provided the Department of Agriculture (USDA) only if the request is made by the cognizant regional Department of Agriculture Office of Inspector General - Auditing (OIG-A) (15-1S5). Requests received directly from a USDA agency should be returned, with a reminder that such requests must be channeled through the USDA regional OIG-A.

15-109 Supplemental Requirements for Department of Commerce Contracts

Audit requests are no longer administered through the Office of Inspector General. Instead, all reports should be sent directly to the requesting activity.

15-110 Supplemental Requirements for Department of Energy Contracts

a. The cost principles and procedures prescribed by the Federal Acquisition Regulation (FAR), supplemented by the Department of Energy Acquisition Regulation (DEAR), apply to Department of Energy contracts. DEAR Part 931 applies to DOE contracts other than DOE prime contracts covered by DEAR Subpart 970.31 which involve operation of Government-owned-contractor-operated facilities and National Laboratories. A contract covered by DEAR Subpart 970.31 will contain a special cost principle clause setting forth provisions on allowable and unallowable costs applicable to the contract. In auditing DOE contracts, auditors will comply with all reasonable requirements and instructions of DOE.

b. Costs claimed under DOE contracts should be evaluated in accordance with the applicable provisions cited therein. Costs unallowable under a contract in accordance with its governing cost principles will not be charged directly or indirectly to any other contract.

c. DCAA has agreed to perform contract audit work at all DOE prime contractor locations other than those designated as Management and Operating Contractors (1-303h).

15-111 Supplemental Requirements for Department of Health and Human Services (DHHS) and Health Care Financing Administration (HCFA) Contracts.

a. The Department of Health and Human Services (DHHS) has placed some constraints upon its representatives regarding their authority to issue requests for audit services.

(1) Requests for audits of pricing proposals from contracting officers, program directors, or price analysts shall be honored. A copy of reports sent to contracting officers will be distributed to the DHHS Office of Inspector General (15-1S3).

(2) Other audit requests must come from the regional or headquarters office of the DHHS Inspector General (15-1S3). The Inspector General will forward the audit reports to the using activity.

b. Any long-term requests or informal understandings should be confirmed with the DHHS Office of the Inspector General.

c. When an auditor observes DHHS contracts subject to audit coverage for which audit requests have not been received, the auditor should notify the DHHS Office of the Inspector General and determine if funding is available. This includes those DHHS contracts benefiting from operations audits or other across-the-board audits.

d. For Health Care Financing Administration, Peer Review Organization (HCFA PRO) audits, all audit services will be processed through the Chesapeake Bay Branch Office of the Mid-Atlantic Region. Should any FAO receive a request directly from HCFA, they should notify the Chesapeake Bay Branch to ensure that the audit has been authorized and funded. Funding is limited on the HCFA PRO audits and FAOs must ensure that billings for these audits do not exceed the amount that has been funded for the assignment.

15-112 Supplemental Requirements for Department of the Interior Contracts

The Department of Interior, Office of Inspector General has delegated responsibility for audit requests to the individual bureaus within the department. Accordingly, audit requests may come from any component of the Department of Interior.

15-113 Supplemental Requirements for Department of Labor Contracts

Audit services will be provided to the Department of Labor (DOL) only if requests are received from the Assistant Inspector General for Audit. DCAA must obtain a written request for all audits, including contract required audits. DOL's procurement offices may neither request nor authorize audits.

15-114 Supplemental Requirements for Department of Transportation Contracts

a. The Office of Inspector General (OIG) for the Department of Transportation (DOT) is no longer responsible for processing DCAA audits. This change came about as a result of the DOT's Appropriations Act for 1997 which eliminated all OIG funding for DCAA contract audits. Accordingly, each DOT contracting officer is authorized to request audit services through an Interagency Agreement Order (IAO). This means that each audit will be requested, and can only be performed, upon issuance of a task order. The DOT contracting activity will notify the cognizant FAO of an impending audit and request a dollar amount for obligating funds. FAOs should give the DOT an estimate of funds based on the anticipated number of billable audit hours times the current reimbursable hourly rate. Billable hours is defined as the sum of direct audit hours plus the application of the Reimbursable Adder Rate (RAR factor). FAOs should not commence audit effort until a written and signed notification,

in the form of an Interagency Agreement Order (IAO), is received from the DOT contracting officer.

b. It is extremely important for FAOs to closely monitor the number of audit hours expended on each DOT order for audit services. Our objective is to assure that no hours are expended in excess of hours funded. Therefore, it is imperative that each FAO keep track of the cumulative billable hours on each DOT audit assignment. In order to provide adequate safeguards to ensure funded hours are not exceeded, FAOs are required to establish a system for monitoring the hours expended on DOT audits. This system should incorporate an internal control which requires a reassessment of the estimated hours (obligated funds) once 75% of the direct hours budgeted have been expended. If it appears that the estimated hours are not adequate, the Department of Transportation contracting officer should be advised of the following available options:

(1) The contracting officer can modify the IAO to provide sufficient funds for the level of effort to be provided, or

(2) The contracting officer can request that audit effort continue until the funds that have been obligated are depleted. In this case, the contracting officer should be advised that the audit report will reflect an audit opinion appropriate for the level of effort that was expended (i.e., this could mean an adverse opinion will be issued), or

(3) The contracting officer can direct termination of the work and no audit report will be issued.

c. In accordance with P.L. 104-50, section 348, the Federal Aviation Administration is exempt from FAR and any other regulatory material not specifically included in the FAA "Acquisition Management System" (AMS), effective April 1, 1996. The FAA AMS cost principles can be accessed at http://fast.faa.gov/. Though the FAA AMS cost principles mirror those covered in the FAR Part 31, allowability of costs on FAA contracts should be determined using the FAA AMS cost principles. The FAA AMS should also be the applicable regulation cited in the audit report. However, at contractor locations where contract administration responsibility rests with another Government agency (e.g., DoD, DOE, etc.) the cost principles (e.g., FAR, DFARS, etc.) used by the agency having contract administration responsibility may be used to determine the allowability of costs for FAA contracts. Auditors at contractor locations with FAA contracts should verify which agency has the contract administration responsibility.

d. For each audit report sent to a DOT activity (including the Massachusetts Highway Department Central Artery/Third Harbor Tunnel project), send two copies of the report to the DOT Office of the Inspector General. An address list for Department of Transportation offices is provided on 15-1S4.

15-115 Supplemental Requirements for Department of the Treasury Contracts

a. With the exception of the Internal Revenue Service (IRS), Treasury Inspector General for Tax Administration (TIGTA), copies of audit reports pertaining to a Department of Treasury contract or procurement action will be sent to:

Department of the Treasury
Office of the Inspector General
1500 Pennsylvania Ave., NW
Room 2412
Washington, DC 20220

b. If the audit report is for the IRS, TIGTA, the original report should be mailed to:

Treasury Inspector General for Tax Administration
Attn: Director, Special Projects
915 Second Avenue, Room 2640
Seattle, WA 98174

In addition, two copies should be mailed to:
Internal Revenue Service,
Procurement Chief,
Cost and Price Analysis Branch
6009 Oxon Hill Road, Suite 700
Oxon Hill, MD 20745-3129

15-116 Supplemental Requirements for Environmental Protection Agency Contracts

a. The Environmental Protection Agency (EPA) Office of Inspector General, DCAA Monitoring Team, will authorize and coordinate all audit requests. EPA has requested that FAOs send the Notification of Contract Required Audits (including a copy of Schedule H from the claim and reimbursable participation percentage by Agency for incurred cost audit) and all acknowledgment letters within two weeks of receiving the EPA Audit control Number and that the following information be included in the letter:

(1) EPA contract/subcontract number to be audited.
(2) Contract period of performance to be audited.
(3) Reference the EPA Audit Control Number.
(4) DCAA Assignment Number.
(5) Estimated audit hours, including hours for assist audit.
(6) Estimated final report date.

EPA procedures require that audit requests must include a valid ten-digit EPA control number; otherwise the assignment is not to be accepted/reimbursed. All requests for EPA OIG audit control numbers, correspondence, and a copy of all audit reports should be e-mailed to: dcaa.monitoring@epa.gov and mailbox.farnsc@epa.gov. A hard copy of the audit reports should be mailed to FARNSC at the following address:

U.S. EPA
Aerial Rios Building
(Mail Code 3802R)
1200 Pennsylvania Ave., NW
Washington, DC 20460
ATTN: Manager, FARNSC

b. If requested, an annual report will be sent to the Inspector General for Audits on each contractor/grantee where:

(1) EPA contracts/grants are in excess of $1 million, or
(2) two or more contracts/grants are in effect during the contractor's fiscal year.

In its request for audit, EPA will indicate the type of information required in the annual report, such as status of contracts/grants, amounts questioned, and other related data.

15-117 Supplemental Requirements for National Science Foundation (NSF) Contracts

All audit requests will originate from the National Science Foundation, Office of Inspector General, 4201 Wilson Boulevard, Arlington, Virginia 22230. All questions concerning National Science Foundation audit requests will be directed to this address. The procedures described in 1-300 should be followed when auditable NSF contracts are identified for which audits have not been requested.

15-118 Supplemental Requirements for U.S. Army Corps of Engineers (USACE) Contracts

a. Requests for audit services will be issued by the individual USACE's contracting activities. Only audits of USACE Civil Works projects are reimbursable. Funds for Civil

Works projects come from the Energy and Water Development Appropriation and not from DOD. DCAA provides audit support for USACE-funded Military contracts and agreements at no cost. The auditor will need to contact the requester to find out if the contract is Military (not reimbursable) or Civil Works (reimbursable). Refer to the Reimbursable Pamphlet for additional information.

b. DCAA will also provide contract audit support to USACE contracting personnel during civil and military emergencies, disasters and special operations. DCAA may be requested to perform real-time audit support on-site (e.g., physical observations of contract performance) and on an expedited basis. In addition to the routine audit services, DCAA may be requested to provide financial advisory services in support of the Government's acquisition program for the emergency response efforts. The auditor will issue an acknowledgement letter identifying the specific services (both audit and non-audit) and any related reporting requirements once the services have been defined and coordinated with USACE. (See guidance in 2-106 when performing non-audit services).

15-119 Supplemental Requirements for Department of Education Contracts

All requests for audit services will be issued only by the Department of Education, Office of Inspector General. Education prefers to notify DCAA when a contract should be included in a contract required audit. FAOs should not request a written confirmation when Education declines to participate in a contract required audit. FAOs must have an audit request prior to initiating any audit for Education.

15-120 Supplemental Requirements for DHS Contracts

a. The Memorandum of Understanding (MOU) between DCAA and Department of Homeland Security (DHS), Office of the Chief Procurement Officer (OCPO) covers all DHS organizational elements. DHS organizational elements will address requests for audits directly to the cognizant DCAA field office.

b. Completed DCAA audit reports will be sent to the requesting organizational element and/or whomever is designated in the request. In addition, copies of the following types of audit reports will be provided to the OCPO Director of Acquisition Oversight:

(1) Audits of contractor Internal Control Systems (accounting system, estimating system, compensation system, etc.);

(2) Audits of Compliance with Cost Accounting Standards;

(3) Audits of Cost Impact Proposals submitted pursuant to the Cost Accounting Standards clause (changes in cost accounting practice and/or noncompliances); and

(4) Postaward Audits (Reviews for Compliance with the Truth in Negotiations Act).

These reports should be addressed to:

Director, Acquisition Oversight
Office of the Chief Procurement Officer
U.S. Department of Homeland Security
Washington, DC 20528
(202) 447-5417
procurement.support@dhs.gov

15-121 Requests for Audit Services Received from State or Local Governments

a. This guidance pertains to requests for audit services when the request is initiated by a representative of a state or local government. The procedures are based on the provisions of OMB Circular No. A-97, "Rules and Regulations Permitting Federal Agencies to Provide Specialized or Technical Services to State and Local Units of Government under Title III of the Intergovernmental Cooperation Act of 1968." The OMB Circular sets the ground

rules permitting federal agencies to provide specialized or technical services to state and local governments.

b. Title III of the Intergovernmental Cooperation Act of 1968 is intended to:

(1) encourage intergovernmental cooperation in the conduct of specialized or technical services,

(2) enable state and local governments to avoid unnecessary duplication of special service functions, and

(3) authorize federal agencies that do not have such authority to provide reimbursable specialized and technical services to state and local governments.

c. Requests for Indirect Rate Information. Field audit offices (FAOs) are authorized to provide readily available contractor information to an audit representative from a state or local government. This includes information that is contained in an audit report or information that is contained in the permanent files on the contractor. Auditors may answer questions and concerns raised by the requestor and may provide a copy of the audit report to them. The key requirement is that the information is readily available and does not require additional audit effort. The FAO should not bill the requesting entity, since this type of effort is not a billable activity.

d. Requests for Contract Audit Services. At contractor locations where DCAA is the responsible audit agency, FAOs may be asked to perform contract audit services by a state or local government. FAOs should first check with Headquarters, ATTN: OWD, to determine if a Memorandum of Understanding (MOU) is in place for the requesting organization, to obtain the Funding Customer Identification (FCID) billing code, and the billing rate to be used. Both the MOU and the funding arrangements must be in place prior to providing any audit services. When performing audits for state and local governments, bear in mind that the following conditions must be met:

(1) The effort is consistent with work normally performed under our contract audit mission;

(2) There is a written request for services from the state or local government;

(3) The services requested can be performed without a negative impact on the existing audit staff;

(4) The predominance of audit services will be at contractors that have either DoD or other Federal contract awards subject to audit. The provision of audit services at contractors that have no DCAA presence will be incidental and at the discretion of the Regional Director.

(5) The requestor agrees to pay for the audit services in advance and a funding authorization number is contained in the request; and

(6) The requestor certifies that the requested audit "cannot be procured reasonably and expeditiously through ordinary business channels."

15-1S1 Non-DoD Supplement - Address List for NASA Office of Inspector General Field Offices

The NASA Office of Inspector General has established a centralized office and e-mail address for the receipt of DCAA audit reports. Audit reports should be sent to the cognizant NASA IG office when the NASA IG requests that it be furnished a copy.

NASA Office of Inspector General
Assistant Inspector General for Auditing
Code W
NASA Headquarters
300 E Street, S.W.
Washington, DC 20546-0001
(202) 358-1220
(202) 358-3022 FAX
E-mail address: dcaa@nasa.gov

DCAA audit reports should not be sent to the following NASA-IG offices, unless specifically requested by the OIG. The following list of OIG offices is for information purposes and should be used if there is a need for auditor contact:

Address of Center
NASA Office of Inspector General Mail Stop 190 Goddard Space Flight Center Greenbelt, MD 20771-0001 (301) 286-0497 (301) 286-1680 FAX
NASA Office of Inspector General Mail Stop 501-9 Glenn Research Center at Lewis Field Cleveland, OH 44135-3191 (216) 433-5413 (216) 433-5489 FAX
NASA Office of Inspector General Mail Stop 292, Langley Research Center Hampton, VA 23681-2199 (757) 864-8500 (757) 864-6328 FAX
NASA Office of Inspector General Mail Stop M-DI, Bldg 4201 George C. Marshall Space Flight Center Marshall Space Flight Center, AL 35812-0001 (256) 544-1149 (256) 544-5856 FAX
NASA Office of Inspector General Mail Stop KSC/OIG John F. Kennedy Space Center Kennedy Space Center, FL 32899-0001 (321) 867-4531 (321) 867-4881 FAX

NASA Office of Inspector General Mail Stop 204-11, Ames Research Center Moffett Field, CA 94035-0001 (650) 604-2672 (650) 604-3955 FAX
NASA Office of Inspector General Mail Stop 180-300 Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109-8099 (818) 354-3360 (818) 393-4882 FAX
NASA Office of Inspector General Mail Stop W-JS Lyndon B. Johnson Space Center 2101 NASA Road 1 Houston, TX 77058-3696 (281) 483-4773 (281) 483-5773 FAX

15-1S2 Non-DoD Supplement --- Address List for NASA Procurement Centers

Langley Research Center, NASA P. O. Box 1000 Mail Stop 126 Hampton, VA 23681-2199 (757) 864-2426 (757) 864-8541 FAX	NAS 1 (1) NNL (2)
Ames Research Center, NASA Mail Stop 241-1 Moffett Field, CA 94035-1000 (650) 604-5800 (650) 604-4646 FAX	NAS 2 (1) NNA (2)
John H. Glenn Research Center Mail Stop 500-313 21000 Brookpark Road Cleveland, OH 44135-3191 (216) 433-2800 (216) 433-5489 FAX	NAS 3 (1) NNC (2)
Dryden Flight Research Center, NASA P.O. Box 273 Mail Stop D-1044 Edwards, CA 93523-0273 (661) 276-3326 (661) 276-2292 FAX	NAS 4 (1) NND (2)
Goddard Space Flight Center, NASA Mail Stop 210.1 Greenbelt, MD 20771-0001 (301) 286-7522 (301) 286-1706 FAX	NAS 5, NAS W (1) NNG, NNH (2)
NASA Management Office - JPL Mail Stop 180-801 4800 Oak Grove Drive Pasadena, CA 91109-8099 (818) 354-4817 (818) 354-6051 FAX	NAS 7 (1) NNN (2)
George C. Marshall Space Flight Center, NASA Mail Stop PS01 Marshall Space Flight Center, AL 35812-0001 (256) 544-0253 (256) 544-9344 FAX	NAS 8 (1) NNM (2)
Lyndon B. Johnson Space Center, NASA Mail Stop BD8 2101 NASA Road 1 Houston, TX 77058-3696 (281) 483-5554 (281) 483-3106 FAX	NAS 9, NAS 15 (1) NNJ (2)

John F. Kennedy Space Center, NASA Mail Stop OP Kennedy Space Center, FL 32899-0001 (321) 867-7212 (321) 867-8599 FAX	NAS 10 (1) NNK (2)
John C. Stennis Space Center, NASA Mail Stop BA30 Stennis Space Center, MS 39529-6000 (228) 688-3632 (228) 688-1141 FAX	NAS 13 (1) NNS (2)

Notes
(1) For NASA contracts awarded on or before September 30, 2003.
(2) For NASA contracts awarded on or after October 1, 2003.

15-1S3 Non-DoD Supplement --- Address List for Department of Health and Human Services Regional Audit Offices

Region	Address of Regional Audit Office	Geographic Areas
I.	Regional Inspector General for Audit, DHHS John F. Kennedy Federal Building, RM 2425 Boston, MA 02203 (617) 565-2684 (617) 565-3750 FAX	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island & Vermont
II.	Regional Inspector General for Audit, DHHS Federal Building, RM 3900A 26 Federal Plaza New York, NY 10278 (212) 264-4620 (212) 264-6307 FAX	New Jersey, New York, Puerto Rico & Virgin Islands
III.	Regional Inspector General for Audit, DHHS 535 Market St Rm 4300 Philadelphia, PA 19101 (215) 861-4470 (215) 861-4541 FAX	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia & West Virginia
IV.	Regional Inspector General for Audit, DHHS 61 Forsyth Street, SW Room 3T41 Atlanta, GA 30301 (404) 562-7251(404) 562-7795 FAX	Alabama, Florida, Georgia, North Carolina, and South Carolina
V.	Regional Inspector General for Audit, DHHS 105 West Adams 23rd Floor Chicago, IL 60603 (312) 353-2618 (312) 353-1194 FAX	Illinois, Indiana, Michigan, Minnesota, Ohio & Wisconsin
VI.	Regional Inspector General for Audit, DHHS 1100 Commerce Street RM 4E1A Dallas, TX 75242 (214) 767-8414 (214)767-2039 FAX	Arkansas, Louisiana, New Mexico, Oklahoma, & Texas
VII.	Regional Inspector General for Audit, DHHS 601 E. 12th ST RM 4A-5 Federal Building Kansas City, MO 64106 (816) 426-3591 (816) 426-3655 FAX	Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, & Wyoming
VIII.	Regional Inspector General for Audit, DHHS Federal Office Building 50 United Nations Plaza RM 171 San Francisco, CA 94102 (415) 437-8369(415) 437-8372 FAX	Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Washington, American Samoa, Guam, Trust Ter. of Pacific Islands, & Wake Island

15-1S4 Non-DoD Supplement -- Address List for Department of Transportation Offices

Address of Office	Supplemental Address for Submission of Public Vouchers and Audit Reports
Department of Transportation Office of the Inspector General Office of Planning, Training & Tech Support, JA-2 Room 9210 400 7th Street, SW Washington, DC 20590 (202) 366-2704 (202) 366-3912 FAX	Not Applicable
Department of Transportation Office of the Secretary 400 7th Street SW M-63 Rm 5106 Washington, DC 20590 (202) 366-4953 (202) 366-9848 FAX	ATTN: Acquisition Management Includes former Transportation Administrative Service Center (TASC) (Contract No. Prefix DTOS59 or DTTS59)
Research and Special Programs Administration Volpe National Transportation Systems Center, Kendall Square 55 Broadway DTS-85 Cambridge, MA 02142 (617) 494-2170 (617) 494-3656 FAX	ATTN: Contract Price Analyst, DTS-85 (Contract No. Prefix DTRS57)
Department of Transportation Research and Special Programs Admin. Office of Contracts and Procurement 400 7th Street, SW Rm. 7104 Washington, DC 20590 (202) 366-5180 (202) 366-7974 FAX	ATTN: Contracting Officer, DMA-30 (Contract No. Prefix DTRS56)
Federal Highway Admin. Headquarters 400 7th Street, SW Rm. 4410 Washington, DC 20590 (202) 366-4205 (202) 366-3705 FAX	ATTN: Office of Acquisition Management, HAAM-10 (Contract No. Prefix - DTFH61)
Federal Land Highway Program Office 400 7th Street, SW Rm 6311 Washington, DC 20590 (202) 366-9482 (202) 366-7495 FAX	ATTN: Director of Acquisition, HFL-1 (Contract No. Prefix DTFH68, 70 and 71)
Federal Transit Admin. 400 7th Street, SW Rm 9101 Washington, DC 20590 (202) 366-4980 (202) 366-3808 FAX	ATTN: Director, Office of Procurement, TAD-40 (Contract No. Prefix DTUM and DTFT 60)

Address of Office	Supplemental Address for Submission of Public Vouchers and Audit Reports
Federal Railroad Admin. 1120 Vermont Ave NW MS-50 Washington, DC 20590 (202) 493-6130 (202) 493-6171 FAX	
National Highway Traffic Safety Admin. 400 7th Street, SW Rm 5301 Washington, DC 20590 (202) 366-9561 (202) 366-9555 FAX	ATTN: Contracting Policy Analyst, NPO-220, Office of Contracts and Procurement (Contract No. Prefix DTNH22)
St. Lawrence Seaway Development Corp. P.O. Box 520 Massena, NY 13662 (315) 764-3244 (315) 764-3268 FAX	ATTN: Contracting Office (Contract No. Prefix DTSL55)
United States Maritime Admin. 400 7th Street, SW Rm 7310 Washington, DC 20590 (202) 366-9081 (202) 366-3237 FAX	ATTN: Deputy Director, MAR-380 (Contract No. Prefix DTMA)
Federal Aviation Admin. Headquarters 800 Independence Ave, SW Washington, DC 20591 (202) 267-7535 (202) 267-5149 FAX	ATTN: Contracts Support Branch, ASU-370, (Contract No. Prefix DTFA01 and DTFAWA)
Federal Aviation Admin. Aeronautical Center, AMQ 120 P.O. Box 25082 Oklahoma City, OK 73125 (405) 954-7713 (405) 954-0133 FAX	ATTN: Pricing Support Services, AMQ (Contract No. Prefix DTFA-AC02)
Federal Aviation Admin. Wm J. Hughes Technical Center Atlantic City International Airport, Atlantic City, NJ 08405 (609) 485-6320/6127 (609) 485-6766 FAX	ATTN: Contracts Manager, ACX-51/52 (Contract No. Prefix DTFA03)

15-1S5 Non-DoD Supplement --- Address List for Department of Agriculture Regional Audit Offices

Address of Regional Audit Office	Geographic Areas
Regional Inspector General Northeast Region Suite 2-2230 5601 Sunnyside Ave. MS 5300 Beltsville , MD 20705-5300 (301) 504-2100 (301) 504-2437 FAX	Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, Vermont, Virgin Islands, Virginia, and West Virginia
Regional Inspector General Southeast Region 401 W. Peachtree Street, NW Suite 2328 Atlanta, GA 30308 (404) 730-3210 (404) 730-3221 FAX	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee
Regional Inspector General Midwest Region 111 N. Canal Street Suite 1130 Chicago, IL 60606-7295 (312) 353-1352 (312) 353-3017 FAX	Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin
Regional Inspector General Southwest Region 101 S. Main Street Room 324 Temple, TX 76501 (254) 743-6565 (254) 298-1373 FAX	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
Regional Inspector General Great Plains Region 8930 Ward Parkway, Suite 3016 Kansas City, MO 64114 (816) 926-7667 (816) 926-7676 FAX	Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Wyoming, and Utah
Regional Inspector General Western Region Suite 225 75 Hawthorne Street Suite 200 San Francisco, CA 94105-3920 (415) 744-2851 (415) 744-2871 FAX	Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Territory of Guam, Trust Territories of the Pacific, and Washington

15-1S6 Supplement --- Additional Report Distribution Requirements for Non-DoD Organizations

ORGANIZATION	TYPE OF REPORT	SUPPLEMENTAL DISTRIBUTION (NOTE 1)	ADDRESS
All non-DoD	Forward Pricing, Terminations, Equitable Adjustment Claims, Systems, Incurred Cost	DCAA-FLA-NONDOD	15-100
	Suspected Irregularity	DCAAI 7640.16	
AID	Annual Report CAC All Other Reports	13-706.7 15-107	13-706.7 10-905a(5) 15-107
Dept of Commerce	All	15-109	15-109
DHHS	Proposals	15-111a(1)	15-1S3
	Closings	10-905.a(4)	15-1S3
	All Other Reports	15-111a(2) & b	15-1S3
Dept of Interior	All	15-112	15-112
Dept of Transportation	All	15-114	15-1S4
EPA	All	15-116	15-116
Dept of Agriculture	All	15-108	15-1S5
Dept of Homeland Security	Internal Controls, CAS Compliance, Cost Impact Proposals, Post Awards	15-120	15-120

1. The general DCAA policy for addressing audit reports is stated in 10-206.1. Supplemental distribution requirements specified by the non-DoD organizations are referenced in this column.

15-200 Section 2 --- Contract Audit Coordinator (CAC) Program

15-201 Introduction

This section sets forth the policies and procedures applicable to the Contract Audit Coordinator (CAC) Program. It also provides guidelines for their implementation by field audit offices.

15-202 Policy for Establishment

a. A CAC program may be established and implemented as stated in this section for designated (1) larger multi-segment contractors; (2) Government-owned, contractor-operated (GOCO) plants; or (3) other groups of contractors operated as an integrated complex or engaged in a major procurement program or in furnishing the same or similar services or end items to the Government, e.g., shipbuilding or aircraft jet engines.

b. When there is a major organizational segment of a contractor's overall corporate structure that consists of a group of subordinate segments under common organizational control, which are relatively independent and have significant auditable Government business, a Group Audit Coordinator (GAC) may be established. There should be sufficient contract audit issues, usually unique to the group and normally different from the rest of the corporation, which require coordination among a number of FAOs. Further, there should be a contractor representative available at this group level that can speak for the group and is authorized to resolve issues.

c. Where establishment of a GAC is requested and approved, the DCAA organizational designation of the auditor cognizant of the parent level operations will vary depending on the circumstances. If other segments within the company's organization have sufficient audit requirements, a CAC at the corporate level would be appropriate; if not the position may be a Corporate Home Office Auditor (CHOA).

d. The guidance contained in 15-204 should be followed when establishing a GAC, and all the CAC Case Files required by 15-211 will be maintained at the GAC level, including distribution to Headquarters. All other portions of this guidance should be followed as applicable to the GAC.

e. The program will apply to all locations of each designated contractor or specific group of contractors. It will cover contract audit matters subject to or requiring centralized direction, control, or resolution in such areas as accounting, pricing, audit programming, CAS compliance, and cost estimating policies and practices. In each case, the extent of coordination will be determined by the specific circumstances.

f. Assignment and performance of the coordination duties described herein should be considered an identified part of supervisory and administrative responsibilities at the regional or FAO levels.

15-203 Program Objectives

The overall objective is to increase the effectiveness of contract auditing at those contractor locations designated for inclusion in the program by such means as:

a. Establishing a focal point for each contractor or contractor group to coordinate contract audit matters and distribute information regarding activities of common concern and interest within the CAC/CHOA/GAC complex.

b. Facilitating discussion and resolution of major audit problem areas with corporate or group level personnel.

c. Establishing closer working relationships among audit personnel and responsible contract administration officials in the evaluation of price proposals and negotiation, administration, repricing, and settlement of contracts and subcontracts.

d. Promoting consistency in the audit treatment of incurred and estimated cost representations and implementation of CAS.

e. Coordinating with procurement offices on contract provisions affecting accounting and finance.

f. Establishing coordinated audits where appropriate.

15-204 Designation of Audit Coordination Office

a. Regional directors will submit recommendations to Headquarters, ATTN: P, for the establishment of a CAC complex where such action is in consonance with the policy and objectives stated in 15-202.

b. A regional office or FAO will be selected as the audit coordination office for each CAC complex in accordance with the following guidelines:

(1) For multi-segment contractors, the FAO having the predominant audit workload or a major workload will ordinarily be selected. Proximity to the contractor's home office will also be considered.

(2) For other complexes, the CAC function will be assigned to the regional or field audit office which has responsibility for one or more of the larger contractor(s) performing on the major program. Proximity to the key procurement or contract administration office(s) will also be considered.

c. When a CAC complex is authorized by Headquarters, the regional director will notify all interested DCAA regional and field offices, as well as all applicable Government procurement and contract administration offices, of the name of the CAC and his/her office location. Also inform the principal representative(s) of a multi-segment contractor of the establishment of the CAC and the objectives of the program. Notification of the establishment of a CAC complex for GOCO plants or other groups of contractors need not be furnished to the contractors involved.

15-205 Responsibilities of the CAC

The responsibilities of the designated contract audit coordinator (CAC) will include but are not limited to:

a. Coordinating the contract audit activities of applicable FAOs as required to accomplish the program objectives, and formulating the annual CAC program or plan of operation.

b. Acting as the contact point for discussions with contractor officials in corporate and divisional offices on such matters as:

(1) Management policies and practices, including proposed changes thereto, having cost implications. These may involve relocation of operations, establishment of a new division, change in organizational structure, new types of products or contracts, and similar matters which would be of significant concern to cognizant auditors at the contractor's other plants or divisions (see 1-502 on change of FAOs).

(2) Inconsistencies and weaknesses in cost accounting procedures and practices, estimating methods, or indirect cost allocation procedures particularly those which are common to more than one division.

(3) Compliance with CAS Board rules, regulations, and standards (see Chapter 8).

(4) Treatment of inter- and intra-company transfers or billings.

(5) Access to the contractor's accounting, operating and statistical records, current and prospective budgets, operating and financial statements, internal audit reports, corporate minutes, operating committee minutes, and working papers and documents providing the basis for corporate managements' certifications and disclosures pursuant to the Sarbanes-Oxley Act of 2002.

(6) Questions on the contractor's local practices and procedures affecting cognizant auditors at other locations and requiring consultation or resolution at a higher management level.

c. Notifying cognizant auditors at the respective contractor locations of the results of discussions held and actions taken concerning any of the matters covered above; also ad-

vising such auditors on proposed or established changes affecting the contractor's accounting, pricing or estimating procedures, and other changes or management decisions having a bearing on contract audit activities.

d. Coordinating with cognizant auditors to promote consistency of audit treatment of sensitive and controversial elements of cost such as research and development, advertising, selling expenses, pension and retirement plans, compensation (see 5-803.2) and recruitment expense.

e. Coordinating with cognizant auditors to promote consistency and uniformity of audit approach by:

(1) providing them with complete details concerning special audit procedures, techniques, and programs which may be usefully applied at their assigned locations,

(2) alerting cognizant auditors of problems at other locations which may exist at their assigned locations,

(3) informing cognizant auditors of the details of problem resolution achieved at other locations that may also be applicable at their assigned locations, and

(4) advising cognizant auditors of action taken on problems referred to the audit coordination office for resolution.

f. Furnishing guidance for the scheduling and performance of the annual (historical) home office audit, and home office or other intracompany audits required for forward pricing.

g. Ensuring distribution of pertinent home office reports, and the results of the reviews of the corporate minutes and tax returns to each FAO within the CAC network (3-104.16); and ensuring that the contractor's corporate annual report is made available to FAOs within the network, the CAC's regional office, Headquarters, Special Projects Division (PSP) and the Field Detachment.

h. Reviewing quarterly SEC filings and accompanying notes. Items to consider when reviewing the SEC filings include the disclosure of off-balance sheet arrangements and related party transactions in the Management's Discussion and Analysis (MD&A) section, the report of management on the company's internal control over financial reporting, and the independent auditor's attestation report on management’s assessment of the company's internal control over financial reporting. If the filings or financial statement notes identify any relevant areas of risk, the CAC should review the information and related supporting documents and provide the results of the review to the applicable FAOs in the CAC network.

i. Coordinating with cognizant auditors, contracting officers, and other responsible officials, as appropriate, in the resolution of general questions of reasonableness of costs generated by divisions or affiliates of the contractor.

j. Assisting departmental negotiators by coordinating with cognizant auditors on:

(1) Timely issuance of indirect cost audit reports.

(2) Consistency in audit presentations and explanations for questioned costs.

(3) Uniform audit position and rationale on similar items questioned at different locations.

(4) Attendance at company-wide indirect cost negotiations.

k. Cooperating with procurement and contract administration personnel in performing contractor-wide studies and issuing reports to assist in increasing the effectiveness of procurement and in achieving consistency in pricing and costing.

l. Developing coordinated objectives or programs for the audit of selected functional areas and indirect cost items that are common to several locations within the CAC network (see 15-206).

m. Responding to inquiries for information, special studies, etc. on sensitive items or significant and common problem areas in the CAC network. Such inquiries will ordinarily be made by Headquarters to the regional director with a copy forwarded directly to the CAC. Replies will be made by similar procedures. Inquiries and replies may be made by telephone when required by time limitations.

n. Evaluating reports submitted by network FAOs and consolidating, where appropriate, significant findings for presentation to appropriate Government and/or contractor officials involving major procurement programs for same or similar services or end items, e.g., GOCO plants. Such reports can present pertinent information on common problem areas and indicate recommended action to be taken by procurement and/or contractors to increase the financial effectiveness of contracts.

o. If the contractor is a Defense Industry Initiative (DII) signatory company, notifying the FAOs within the CAC network the extent of the contractor's DII participation and the results of the corporate office review of the contractor's DII questionnaire. The list of signatory companies is included in DII's Annual Report, which is available on DII's web site at http://www.dii.org. The DII Annual Report and other DII information are also available on the DCAA Intranet under the Policy and Plans, Special Projects (PSP) web page.

(1) DII's fundamental principles include establishing codes of ethics and implementing self-governance programs to monitor ethics and compliance with Federal procurement laws and regulations. The DII conducts annual activities supporting its objectives and initiatives. The DII Annual Report summarizes these activities and provides a discussion of the signatory companies' ethics and conduct practices. As part of the corporate office audit of the control environment and overall accounting controls, the CAC should query the corporate office contractor on its DII activities and furnish the CAC network a summary of the contractor's activities, if applicable.

(2) Each year DII signatory companies complete a questionnaire to document ethics activities and compliance with the DII principles. A copy of the questionnaire is included as an attachment to the DII Annual Report. As part of the corporate office audit of the control environment and overall accounting controls, the CAC should request from the contractor its responses to this questionnaire and the supporting documentation. The contractor's responses to the DII questionnaire and the supporting data are useful information to assist in assessing the contractor's internal control structure. Therefore, the CAC should review the contractor's responses to the questionnaire (and the supporting data) and provide the CAC network a summary of this review.

(3) The periodic notification to the CAC network FAOs should include an explanation of the contractor's DII related activities that pertain to each segment (as applicable). The information provided should be sufficient to assist the segment auditor to determine the extent of the contractor's DII participation for consideration during the annual assessment of internal controls.

15-206 Coordinated Audit Objectives or Programs

15-206.1 Criteria for Multi-Segment Contractor CAC Complexes

As respects multi-segment contractors, common audit objectives and programs are particularly applicable when the same policies and procedures are used throughout the CAC complex in such areas as accounting, estimating, personnel practices, purchasing, and implementation of CAS. In these and other instances the use of common audit programs promotes consistency of audit treatment of selected functional areas at all participating components, as well as assisting in the proper time phasing and consolidation of audit reports. In those multi-segment CAC complexes where common audit programs cannot be used, the CAC should develop and issue common audit objectives.

15-206.2 Criteria for Other CAC Complexes

Where the CAC program is comprised of selected contractors involved in a major item procurement program or the production of similar or like end items, common audit programs cannot usually be adopted because of the differences in accounting, estimating, and other management systems existing among the different contractors. However, common objectives should be developed and must be sufficiently defined to produce

audit results which are compatible for consolidated audit reports. Some examples of areas to be given attention in such CAC programs would include:

(1) purchasing of common items,
(2) use of the same subcontractors,
(3) labor utilization,
(4) make-or-buy programs, and
(5) Government-furnished materials and equipment.

15-206.3 Procedures for Coordinated Audits

Audit objectives and programs should be developed by the CAC with the cognizant auditors, and audits made accordingly. The following guidelines are applicable:

a. Selection of the functions and indirect cost items to be audited will depend upon materiality, sensitivity, and the possibility that such may be questionable or unallowable.

b. The CAC will establish on an overall annual basis the functions and indirect cost items selected for coordinated evaluation and the summary and consolidated reports to be issued.

c. If coordinated audit programs or detailed audit objectives, as appropriate, have been prepared, copies will be distributed to each participating FAO.

d. While the audits are in process, the CAC and participating FAOs should communicate with each other as necessary to clarify questions and problems which may arise.

e. Workshops may be arranged, subject to regional office approval, to discuss and resolve problems and significant questionable areas which cannot otherwise be disposed of.

f. Where indirect cost negotiations are involved, individual reports prepared by the assigned FAOs will be forwarded to the CAC for incorporation in a consolidated audit report covering items audited on a coordinated basis.

15-207 Responsibilities of Other Audit Offices

Audit offices having responsibility for CAC network components shall follow a policy of full disclosure and positive support to the contract audit coordination program. These offices will:

a. Provide to the contract audit coordinator:

(1) Copies of any reports requested or otherwise considered pertinent for CAC network consideration or action.

(2) Complete data concerning any local problem areas that, in their opinion, may also exist at any other locations of the contractor or within the CAC network.

(3) Complete data concerning any local problem area that, while not believed to exist at other CAC network locations, cannot be resolved locally. Problems should not be submitted until local efforts for resolution have been exhausted. When forwarding unresolved problems, it is necessary that the cognizant auditors explain action taken at the local level and make recommendations for solution by the contract audit coordinator.

(4) Description of special audit procedures, techniques, or programs developed locally that resulted in more effective audit performance and that may be applied at other locations.

b. Perform, on a coordinated basis, audits of selected functional areas, indirect cost items, major item procurement program elements, etc., in accordance with the time schedules and/or audit programs established for the CAC network under 15-206.

c. Coordinate the following draft reports or correspondence (prior to issuance) with the CAC to ensure consistency within the CAC network and provide the CAC a copy of the report or correspondence when issued:

(1) Cost Accounting Standards draft audit reports containing audit exceptions;

(2) Operations audit draft reports for major contractors (see 14-504) with recommended cost avoidances;

(3) Restructuring costs draft audit reports; and

(4) Other correspondence (for example, advance agreements) or draft audit reports that involve issues that require CAC coordination to ensure consistency among the CAC network (as defined by the CAC). The CAC should provide its policy on coordination of draft audit reports and draft correspondence to the CAC network.

15-208 Communication Among Audit Offices

a. Full and free exchange of information and thinking is essential to this program. To that end, the audit coordination office and the FAOs responsible for audit at the other contractor locations are authorized to communicate directly with one another in respect to the types of matters described above. Such communication may be through the media of telephone, correspondence, small workshops or visits, as appropriate. The CAC is encouraged to pursue the availability of contractors' tele/video conferencing facilities as a means of communication if possible.

b. Communications between audit offices on problem areas or interrelated audit matters should not be delayed pending the holding of a contract audit coordination conference. They should be initiated as soon as the need is recognized, and should be continued thereafter, on a day-to-day basis as required, to effect resolutions of problem areas.

15-209 CAC Conferences

15-209.1 Objectives of Conferences

In addition to the normal and regular communication channels provided above, conferences of cognizant auditors of a multi-segment contractor or groups of contractors will be held to evaluate mutual problems. These conferences:

(1) serve as a means for the dissemination of information and the exchange of experiences,

(2) enable conferees to reach common understandings and crystallize unresolved problems, and

(3) result in agreement on actions to be taken.

15-209.2 Planning and Conducting CAC Conferences

a. Conferences will be planned and held as required, in coordination with the cognizant regional office. Approval for holding conferences and workshops must be obtained from Headquarters, ATTN: DX, at least 45 days before the date of the planned conference. (The approval requirement does not extend to the conduct of routine operational meetings between CAC and DCE staff members to address specific issues. Moreover, the participation by the CAC and his or her key supervisor in CACO or DCE conferences, when DCAA is not jointly holding and planning the conference, will be left to the discretion of regional management.) If attendance and participation in a CACO, DCE or other conference extends to employees from more than one region and if the total number of DCAA employees is more than four, approval for attendance should be requested as if the conference were being held by DCAA. A copy of the request should be concurrently provided to Headquarters, ATTN: PSP. The request for approval must include the following: a draft agenda (15-209.2.d); specific requests for Headquarters participation in agenda topics, if desired; justification for a location other than the Corporate Office, if applicable; and a completed DCAA Form 1100-1(EF) [MRD 06-DX-005(R) dated May 4, 2006].

(1) DX will provide the requestor notification, within 10 business days, on whether the conference has been approved as proposed; approved with changes; or disapproved for reasons stated in the notification.

(2) Normally a CAC conference should be scheduled at least once every two years; if other considerations indicate a longer interval, the regional director and Headquarters CAC program manager should be appropriately advised.

b. Invitations to participate in conferences will be extended to the Defense Corporate Executive (DCE) or the corporate ACO (CACO), procurement personnel, and audit representatives from non-defense audit agencies, such as NASA, having a significant audit interest. However, the total number of conferees should be kept to a practical minimum. To facilitate a productive concurrent consideration by different audit and/or procurement representatives, separate workshop sessions may be scheduled at the same time as part of the conference proceedings. A separate session for audit personnel only should be considered in preparing the agenda. Topics to be considered for presentation during auditor-only sessions include procurement support problems, and audit techniques employed at various contractor locations that resulted in improved audit effectiveness or significant audit findings. A summary report of each workshop should be furnished to the conference participants.

c. Contractor representatives may be invited to address the conferees and engage in discussion of matters of mutual interest. Their participation will be limited to specific sessions devoted wholly to this purpose.

d. The CAC should prepare a draft conference agenda on the basis of day-to-day knowledge of CAC activities and information solicited from FAOs on appropriate topics. The draft agenda should be time-phased, incorporate a concise description of each topic showing its scope and applicability, and describe any problems for discussion by participants. Before release of the agenda, an advance copy will be submitted for regional office approval. The CAC will generally serve as conference chair.

e. Recommendations for action to resolve problem areas will be developed during the conference. Where applicable, each such recommendation should be assigned a due date for its implementation. If the conferees cannot agree on a solution to a problem, the matter should be submitted to the appropriate regional directors for resolution (see 15-210).

15-209.3 Conference Minutes

a. Within 30 working days after the close of the conference, the CAC will prepare the conference minutes and submit them to the regional office for review and approval. After review and approval by the regional office, the CAC will distribute the minutes to the following:

(1) Regional office.
(2) Other interested regional offices.
(3) Cognizant auditors.
(4) CACO, NASA, and other interested offices having representation at the conference.

b. The regional office will transmit the minutes (with appropriate comments, if any) to Headquarters, Attn: PSP.

15-210 Resolution of Problem Areas

It is anticipated that most of the contract audit problems that may arise can be resolved through discussions between the contract audit coordinator and the contractor's key management officials, or by agreement among the cognizant auditors involved, subject to appropriate audit and procurement administrative approvals.

15-210.1 Resolution with Contractor

In the event resolution cannot be achieved with the contractor, the audit problem will be referred by the contract audit coordinator to his/her regional office for disposition. Where resolution cannot be achieved at that level within a reasonable time, Headquarters, ATTN: PSP, will be apprised of all pertinent facts as a basis for appropriate action.

15-210.2 Resolution Among Auditors

Disagreements between a contract audit coordinator and a cognizant auditor in common problem areas will be referred by the contract audit coordinator to his/her regional office. If the cognizant auditor is in another region, the regional office will take steps to resolve the disagreement with the regional office in which the cognizant auditor is located. If this cannot be accomplished, the interested regional offices will refer the matter to Headquarters, ATTN: PSP. Where appropriate, an Advice of CAC Case (see 15-211) will be used to accomplish this referral.

15-211 CAC Case Files

15-211.1 Establishing CAC Cases

a. Contract audit coordinators will maintain appropriate records to document activities under the CAC program. A CAC case file will be established, at the contract audit coordinator's discretion, for (1) each separate problem area or action item submitted to the contract audit coordinator under the CAC program if resolution will not be accomplished in a relatively short time frame, and (2) any studies or inquiries undertaken under the monitorship of the contract audit coordinator, the scope of which is CAC complex-wide, or affects more than one location.

b. Examples of CAC case file subjects include:

(1) difficulties concerning access to records;

(2) local problems which cannot be resolved locally;

(3) problems affecting more than one contractor division or plant;

(4) problems requiring coordination or action at the corporate headquarters level;

(5) problems requiring uniform action at the contract administration level;

(6) CAS compliance issues, and

(7) special studies or inquiries on corporate accounting, pricing, and cost estimating policies and procedures.

c. Each CAC case file will contain all pertinent data on the matters and issues involved. Appropriate documentation will also be maintained for CAC activities or actions not made the subject of an individual CAC case file.

15-211.2 Advice of CAC Case

a. When a CAC case file is opened, the contract audit coordinator will prepare an Advice of CAC Case. The advice will show the name of the contractor, the date the case was established, and a control number consisting of the fiscal year and a consecutive series of numbers (for each fiscal year) beginning with one. The advice will include a statement of the case, source of the case, action taken to date, and any action planned. It will be signed by the contract audit coordinator. Below the signature, the following statement will appear:

"Recipients of this advice are invited to submit suggestions for solution of the problem." Copies of the advice will be distributed to:

(1) the cognizant regional office,

(2) each of the other cognizant FAOs,

(3) the CACO where appropriate,

(4) case file, and

(5) Headquarters, ATTN: PSP.

b. Supplemental Advices of CAC Cases may also be issued as required to present subsequent additional data and status information which the CAC considers should be distributed to the above recipients to keep them currently informed about the case.

15-211.3 Case Resolution

When a CAC case is resolved, the contract audit coordinator will prepare an Advice of CAC Case Resolution, which will include the name of the contractor, the case control number, date the case was closed, and a statement of resolution. The advice will be signed by the contract audit coordinator and distributed as in 15-211.2.

15-212 CAC Information Files

The CAC will maintain adequate files relating to the CAC network and activities for his/her own use and the use of participating FAOs, regional directors, DCAA Headquarters, and others as may be authorized. If the CAC maintains a web site, then information from these files may be posted on the CAC's password protected web site. Information posted on the CAC's web site should be kept current. The CAC information files should include as a minimum the following:

a. Contractor Organization

(1) For multi-divisional CACs, location of the corporate office, and each operating division, plant and/or affiliate performing Government contracts.

(2) For groups of contractors constituting a CAC network, a list showing the name and location of each contractor.

(3) Location of each ACO and DCAA regional and field audit office cognizant of the individual offices or plants indicated in (1) and (2) above.

(4) Organizational chart of each division or constituent contractor, including the names of key personnel.

(5) Annual financial reports as available for each contractor or component within the CAC network.

(6) Number of employees for each of the locations shown in (1) and (2) above.

(7) For multi-segment contractors, major product lines and services by division or plant as applicable.

(8) For multi-segment contractors, annual (calendar or fiscal year) volume of sales by office, division or plant, and if available, amount and percentage of Government business for each.

b. Policies and Procedures

Access to corporate or institutional policies and procedures including those applicable to each contractor, GOCO plant, or division in the CAC network.

c. Plans, Programs, Reports, etc.

(1) Annual CAC program or plan of operation.

(2) Common audit programs, audit objectives, and unusual audit programs of applicable FAOs.

(3) Major audit reports submitted by the CAC and applicable FAOs. (These include reports on functional areas, surveys, indirect costs, significant pricing proposals, and noncompliance with CAS.)

(4) Reports on GAO reviews and procurement surveys, and other non-DCAA reports.

d. Correspondence and Communications

(1) Minutes of all CAC conferences and workshops.

(2) Trip reports covering visits to FAOs.

(3) Written comments of the CAC on the review of reports submitted by FAOs.

(4) All correspondence pertaining to the CAC program.

e. CAC Cases

Files pertaining to CAC cases designated by number and title (See 15-211.)

f. Other. The CAC information files should serve as a central collection and distribution point for information on:

(1) Access to all types of contractor records about which there is some difficulty or question from time to time.

(2) The status of completion of corporate-wide audits where common programs are in use.

(3) Changes or proposed changes in management policies and practices having cost implications.

(4) Current practices in estimating methods, overhead allocation methods, CAS, IR&D costs, advance agreements, pension plan management, insurance on plants, intracompany cost transfers, and other areas common to more than one office, division, or plant.

(5) Specific areas which may afford special opportunity for achieving contractor-wide or group-wide cost reduction and consistent audit treatment.

15-300 Section 3 --- Financial Liaison Advisory Services

15-301 Introduction

a. This section provides policies and procedures applicable to the performance of the DCAA Financial Liaison Advisor (FLA). Financial liaison covers advisory audit services that are offered to DoD procurement and contract administration offices to assist them in achieving the objectives of sound contracting by providing onsite accounting and financial advice to contracting officers, negotiators, and buyers.

b. GAGAS prohibits DCAA from auditing its own work or providing nonaudit services in situations where the nonaudit services are significant or material to the subject matter of audits (GAGAS 3.22). These standards also require audit organizations to be free from external impairments to independence both in appearance and in fact (GAGAS 3.10). By limiting the advisory services they perform to those in 15-304, FLAs will avoid even any appearance of violating the GAGAS independence standards.

c. The FLA is responsible for:

(1) facilitating effective communication and coordination between procurement officers and auditors;

(2) providing advice to the procurement office in connection with contractors' cost representations and related matters, in consultation with the cognizant FAO;

(3) providing to DCAA information regarding specific awards, trends in the type and volume of awards and other data impacting on immediate or long-range DCAA responsibilities; and

(4) providing DCAA management with information as to the adequacy, responsiveness and timeliness of the advisory audit reports being submitted by field audit offices. See 15-304 for further description and guidance on the liaison services provided by DCAA financial liaison advisors.

15-302 FLA Authorization

a. DoD Directive 5105.36 (see 1-1S1 3.1 & 5.9) authorizes the Director, DCAA to provide accounting and financial advisory services to all DoD Components responsible for procurement and contract administration and to establish and maintain liaison advisors, as appropriate, at major procuring and contract administration offices.

b. Financial advisory services are provided onsite by FLAs working at the individual procuring and contract administration offices or offsite by FLAs located at DCAA Headquarters. Generally speaking, the onsite FLAs are located at:

(1) the major procurement commands with the most significant auditable contracting activity, or

(2) the procurement policy-making groups for the military services (see 15-303).

15-303 Onsite FLAs

15-303.1 Audit Liaison Division (OAL)

OAL reports to the Assistant Director, Operations, and is responsible for (1) managing the Agency's Financial Advisory Services programs, and (2) directly supervising all FLAs. For those with access to the DCAA Intranet, information regarding OAL representatives currently onsite at the major procurement commands, and contract administration offices, and major buying offices’ activity codes and a cross-reference to onsite OAL representatives is available under Audit Tools.

15-303.2 Memorandum of Understanding (MOU)

a. To ensure that the FLA services being rendered are genuinely useful and effective and that there is no misunderstanding as to the nature of these services, DCAA enters into memorandums of understanding (MOUs) with those buying commands that can support/justify a full-time FLA. The MOU represents general agreement on the available services and facilities to be provided the FLA. It also represents a commitment by both parties to cooperate in the exchange of information to resolve procurement-related problems.

b. Each MOU is signed by DCAA's Assistant Director, Operations, and by the responsible official at each of the FLA locations. It is a working document without an established effective period, and as such can be amended at any time. Questions regarding the MOU may be directed to the Chief, Audit Liaison Division (see liaison information at the DCAA Intranet site under Organizations).

15-304 FLA Services

15-304.1 General

The onsite FLA is DCAA's principal point of contact at the procuring or contract administration activity to which assigned. The duties of the FLA cover a broad spectrum ranging from expediting the submission of advisory audit reports to on-the-spot consultation on complex financial and accounting matters relating to contract costs. The FLA duties also include focusing on improving the quality of information for decision-makers by providing confidence about the reliability and relevance of information. This information may be required by contracting officers throughout the contract negotiation process and the life cycle of the contract. To properly provide FLA services, the FLA must be independent. Many of the key services that the FLA performs are discussed in 15-304.3 to 15-304.14.

15-304.2 Proactive vs. Reactive

Whenever possible, FLAs are to take a proactive role as opposed to a reactive role. The proactive role stresses the opening of lines of communication with all command activities including contracting officers, pricing directorates, legal staff, and all other acquisition officials requiring DCAA services. It also:

(1) emphasizes the joint exploration of ways to improve coordination and the establishment of mechanisms to identify, evaluate and resolve issues;

(2) recognizes that a strong relationship between DCAA and the acquisition and contract administration commands provides a clearer understanding of customer needs; and

(3) facilitates DCAA's ability to provide quality, timely, and responsive audit and assurance services.

15-304.3 Professional Accounting and Financial Advice

The FLA advises procurement personnel on accounting and financial matters in areas of DCAA responsibility. This includes:

a. Advising procurement personnel on types of DCAA audit services and facilitating audit services with cognizant Field Audit Offices (FAOs).

b. Explaining or elaborating on the accounting and auditing principles, including CAS, underlying advisory audit report comments, findings, and recommendations and, when necessary, obtaining additional data, elaboration, or explanations from the field auditor.

c. Assisting procurement personnel in their efforts to obtain specific cost information when an audit of a contractor's proposal is not required (see 9-107) such as in below threshold proposals.

(1) FLA assistance in obtaining such information (e.g., indirect cost rates, labor rates, loading factors, etc.) from the cognizant DCAA field audit office (FAO) may be necessary and is usually beneficial when a contracting officer is experiencing difficulty:

(a) contacting the cognizant DCAA FAO,

(b) obtaining the requested data in a timely manner, or

(c) obtaining the requested data because of its connection with some unusual or controversial matter.

(2) FLAs may advise on the types of contractor data that the contracting officer might request from the contractor to support direct labor base rates, indirect rates, pools and bases, loading factors, and other cost elements.

d. Providing advice regarding reports on contractors' accounting and estimating systems in consultation with the cognizant FAO.

e. Advising the contracting officer on the results of audit as he/she prepares for the ne-

f. Facilitating the attendance of field auditors at the negotiation conference, and if requested by the FAO, participating in the negotiation to support the DCAA findings. (Also see 15-304.6.)

g. If an FAO is not able to attend negotiations, the FLA will provide assistance only with direct coordination with the FAO when discussing the treatment accorded costs in negotiations in which an audit report was issued.

h. Advising the contracting officer on matters relating to DCAA's postaward audit reports, and coordinating on requests for followup audit effort on postaward audit findings.

i. Providing counsel and any necessary coordination where a contracting officer is planning to issue a request for audit on only a part of a contractor's price proposal.

j. Attend government only meetings to address general issues and problems affecting DCAA’s relationship and work with acquisition and contract management personnel; such as barriers to accomplishing audits caused by the contractor, proposals inadequate for audit, due date extensions, etc.

k. Facilitate coordination between FAOs and Command on issues related to billing, Wide Area Work-Flow (WAWF) and contract close-out procedures.

15-304.4 Coordination of Requests for Audit of Price Proposals

a. The FLA is available to provide procurement personnel with information regarding the DCAA field audit office to which a copy of the request for field pricing support should be sent, and the type of audit they request based on the information they require. This is to assist contracting officers in using language that clearly identifies the specific information that is desired. This should be done in consultation with the cognizant FAO to ensure any areas of risk for that contractor are provided to the contracting officer for consideration in developing the request.

b. Direct telephonic communications between procurement personnel in the larger buying offices and the cognizant field auditors may result in multiple requests from various negotiators for the same data or requests for data already available in the files of the FLA; requests for data with unrealistic time deadlines; and requests for data to be furnished by telephone which is of such significance or magnitude that it should be furnished only by means of an advisory audit report. Also, direct telephonic communications may result in misinterpretation because the negotiator may not readily understand what the data means. Consequently, when a field auditor receives a telephonic request for data, questionable or problem areas which cannot be resolved at that time should be promptly referred to the FLA who will obtain any needed clarification or background information from the requestor (see 9-107).

c. The FLA should provide the procuring activity with the proposal adequacy checklist and provide general advice on the application of the checklist. The FLA should make arrangements with the procurement activity to be furnished a copy of each request for field

pricing support as well as any notices of date adjustments for the auditor's submission of audit report to the Plant Representative/ACO.

d. When the buying office changes product requirements, quantities, or specifications while an audit is in process, the FLA should confer with the contracting officer to assess the impact of the changes on the current proposal. The FLA should then confer with the field auditor on the advisability of continuing the current audit or suspending audit until a revised proposal is submitted. Where appropriate, arrangements may be made for supplemental audit reports.

e. Responsibility for the submittal of a timely audit report rests with the cognizant field auditor; responsibility of the FLA in this matter is to facilitate the use of audit service. The FLA shall look into any inquiry made either orally or in writing by the procuring activity where it is stated that a specific advisory audit report is overdue or was not received on a timely basis. On each such matter the FLA shall discuss the matter with the FAO and the procuring activity in an effort to assure timely reporting or more practicable due dates for future requests.

15-304.5 Counsel on Advisory Audit Reports

a. The FLA is available to discuss audit reports with procurement personnel. This can involve providing interpretation and explanation of the accounting and auditing principles underlying the findings, comments, and recommendations set forth in the report or obtaining from the cognizant field auditor additional information or further elaboration and explanation regarding particular cost elements. DCAA offices will provide the onsite FLA one copy of each advisory audit report when it is issued (see 15-307 and FLA information available at the DCAA Intranet site).

b. The FLA will pursue all leads and concerns raised by the management at the commands being supported, and those requiring the attention of DCAA field and/or Headquarters management should be elevated accordingly. A file should be maintained on problem areas in order that recurring matters indicating a trend or other condition requiring action at FAO, regional or Headquarters level may be communicated by the FLA to the appropriate office. Arrangements should be made with the procurement office to provide appropriate notification of problems and problem areas to the FLA, preferably by direct written communication or by copy of a PNM in which the matter is set forth.

15-304.6 Arranging for DCAA Participation in Negotiation Conferences

a. The FLA should arrange to obtain advance information concerning impending contract negotiation conferences in instances where an audit report has been issued. Encourage the contracting officer to request DCAA attendance at negotiations. This could involve the prenegotiation conference attended only by Government representatives, the formal negotiation conference with the contractor, or both. When such attendance is required, the PCO's request to the field audit office should be transmitted promptly to provide maximum time for preparation and travel arrangements. Where the PCO consistently fails to solicit necessary field auditor attendance, the FLA should resolve the problem in accordance with 15-402.1.

b. Arrangements for auditors' participation in negotiations should be coordinated with the DCAA FLA. Field auditors should inform the FLA of any requests for attendance at negotiations received directly from contracting officers, and discuss any question concerning the necessity or duration of his or her attendance. Field auditors should notify the FLA upon arrival at a supported procuring activity to attend a negotiation. The negotiations in which field auditors are invited to participate are usually large-dollar, complex procurements, and it may be advisable for the FLA to attend with the field auditor, especially where continuity is needed because negotiations are expected to extend over a number of days or weeks at both the contractor's location and the procurement office and it will not be possible for the field auditor to be present at all sessions.

c. In those cases where a field audit report was issued and the field auditor is not able to attend, the FLA can attend negotiation meetings and conferences when requested by the contracting officer, and should provide whatever accounting and audit advice and assistance is required in direct consultation with the cognizant FAO.

15-304.7 Procurement and DCAA Policy and Procedures

The FLA will explain and clarify DCAA policy and procedures to the procuring activity to which assigned, when requested. In turn, when the FLA becomes aware of new or revised policy or procedures that impact upon DCAA operations, the FLA will advise Headquarters, the Audit Liaison Division.

15-304.8 FLA Support of Major Defense Systems Procurement – Liaison Services

a. DoD Directive 5000.1, DoD Instruction 5000.2, and the Defense Acquisition Guidebook set forth the policies and procedures and establish specific requirements and responsibilities for acquiring major defense systems. As stated in the Directive, the policy of DoD is to assure that the acquisition process is timely, efficient, and effective. When providing liaison services the FLA should make a direct offer to assist the program manager for the major defense systems procurement during the initial stages of the program as well as after contract award. Maintaining good communications and close working relationships with the program manager will help facilitate the acquisition process.

b. Although not intended as a complete listing, the types of liaison services provided by the FLA on major defense system procurements will generally include those summarized below:

(1) To act as the facilitator and liaison for DCAA on matters requiring contact with the contracting officer, project manager and their staffs.

(2) To recommend to the procurement activity, when appropriate, that the request for proposal (RFP) should require the contractor to:

(a) Disclose any deviations from its normal accounting and/or estimating procedures used to prepare the proposal.

(b) Identify the dollar impact of such deviations.

(c) Identify and explain any anticipated differences between the accounting for costs to be incurred under the proposed contract and the accounting methods and procedures reflected in its proposal.

(d) Prepare and furnish for audit historical unit cost trend studies and analyses of experienced labor and overhead and G&A expense rate data.

(3) To assist the procurement office in understanding the accounting and financial aspects of the contractor's submission in consultation with the FAO and in conjunction with an audit.

(4) To monitor the overall audit input, arranging the timing of field audit effort and reporting so that submissions coincide with the overall time schedules and requirements of the procurement office.

(5) To advise FAOs promptly of any unusual cost provisions in the RFP in order that appropriate coverage may be provided in the audit program.

(6) To advise FAOs of any special areas of audit coverage desired by the procuring authority and not detailed in the RFP; this may be especially important in a competitive situation.

(7) To facilitate discussions between the appropriate contracting official and the cognizant Prime FAO on the extent to which audits will be needed on major subcontract proposals.

(8) To maintain sufficient contact with the FAOs to monitor the timeliness of audit service, and arrange for any necessary extensions of scheduled report dates.

(9) To facilitate communications between cognizant FAO and requestor to explain the audit results.

(10) To arrange for any additional audit effort that may become necessary subsequent to the submission of audit reports. In these efforts, it is essential that the field audit offices are timely and completely responsive and that actual or expected delays are communicated promptly to the FLA in order that he or she may initiate appropriate action with the procurement office.

15-304.9 Reserved

15-304.10 Auditors Role on Source Selection Evaluation Boards (SSEBs)

a. FAR 15.300 prescribes policies and procedures for selection of a source or sources in competitive negotiated acquisitions. The objective of source selection is to select the proposal that represents the best value to the Government, which may not be the lowest price. The Source Selection Authority (SSA) is responsible for source selection. In some instances there will also be a Source Selection Advisory Council (SSAC) which advises the SSA. The Source Selection Evaluation Board (SSEB) evaluates proposals and reports to the SSAC and/or SSA. The SSEB is comprised of contracting, legal, logistics, technical, and other expertise to ensure a comprehensive evaluation of offerors.

b. To avoid any potential independence issues, DCAA FLAs may not be a member of the SSEB. Such participation would constitute a nonaudit service. See 15-301 for further information on GAGAS independence standards when performing nonaudit services. FLAs may serve as advisors to SSEBs and provide support such as:

(1) Advise on requirements that should be included in RFP Section L and M, including the criteria on the DCAA Adequacy Checklist;

(2) Advise on the type of audit services available;

(3) Explain the importance of requiring proposals to be adequate for audit;

(4) Provide general advice on FAR and CAS applicability;

(5) Facilitate audit of proposals, pre-award surveys of prospective contractors' accounting systems, and financial condition risk assessments; and,

(6) Provide other types of FLA functions as described in other sections of CAM 15-300.

c. Source selection information is confidential in accordance with FAR 3.104-3 and 3.104-4. Source selection information may not be shared with anyone not appointed to the SSEB. The FLA may be requested to sign a non-disclosure agreement and may do so in accordance with CAM 1-403.5.

d. DCAA field auditors will not be members or advisors to SSEBs, but Field Audit Offices will provide requested audit services in support of SSEBs. When performing audit efforts related to an SSEB, auditors will not be required by the SSEB to sign a non-disclosure agreement. In accordance with CAM 1-507, DCAA auditors are required to perform audits in such privacy as warranted under the circumstances, and provide all necessary safeguards to contractor confidential data at all times.

15-304.11 Distribution of Contract Documents and Price Negotiation Memorandum (PNM)

a. The FLA will assist procurement personnel in the identification of FAOs to which contract documents should be sent.

b. CAM 4-104 states the procedure to be followed by field auditors in the event a copy of the PNM is not furnished by the contracting officer within a reasonable time after contract negotiation. Upon receipt of a copy of the FAO's follow-up request, the FLA has the responsibility to follow up until the PNM (or Command equivalent document such as

Business Clearance, Contract Modification) is distributed. Preparation and distribution of the PNM is the responsibility of the PCO. However, when requested by the PCO, the FLA may assist in clarification of matters related to audit input and accounting terminology. Although it is not desired that the FLA receive PNMs, he or she should try to arrange that the procedures of the procurement activity provide (1) direct distribution of a copy of the PNM to the cognizant auditor, and (2) notification to the cognizant FAO in those instances where no PNM will be prepared, i.e., when the procurement was cancelled, the offeror was unsuccessful, etc.

15-304.12 Participation in Training Sessions, Seminars and Review Groups

The FLA 's participation in informal training sessions and seminars of the procurement or contract administration office is encouraged since it affords an excellent opportunity to elaborate on DCAA services available to the procurement office.

15-304.13 Assistance in Preparing Replies to Government Accountability Office (GAO) Reports

Procurement and contract administration activities will on occasion request the assistance of the liaison auditor or the financial advisor in preparing replies to GAO reports. FLAs may only verify the financial matters relating to DCAA audit reports. This should be done in conjunction with the cognizant FAO. The FLA and FAO should follow guidance and procedures in 1-204 regarding interaction with the GAO.

15-304.14 General

The FLA should be continuously alert to major items of audit workload originating at the procurement office. When it is learned that a major proposal will require audit evaluation in the near future, the appropriate resident or branch office(s) should be informed. Along these same lines, the FLA should assist field auditors by providing information on developments affecting contracts under their cognizance, facilitating communications with FAO and procurement personnel on audit issues, and coordinating with procurement personnel in establishing the agendas for negotiation conferences so that the field auditor's time at the conference is not unduly extended.

15-305 Financial Liaison Advisory Services to Contract Administration Offices

a. Many of the FLA services provided to the procurement centers are also available to Administrative Contracting Officers (ACOs) and other procurement-support personnel at the contract administration offices (CAOs). However, since DCAA field audit office (FAO) managers are often co-located or housed in close proximity, and in daily contact with their CAO counterparts, it is generally unnecessary to assign FLAs to the CAOs.

b. Meetings should be held periodically between the local management of the DCAA FAO and CAO to discuss issues of common concern, and to determine whether DCAA and the CAO could benefit from new or improved financial liaison advisory services. When this appears to be the case, the FAO responsible for the CAO should not hesitate to provide the services. If there is no DCAA FAO in close proximity to the CAO, the matter of financial liaison advisory services should be brought to the attention of the appropriate DCAA regional office.

15-306 Financial Liaison Advisory Services for Sensitive Compartmented Information (SCI) and Special Access Programs (SAP)

a. As a result of their special security requirements, SCI and SAP procurements require unique financial liaison advisory services. To provide these services, DCAA has estab-

lished an FLA team referred to as the Special Programs Team. The team reports to the Chief, Audit Liaison Division (OAL).

b. DCAAM 5110.1, Chapter 6.2 – Field Detachment, sets forth DCAA's operating procedures for supporting SCI and SAP efforts. The Special Programs Team FLAs are subject to these same procedures to ensure that they are properly trained to handle SCI and SAP efforts. Questions relating to DCAA's general support of SCI and SAP efforts may be directed to the Senior FLA - Special Programs.

15-307 Audit Report Distribution to FLAs

a. As provided for in various sections of Chapter 10, the FLAs (see FLA and office information available at the DCAA Intranet site) are to be included in the distribution of all DCAA audit reports resulting from forward pricing audits (including rate audits), postaward audits, terminations, and claims.

b. This requirement does not mean that the FLAs should be limited only to the types of reports noted above. Special consideration should always be given to providing the cognizant FLA with a copy of any audit report that may require, or could benefit from, FLA coordination or involvement. However, prior to transmitting non-listed audit reports, first coordinate with the FLA to determine if there is a need for a copy of the report.

15-400 Section 4 --- Auditor Support of a Negotiation Conference

15-401 Introduction

This section contains procedures and guidance on audit support of negotiation conferences. It is DCAA's policy to support contracting officers at negotiations where DCAA has issued an audit report on the contractor's submission (e.g., price proposals, incurred cost submissions, termination claims), especially for complex submissions with significant audit issues. While this section primarily addresses negotiation conferences for price proposals, DCAA is available to support contracting officers at any type of negotiation; e.g., those involving incurred costs or terminations, as well as price proposals. Attendance at Government only pre-negotiation meetings when requested by the contracting officer to discuss audit report results is also encouraged. Providing support and technical advice based on the auditor's technical knowledge and expertise to help the contracting officer understand audit report results does not impair auditor independence. Answering questions about audit rationale/computations or giving advice regarding contractor rebuttals to reported results helps the contracting officer understand audit conclusions.

15-402 Auditor Attendance at a Negotiation Conference

15-402.1 Notification of Availability of Audit Assistance

In routine audits, auditor availability for negotiations will be presumed. If auditor attendance is considered critical; for example, due to the complexity or controversial nature of the matters presented in the audit report, the audit report should contain a statement recommending that the contracting officer invites DCAA to attend the negotiation conference (see 10-210.5e(2)(f)). See 15-304.6 for the FLA's responsibilities related to arranging for DCAA participation in negotiation conferences. When buying offices continually fail to solicit necessary auditor attendance at negotiation conferences, the FLA, together with the regional directors, should confer with the head of such activities. Refer significant unresolved problems to Headquarters, Attention: O, for discussion at higher procurement levels.

15-402.2 Request for Auditor Attendance at the Negotiation Conference

Field auditors should inform the FLA of any requests for attendance at negotiations received directly from contracting officers (see 15-304.6). On receiving the request for audit assistance, the FLA will discuss the report with the contracting officer to determine the extent of the assistance required. To the maximum extent practicable, the FLA should render the required assistance through his or her own office, particularly where it involves only an explanation of accounting principles or a limited amount of information which can readily be obtained by contacting the audit office which performed the audit. Copies of selected audit office working papers may be provided to efficiently satisfy an inquiry. The copies will be marked with appropriate protective markings based on the information contained therein and consistent with the audit report (see 10-205). Where, however, the assistance involves extensive referral to audit working papers or presentation of information on conduct of the examination, the FLA will arrange directly with the audit office for auditor attendance at the negotiation conference (see 15-304.6). Any requests for auditor attendance which will involve more than two weeks

15-402.3 Subcontract Negotiation Conferences

Arrangements may be made for a DCAA auditor who performed a subcontract audit to attend a subcontract negotiation conference only when all negotiating parties concur. Participation should be limited to explaining the audit procedures performed and the results of examination. The conduct of subcontract negotiations is the responsibility of the upper-tier contractor.

15-403 Advisory Audit Counsel in the Negotiation Conference

15-403.1 Negotiation Process

The negotiation of a fair and reasonable price is a complex process involving consideration of many factors including:

(1) actual costs and completion estimates;

(2) the amount of profit or fee in relation to total cost, the complexity of the work, quality, efficiency, and ingenuity of the contractor's performance, and the technical and financial risk assumed; and

(3) the competitiveness of the end price.

Costs constitute an important factor in the contract price negotiation and the discussions between the contractor and the contracting officer include the objective of arriving at a definitive agreement, to the maximum extent possible, on the amount of costs to be considered in the price. Definitive agreement on each element of cost may not always be possible because of honest differences of opinion or other considerations between the negotiating parties. As a result negotiation involves a give and take proposition and the contracting officer usually cannot negotiate a price which includes cost considerations exactly in accordance with the advisory audit report. In this situation, the auditor should advise the contracting officer on the extent and financial significance of any differences or considerations which exist. In connection with profit or fee, many of the other factors enumerated above that are considered in price negotiation, are also not subject to a precise determination. Such factors as the complexity of the work or the contractor's ingenuity are not generally expressed in dollar and cents terms but require judgmental evaluation of a broader basis. Accordingly, in some instances, a total end price may be negotiated without specific monetary resolution of all of the individual cost elements or other pricing factors involved.

15-403.2 Nature of Audit Counsel

The auditor will provide support and technical advice based on the auditor’s technical knowledge and expertise to help the contracting officer understand audit report results. Providing the contracting officer this type of support and advice does not impair auditor independence and will assist in the conclusion of a fair and reasonable price agreement with the contractor. Whether in actual attendance at the conference or through support from the audit office, the auditor may provide the following types of support:

a. Explain the audit report recommendations on the costs of the particular items in the contractor's proposal. Copies of appropriate supporting working papers may be provided to help answer a request in an efficient, economical, and effective manner, especially when auditor attendance at the negotiation conference is not feasible. The copies will be marked with appropriate protective markings based on the information contained therein and consistent with the audit report (see 10-205).

b. Answer questions raised by conference participants relating to the scope of audit or the rationale for audit computations, determinations or recommendations. Appropriate references should be made to the factual information and documentation in the supporting working papers.

c. Provide technical advice regarding contractor rebuttals to audit results or recommendations.

d. Assist the contracting officer in understanding how any additional cost information/data the contractor may submit or any different considerations which it may allege during the negotiation conference impacts the reported audit conclusions. Auditors should support the contracting officer to the extent possible by providing advice on the additional data. This may include, for example, providing advice on the contractor's rationale for a revised estimate, verifying data to the contractor's books and records or other supporting data, or running various Government position scenarios using the data through audit report schedules and underlying spreadsheets, where appropriate.

e. The auditor should exercise judgment in determining whether a supplemental report is more appropriate in the specific circumstances. If the data is complex and/or represents a significant update to the audited proposal, and requires extensive review or analysis, the auditor would generally need to issue a supplemental report (see 10-214).

f. When a supplemental report is not issued, any documentation provided to the contracting officer of the work performed should be clearly marked to distinguish it from audit report results. For example, it should include a statement noting that the documentation contains advice provided in support of negotiations and does not represent audited data, nor a revised audit opinion. Nothing short of a supplemental report will result in a revised audit opinion.

15-403.3 Limitations of Audit Counsel

As discussed in FAR 15.404-1(a)(1), the contracting officer has exclusive responsibility for ensuring that the final price is fair and reasonable. It is not appropriate for the auditor to provide in writing, or otherwise, an overall opinion on a "bottom-line" negotiation objective (but see 15-403.4 below).

15-403.4 Contracting Officer's Treatment of Reported Recommendations

Circumstances may arise before or during a negotiation conference when the auditor believes the contracting officer has given inadequate or improper treatment to the audit recommendations in the advisory audit report. In such cases, the auditor has the responsibility to make his/her position clear to the contracting officer prior to the negotiation settlement. This should be accomplished with appropriate tact and objectivity at a time when the contractor is not present. When the contracting officer fails to accept an audit recommendation and the auditor feels that this action has a significant or continuing impact on the reasonableness of pricing or contract administration and there is an opportunity for useful corrective action, the procedures outlined in 1-403.3 should be followed.

15-404 Documenting Auditor Support of Negotiations

15-404.1 Auditor's Memorandum of Negotiation

The FAO auditor should prepare a memorandum for the record (MFR) as soon as possible after attendance at a negotiation conference. In those cases where the FLA attends the negotiation conference without the FAO auditor (see 15-304.6), the FLA will prepare the MFR and provide a copy to the FAO. The memorandum will include basic identification data with respect to the contractor, the contract, personnel in attendance, etc.; information on the matters discussed during the negotiation conference; a summary of the action taken on audit recommendations; and the results of the negotiation. Where applicable, the memorandum should also cover advice the auditor provided to the contracting officer

on additional data presented by the contractor (including copies of any documentation provided to the contracting officer of the work performed), and any other pertinent matters not covered in the audit report. If the contractor's proposal was revised during negotiations, indicate the extent to which the audit report is applicable to the revised proposal, or show a self-explanatory reconciliation. Comment on possible improvements in the audit report presentation, the extent of contracting officer acceptance of audit recommendations, the effectiveness of the contribution made by the auditor at the negotiation conference, audit problem areas disclosed by the negotiation, and other pertinent matters. If the FAO does not attend the negotiation conference but provides other significant support (e.g., by attending a pre-negotiation meeting or providing advice to the contracting officer on data provided by the contractor in anticipation of negotiations), the MFR should appropriately document the support provided (including copies of any documentation provided to the contracting officer of the work performed). File the original memorandum in Livelink in the same folder with the official audit working paper files (see 4-407e(9)) and furnish a copy to the FLA. In addition, the regional office will be furnished a copy of every memorandum documenting:

(1) a settlement that is not supported by audit report findings or
(2) unusually effective auditor participation.

15-404.2 Written Concurrence of Settlement

Auditors are sometimes asked to affirm their concurrence in writing with positions negotiated by contracting officers. These negotiated positions frequently differ from audit report positions, as a result of both subjective and objective arguments raised by contractors at negotiations. When asked to provide such concurrence, the auditor should professionally decline. This is because the contracting officer has the authority to make flexible concessions without audit concurrence, as well as the responsibility to document the negotiations. (See 15-403.2d, for guidance on dealing with additional cost information furnished by the contractor.)

15-500 Section 5 --- Procedures for Actual or Potential Contract Disputes Cases

15-501 Introduction

This section identifies the responsibilities of field, regional, and Headquarters personnel. It outlines the reporting requirements for actual or potential board of contract appeals (BCA) cases and cases in other forums, such as the United States Court of Federal Claims.

15-502 Contracting Officer Decisions

Their warrants authorize contracting officers to resolve claims by or against contractors related to contracts subject to the Contract Disputes Act. Contractors may appeal written decisions to agency boards of contract appeals or to the courts (see FAR 33.211). The Armed Services Board of Contract Appeals (DFARS Appendix A) hears most cases affecting DoD contract costs. Many BCA and court cases involve controversial items. Since appeal decisions often influ-ence the treatment of these items in future years, DCAA has special interest in them.

15-503 Coordinated Support of Contract Disputes Activity

a. Close communication, through established channels, between the FAOs, regional offices, and Headquarters is needed throughout the course of such appeals. Close communication with the Government trial attorney and with the contracting officer is also very important.

b. It is Agency policy to assist the Government trial attorney in accounting matters in all cases, whether initiated through an Agency finding or by other means. Audit support should fully respond to the actual needs of the Government trial attorney and may consist of comprehensive audit and accounting advisory services, accounting research applicable to the specific case, testimony relative to the audit report, or testimony as an expert on accounting and auditing matters. Providing assistance to the Government trial attorney includes providing assistance to other Government counsel who are supporting the litigation of the case.

c. Audit work is privileged when performed at the request of Government trial attorney in support of ongoing or anticipated contract litigation. The attorney work product privilege applies and it protects the auditor's advice from release or disclosure to the other party. Auditors must coordinate closely with Government trial attorney before performing litigation support work and during the performance thereof. Auditors must request and follow counsel advice on such matters as whether to affix the attorney work product legend on auditor documents, whether and how to discuss factual aspects of the ongoing audit with the auditee, and the restrictions on handling and use of the auditor's working papers and advisory reports or memos. The Government trial attorney may request that audit work be performed but they should not direct how such work is to be accomplished. If such direction occurs, the auditor should explain to Government trial attorney that DCAA will be fully responsive to the request for an audit evaluation, but that specific audit tasks needed for that evaluation will be determined by DCAA. If unsuccessful, the auditor in a positive, proactive manner should indicate he/she will timely coordinate the request with DCAA management. Written clarification should be provided to the Government trial attorney after coordination with regional management and DCAA Headquarters (Policy and DL). An exit conference will not be held unless the Government trial attorney expressly approves it and its scope in writing (see 4-304.7).

15-504 Reporting Requirements for Contract Disputes Cases

15-504.1 DCAA Contract Disputes Cases

a. DCAA is responsible for evaluating all appeal decisions that have an impact on the allowability of costs under DoD contracts. Where such decisions appear to adversely affect the desired DoD policy, DCAA will recommend changes to the acquisition procedures through established channels. Headquarters has established a web-based application for real-time reporting to provide appropriate tracking of contract disputes cases. The policies and procedures for reporting contract disputes cases are outlined in DCAAI 7730.13. Reporting requirements are summarized in 15-504.2 and 15-504.3.

b. Actual cases have board or court docket numbers while potential cases have not yet reached that stage. Potential cases are those where the contracting officer has issued a unilateral decision advising the contractor of a time frame for appeal — 90-day appeal rights to the ASBCA or 12-month appeal rights to the Court of Federal Claims (FAR 33.211). The status or expiration of appeal rights for most potential cases can be tracked through DMIS. DMIS requires that after a contracting officer's unilateral final decision, the contractor's appeal rights must expire before reporting audit amounts sustained and the related net savings. In addition, even though a contracting officer's decision has not yet been made, there may be occasions when significant CAS or FAR cost principle issues are known to be in dispute and may result in litigation. The FAO should coordinate with the Regional Contract Disputes Coordinator (CDC) regarding the desirability of reporting such a potential case.

c. For reporting purposes, contract disputes cases (both actual and potential) will be designated either significant or routine. Significant cases requiring case summary information (see 15-504.2) are those where:

(1) a Cost Accounting Standard issue is involved;

(2) a Cost Principle issue is involved;

(3) specific DCAA audit guidance is being challenged;

(4) over $50 million is in dispute, regardless of the issue; or

(5) the case involves unusual or complex issues, e.g., the FAO has requested regional or Headquarters support or the case is externally sensitive as evidenced by major media attention or Congressional interest.

Cases which do not meet any of the five criteria identified above are considered routine and do not require input of case summary information. All cases should be included in the web-based application on a real-time basis (see 15-504.3.) This includes all cases involving a DCAA audit report and any additional disputes cases that the FAO is requested to support during the litigation process.

15-504.2 Significant Case Summary Reporting

As soon as a significant, actual or potential, contract disputes case is identified based on the five criteria identified above, FAOs will input a new contracts dispute record including case summary information into the web-based application. The format for the case summary information is included within the web-based application. Items such as notices of deposition, actual depositions, memorandums for record, and trip reports concerning DCAA participation in the dispute proceedings should be provided to the regional CDC, and as appropriate, forwarded to the Headquarters' CDC program manager.

The case summary information should be updated for known or anticipated significant actions related to the dispute.

Both the FAO and the regional CDC are responsible for the accuracy and timeliness of case summary information. They should also make recommendations for DCAA counsel (DL) involvement, if warranted (see 15-507.)

15-504.3 Reporting

The Inventory of Contract Disputes Cases and case summaries will be maintained on a real-time basis on the web-based CDC reporting system. The web-based CDC reporting system is available on the DCAA intranet under Organization, Headquarters, Policy (P), Accounting and Cost Principles (PAC); select the link to Contract Disputes Case Intranet Web Application. Upon the disposition of a case, the case record in the web-based application will be shown as closed. The regional CDC is responsible for the accuracy and timeliness of the information maintained within the web-based application.

15-505 Regional Contract Disputes Coordinator (CDC) Responsibilities in Contract Disputes Cases

15-505.1 Evaluate Audit Position

Regional CDCs will evaluate the audit position, working papers, supporting documentation, contractor's response or rebuttal, and other data to ensure that the case is well-founded. Appeals are time-consuming and expensive, so regional offices should make every effort to present the board or court with a clear, well-supported position. DCAA's position should include rebuttals to any known contractor arguments. Regional offices should recommend additional audit work if the existing documentation is inadequate. In such cases, the field auditor should advise the Government trial attorney if more time is required to develop the supporting data.

15-505.2 Technical Assistance

Regional offices will furnish assistance to the FAO and Government trial attorney when necessary. Regional CDCs will help the field in developing cases. They will ensure that the auditor clearly understands the major points in the case, and that the trial attorney understands the accounting significance of these points.

15-505.3 Coordinate Government Accounting Witnesses

Government trial attorneys sometimes request expert witnesses to testify in the areas of cost accounting standards, Government procurement regulations, generally accepted accounting principles, and generally accepted governmental auditing standards. These witnesses come from various sources, including Government, academia, public accounting and consulting firms, and industry. Regional offices will provide assistance to the Government trial attorney in locating appropriate witnesses. Most RAMs would qualify as expert witnesses in the various areas covered by contract audit. In some cases, FAO managers and field supervisors may qualify as expert witnesses.

15-505.4 Develop and Train Field Witnesses

DCAA witnesses of fact (usually the auditor who performed the audit or the supervisory auditor) or expert witnesses (usually the RAM or RSPM) need to prepare for their roles. Government trial attorneys prepare witnesses for trial, but, occasionally, this preparation is brief and at the last minute. Whenever appropriate, DCAA should support the witness preparation process. After coordinating with the Government trial attorneys, regional CDCs should acquaint the field auditor witness with courtroom procedure, including simulated courtroom testimony. To familiarize themselves with the trial/hearing process, regional CDCs should attend selected board hearings or court trials in their regions.

15-505.5 Evaluate Field Support

Regional CDCs should periodically evaluate FAO compliance with their responsibilities for the contract disputes program (see 15-506) to assure that FAOs are in compliance with Agency policy and to submit suggestions regarding possible improvements. The compliance program should assure active FAO contact with Government trial attorneys.

15-505.6 Real Time Case Summary Reporting

Regional CDC's will oversee real time reporting of contract dispute case summaries (both initial and updates) for all significant cases and maintenance of the inventory of routine cases in the web based application as described in 15-504.

15-506 FAO Responsibilities in Contract Disputes Cases

15-506.1 Release of Official Information in Litigation and Testimony by DCAA Personnel as Witnesses

DCAA Regulation 5410.11, Release of Official Information in Litigation and Testimony by DCAA personnel as witnesses, requires a determination by the General Counsel or his/her delegate prior to the release of official DCAA information for use in litigation or the provision of DCAA personnel to be interviewed, contacted, or used as witnesses concerning DoD information. The authority to authorize the release of requested information or authorize testimony of DCAA personnel has been delegated to the Chief Trial Attorney or other trial attorneys representing the Government in contract appeals proceedings before the ASBCA. Based on the nature of the contract disputes case, litigation requests will typically be processed through the attorneys representing the Government. Therefore, in accordance with Section 3.3.3 of DCAAR 5410.11, the regulation would not apply and DCAA personnel are not required to contact DCAA's General Counsel prior to responding to the request. The regulation does apply when litigation requests are received directly from counsel representing other than the United States Government, in which case DCAA personnel are required to contact the DCAA General Counsel or his/her delegate prior to responding to the request.

15-506.2 Support Government Trial Attorney

Audit support to Government trial attorneys should consist of clearly communicating the facts of the case, explaining the significance of the auditing and accounting issues, if required, and providing appropriate requested assistance. This may include suggesting areas for discovery or participating as a technical advisor during depositions. Field auditors should provide only basic accounting information and specific issue (factual) support. They should exercise special care to avoid expressing opinions on subjects outside the accounting field. They should not express legal or engineering opinions, for example. Auditors should elevate to the regional offices any requests from Government trial attorneys that fall outside of accounting areas. For example, auditors should avoid assessing the litigative risk of a case. This responsibility for board or court cases rests with the Government trial attorney. FAOs should inform the regional CDC in advance of significant meetings with the trial attorney in order to facilitate regional involvement in important cases.

15-506.3 Coordinate with Government Trial Attorney and Contracting Officer

Offer services to the contracting officer and Government trial attorney whenever a situation arises where audit services can be effectively used. Notify the Government trial attorney and the contracting officer promptly of any problems of access to records or

contractor delay in furnishing data (see 1-504.4). Request them to obtain any necessary technical reviews, and notify them of any technical reviews that are not received on a timely basis. Delays in receiving required technical reports can impair the Government's case and hamper the auditor's work. FAOs should be aware of cases in a prehearing status and periodically contact the Government trial attorney to offer assistance and discuss case status.

15-506.4 Maintain Case Files

Establish a separate case file for each active board or other contract disputes case. Index the file for easy retrieval of documents. Prepare and maintain, in the file, a case summary for significant cases (see 15-504.2) and a chronology of significant events for routine cases. Documents belonging in the case file are the decision being appealed, the contract, the audit report, the contractor's complaint, the Government's response to the complaint, correspondence between parties relating to the appeal, and any other pertinent information. Audit assignment files related to contract disputes should be segregated from the general working paper files and maintained in a locked file or cabinet. Contract disputes cases can last for many years. This procedure secures and protects documents during transition periods (change of cognizant supervisors or FAO, for example).

15-506.5 Produce Documents

Clarify and coordinate requests for the production of documents with the trial attorney and the regional office. Review DMIS data to identify all pertinent files. Once identified, segregate these files with the case file for the remainder of the litigation. A DCAA representative should physically observe any contractor access to these files during discovery. Arrange to have all pertinent working papers at the hearing. Protect classified documents essential to the case in the appropriate manner. Retain copies of all working papers released from DCAA custody.

15-506.6 Testify as a Witness

The auditor who performed the original audit or his supervisor will normally be the DCAA factual witness, unless the regional audit manager in coordination with the regional CDC and the Government trial attorney believe other arrangements are appropriate. If the performing auditor is not available (because of termination, for example), or if the original auditor was a trainee, the supervisory auditor involved in the original audit will be the recommended DCAA factual witness. Promptly notify the regional office when FAO personnel must testify, so the regional CDC may review the case and assist in the witness preparation when appropriate. Self-study course No. 9310, "Auditor Testimony in BCA Proceedings" should be taken by all DCAA witnesses. The CDC should coordinate planned action with the Government trial attorneys. Refer any requests from the Government trial attorney for additional or expert witnesses to the regional CDC.

15-506.7 Evaluate Audit Support

Following audit participation in an appeal, evaluate the effectiveness of audit support and the need for additional guidance on the issues involved. This report should be submitted to the regional office.

15-507 Headquarters Support

a. Headquarters, Accounting and Cost Principles Division, will monitor all actual and potential cases and update guidance based on an analysis of individual cases or trends. Headquarters will assist regional offices upon receipt of a written request, input

of case summary information (see 15-504.2), the region's position, and any additional supporting documentation needed to clearly explain the issue (see 4-902.2). The Accounting and Cost Principles Division will evaluate regional requests for Office of General Counsel (DL) involvement and make referrals to DL, if appropriate. Similarly, Headquarters may refer a representative to testify in support of the regional expert witness in significant cases concerning highly complex or unique issues involving accounting principles, auditing standards, contract cost issues, the application of the FAR cost principles, etc. Headquarters will support cases when such support will serve a useful purpose and the elements of the case are likely to have a significant impact on future allowability and allocability of costs at a number of contractor locations.

b. Headquarters, DL, will review and analyze regional requests for DL support referred by the Accounting and Cost Principles Division. DL will coordinate with Policy the identification of cases appropriate for DL involvement. Similarly, any direct requests from Government trial attorneys for DL involvement in contract disputes cases will be coordinated with Policy. For cases accepted by DL for involvement, DL will contact the Government trial attorney and offer assistance. DL will communicate to Policy and the region the significant areas of assistance provided to the Government trial attorney.

15-600 Section 6 --- Contract Audit Follow-up

15-601 Introduction

This section presents the responsibilities of acquisition components and contract auditors under DoD Instruction 7640.02, Policy for Follow-up on Contract Audit Reports. This instruction supersedes DoD Directive 7640.2, Policy for Follow-up on Contract Audit Reports, which was cancelled.

15-602 Background and General Requirements

a. Audit reports often deal with significant problems or controversial situations. Accordingly, each report must provide clear rationale for the audit position. At times, differences of opinion between the auditor and the contracting officer may arise during the settlement of specific audit issues. Whenever a problem of this type occurs, the auditor must provide the contracting officer with all pertinent evidential materials. Moreover, there shall be continuous communication between the contract auditor and the contracting officer, to promote understanding and improve the potential for satisfactory resolution, before a final decision is rendered.

b. DoD Instruction 7640.02, Policy for Follow-up on Contract Audit Reports, dated August 22, 2008, prescribes DoD policies for contract audit follow-up and establishes a system for management action on contract audit reports. The system provides for (1) tracking and reporting of specified types of contract audit reports, (2) procedures to monitor and ensure the proper, timely resolution and disposition of contract audit reports, and (3) periodic evaluations by internal auditors of the effectiveness of the DoD components' follow-up systems.

15-603 Responsibilities of Acquisition Components

The DoD Instruction requires Secretaries of the Military Departments and the Directors of the Defense Agencies to:

a. Designate a top management official to oversee contract audit follow-up (CAFU), including resolution and disposition actions.

b. Establish and implement procedures whereby contracting officers shall fully consider all contract audit findings and recommendations in developing the pre-negotiation and post-negotiation positions, if applicable, including the assessment of recommended penalties and interest.

c. Establish and implement procedures for maintaining records regarding the status of all reportable audit reports.

d. Require periodic internal reviews of the DoD components' follow-up programs to determine whether contracting officials timely and effectively resolve and disposition audit findings and recommendations, including the assessment of penalties and interest.

15-604 DCAA Responsibilities

The DoD Instruction requires DCAA to:

a. issue timely audit reports and provide timely and complete responses to contracting officers or review officials who request clarification or information supporting the audit findings and recommendations,

b. provide timely and adequate support to the DoD IG and any other DoD organization reviewing a DoD component's contract audit follow-up program,

c. consider all feedback provided by contracting officials to analyze and improve audit procedures and practices, and

d. provide a monthly listing of new reportable contract audit reports to the DoD components. The information in the monthly listing is described in 15-605.2d.

15-605 Procedures in DoD Instruction 7640.02

15-605.1 Tracking of Audit Reports

DoD components are required to track all contract audit reports. Reportable audits are to be tracked by the components in a CAFU system that (1) records the actions taken to resolve and disposition reportable contract audits and (2) serves as the source for the semiannual status information reported by the DoD Inspector General to the Secretary of Defense and to Congress.

15-605.2 Reporting Requirements

a. Most DoD components use the CAFU system maintained by the Defense Contract Management Agency (DCMA), and that system generates the semiannual status reports required by the DoD IG. Components not using DCMA's automated CAFU system must submit status reports within three business days after the end of the semiannual periods ending March 31 and September 30. The semiannual status reports include reportable reports (1) open as of the end of the reporting period, and (2) closed during the reporting period.

b. Reportable reports are:

(1) those reports, regardless of dollar value, containing findings and recommendations covering accounting and management systems audits (including estimating systems, control environment and overall accounting systems, billing systems, compensation systems, material management and accounting systems, budget and planning systems, labor systems, information technology systems, purchasing systems, and direct and indirect cost systems), accounting and management systems follow-up audits, estimating system real-time deficiency reports, earned value management systems, post-award audits, cost accounting standards (CAS) noncompliance reports and CAS cost impact statements. Reports containing only favorable findings and recommendations, such as CAS reports recommending that a contractor's proposed accounting change be approved, are not reportable.

(2) reports with total questioned costs or potential cost avoidance of $100,000 or more regardless of Government participation, covering operations audits, operations follow-up audits, incurred costs (except for audits of audit-determined indirect rates where the auditor and contractor agree on all questioned costs and the auditor does not identify questioned costs subject to penalty), settlement of final indirect cost rates, final pricing submissions, termination settlement proposals, claims, insurance and pension audits, capital and direct medical and education cost audits, retention incentive pay audits and Service Contract Act wage determination reviews.

(3) all supplemental audit reports that supersede or supplement a previously issued reportable audit report are reportable, regardless of whether the supplemental report includes findings, recommendations, questioned costs, or potential cost avoidance. Auditors should issue a supplemental report when there is a significant change in audit findings (see CAM 10-214 on supplement reports). A supplemental report supersedes the prior audit report in the CAFU system; therefore, auditors should not use other communication methods such as email because these will not be reflected and tracked in the CAFU system.

c. Audit reports covering pre-award proposals; forward pricing labor, overhead, and other advance rate proposals; progress payments; pre-award surveys; proposals for change orders or modifications; assist audits; auditor-determined final indirect rates where the auditor and contractor agree on the questioned costs and DCAA does not identify questioned costs subject to penalty; and any other audit reports not specifically identified as

reportable in the Instruction are not subject to the reporting requirements of the Instruction.

d. DCAA Headquarters will provide a listing of reportable audits issued each month to the DoD components within three business days following month's end. The listing includes the report number; report date; contractor name; DoD Activity Address Code; type of audit; questioned costs, potential cost avoidance, or recommended price adjustment; questioned costs subject to penalty; and whether the report includes qualifications or unresolved costs.

e. Questioned costs are not adjusted for contract type (e.g., fixed-price or cost-type) or Government participation. This allows users to readily match questioned costs shown in a component's CAFU system record to questioned costs in the corresponding audit report.

f. The contracting officers shall report questioned costs and sustained amounts in the CAFU system by: (1) including those agreed to between the auditor and contractor, except audit-determined incurred cost audits where the auditor and contractor agree on all questioned costs and the auditor does not identify questioned costs subject to penalty, (2) including those negotiated by another DoD contracting officer that are not being reported elsewhere in the CAFU system, and (3) excluding corporate or divisional allocated costs if another DoD contracting officer is responsible for negotiating and reporting them in the CAFU system.

g. The contracting officers shall ensure the accuracy of all data in their CAFU system.

15-605.3 Resolution and Disposition of Reportable Contract Audit Reports

a. The contracting officer shall document the resolution of the audit report in a signed and dated pre-negotiation memorandum, if applicable. The contracting officer shall indicate whether each audit finding and/or recommendation is agreed to and, if not, the rationale for the disagreement.

b. The contracting officer shall (1) assess penalties and interest if the contracting officer determines that the contractor included costs that are expressly unallowable or previously determined to be unallowable in its final indirect cost rate proposal, (2) report the amount of assessed penalties in the CAFU system separate from the reported costs questioned sustained, and (3) collect interest assessed on overpayments resulting from defective cost or pricing data or assessed on increased costs paid by the Government as a result of a cost accounting standard noncompliance.

c. All reportable reports are to be tracked until dispositioned by the contracting officer and closed for follow-up purposes. Prior to reporting the audit as dispositioned, the contracting officer shall prepare, sign, and date a post-negotiation memorandum documenting the disposition results of all reported findings and recommendations. A copy of the post-negotiation memorandum shall be provided to DCAA or to other Government agencies involved in, or affected by, the negotiation, as appropriate.

d. Upon receipt of the post-negotiation memorandum, the auditor is responsible for making sure that the information in DMIS is appropriately updated. If post-negotiation memorandums are not received on a timely basis, auditors should periodically contact the contracting officer and request the status. Guidance for obtaining and processing the post-negotiation memorandum is contained in the DMIS User Guide, Appendix A - DCAA Guidance for Calculating and Reporting Audit Results in the DCAA Management Information System.

15-606 NASA Contract Audit Follow-up

DCAA provides NASA with an electronic extract from DMIS listing (1) the reportable contract audit reports where NASA is the disposition official, and (2) the reportable incurred cost audit reports where DCMA is the disposition official and the NASA portion of questioned costs equals $100,000 or more.

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APPENDIX A

A-000 Contract Cost Principles And Procedures

A-001 Scope of Appendix

The printed version of this appendix is current as of the date of the printed CAM, i.e., January 1 and July 1. The electronic version of this appendix, available from the Agency Intranet site, is linked to the Hill Air Force Base maintained internet site, which contains the most current version of the Federal Acquisition Regulation (FAR) Part 31, and Part 231 of the DoD FAR Supplement (DFARS). On the Hill Air Force Base internet site, the FAR is continuously updated for the Federal Acquisition Circulars (FAC) and is current through the FAC identified on that web site Auditors should consult the online edition prior to finalizing reports with significant or complex findings.

A-100 Section 1 --- RESERVED

A-200 Section 2 --- RESERVED

A-300 Section 3 --- Federal Acquisition Regulation (FAR) --- Part 31 --- Contract Cost Principles and Procedures

A-301 Scope of Section

The Federal Acquisition Regulation Part 31, Contract Cost Principles and Procedures, is reprinted on the following pages. The transcript reproduces the initial 1984 edition of FAR Part 31 updated through Federal Acquisition Circular (FAC) 2005-45 dated October 1, 2010. A chronological history of changes, listed by FAC number, is available on the AT&L Knowledge Sharing System (AKSS). In addition, the information about the FACs is available in the FAR Cost Principles Guide maintained on the DCAA Intranet under CAM and under the Pamphlets, Manuals, Instructions & Regulations in the Resources section. To ensure the application of the appropriate cost principles, auditors must consider the dates the contracts were awarded. The FAR Cost Principles Guide (available on the DCAA intranet, under Library) provides a history of each cost principle from the inception of the FAR and enables the auditor to determine the applicable cost principle at a particular point in time.

For DCAA Intranet users, direct links are provided under CAM to FAR Part 31 and DFARS Part 231. Auditors are encouraged to consult that site for the most current changes to FAR and DFARS. Internet users can access the ARNet (GSA) or the AP Hill (FARSite) FAR and DFARs at the AKSS site (http://akss.dau.mil/jsp/default.jsp).

A-300 Part 31 --- Contract Cost Principles and Procedures

31.000 Scope of part

This part contains cost principles and procedures for—

(a) The pricing of contracts, subcontracts, and modifications to contracts and subcontracts whenever cost analysis is performed (see 15.404-1(c)); and

(b) The determination, negotiation, or allowance of costs when required by a contract clause.

31.001 Definitions

As used in this part—

"Accrued benefit cost method" means an actuarial cost method under which units of benefits are assigned to each cost accounting period and are valued as they accrue; *i.e.*, based on the services performed by each employee in the period involved. The measure of normal cost under this method for each cost accounting period is the present value of the units of benefit deemed to be credited to employees for service in that period. The measure of the actuarial accrued liability at a plan's inception date is the present value of the units of benefit credited to employees for service prior to that date. (This method is also known as the unit credit cost method without salary projection.).

"Accumulating costs" means collecting cost data in an organized manner, such as through a system of accounts.

"Actual cash value" means the cost of replacing damaged property with other property of like kind and quality in the physical condition of the property immediately before the damage.

"Actual costs" means (except for Subpart 31.6) amounts determined on the basis of costs incurred, as distinguished from forecasted costs. Actual costs include standard costs properly adjusted for applicable variances.

"Actuarial accrued liability" means pension cost attributable, under the actuarial cost method in use, to years prior to the current period considered by a particular actuarial valuation. As of such date, the actuarial accrued liability represents the excess of the present value of future benefits and administrative expenses over the present value of future normal costs for all plan participants and beneficiaries. The excess of the actuarial accrued liability over the actuarial value of the assets of a pension plan is the unfunded actuarial liability. The excess of the actuarial value of the assets of a pension plan over the actuarial accrued liability is an actuarial surplus and is treated as a negative unfunded actuarial liability.

"Actuarial assumption" means an estimate of future conditions affecting pension cost; *e.g.*, mortality rate, employee turnover, compensation levels, earnings on pension plan assets, and changes in values of pension plan assets.

"Actuarial cost method" means a technique which uses actuarial assumptions to measure the present value of future pension benefits and pension plan administrative expenses, and that assigns the cost of such benefits and expenses to cost accounting periods. The actuarial cost method includes the asset valuation method used to determine the actuarial value of the assets of a pension plan.

"Actuarial gain and loss" means the effect on pension cost resulting from differences between actuarial assumptions and actual experience.

"Actuarial valuation" means the determination, as of a specified date, of the normal cost, actuarial accrued liability, actuarial value of the assets of a pension plan, and other relevant values for the pension plan.

"Allocate" means to assign an item of cost, or a group of items of cost, to one or more cost objectives. This term includes both direct assignment of cost and the reassignment of a share from an indirect cost pool.

"Compensated personal absence" means any absence from work for reasons such as illness, vacation, holidays, jury duty, military training, or personal activities for which an employer pays compensation directly to an employee in accordance with a plan or custom of the employer.

"Compensation for personal services" means all remuneration paid currently or accrued, in whatever form and whether paid immediately or deferred, for services rendered by employees to the contractor.

"Cost input" means the cost, except general and administrative (G&A) expenses, which for contract costing purposes is allocable to the production of goods and services during a cost accounting period.

"Cost objective" means (except for Subpart 31.6) a function, organizational subdivision, contract, or other work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, products, jobs, capitalized projects, etc.

"Deferred compensation" means an award made by an employer to compensate an employee in a future cost accounting period or periods for services rendered in one or more cost accounting periods before the date of the receipt of compensation by the employee. This definition shall not include the amount of year end accruals for salaries, wages, or bonuses that are to be paid within a reasonable period of time after the end of a cost accounting period.

"Defined-benefit pension plan" means a pension plan in which the benefits to be paid, or the basis for determining such benefits, are established in advance and the contributions are intended to provide the stated benefits.

"Defined-contribution pension plan" means a pension plan in which the contributions to be made are established in advance and the benefits are determined thereby.

"Directly associated cost" means any cost which is generated solely as a result of the incurrence of another cost, and which would not have been incurred had the other cost not been incurred.

"Estimating costs" means the process of forecasting a future result in terms of cost, based upon information available at the time.

"Expressly unallowable cost" means a particular item or type of cost which, under the express provisions of an applicable law, regulation, or contract, is specifically named and stated to be unallowable.

"Final cost objective" means (except for Subparts 31.3 and 31.6) a cost objective that has allocated to it both direct and indirect costs and, in the contractor's accumulation system, is one of the final accumulation points.

"Fiscal year" means the accounting period for which annual financial statements are regularly prepared, generally a period of 12 months, 52 weeks, or 53 weeks.

"Funded pension cost" means the portion of pension cost for a current or prior cost accounting period that has been paid to a funding agency.

"Home office" means an office responsible for directing or managing two or more, but not necessarily all, segments of an organization. It typically establishes policy for, and provides guidance to, the segments in their operations. It usually performs management, supervisory, or administrative functions, and may also perform service functions in support of the operations of the various segments. An organization which has intermediate levels, such as groups, may have several home offices which report to a common home office. An intermediate organization may be both a segment and a home office.

"Immediate-gain actuarial cost method" means any of the several actuarial cost methods under which actuarial gains and losses are included as part of the unfunded actuarial liability of the pension plan, rather than as part of the normal cost of the plan.

"Independent research and development (IR&D) cost" means the cost of effort which is neither sponsored by a grant, nor required in performing a contract, and which falls within any of the following four areas—

(a) Basic research,

(b) Applied research,

(c) Development, and
(d) Systems and other concept formulation studies.

"Indirect cost pools" means (except for Subparts 31.3 and 31.6) groupings of incurred costs identified with two or more cost objectives but not identified specifically with any final cost objective.

"Insurance administration expenses" means the contractor's costs of administering an insurance program; *e.g.*, the costs of operating an insurance or risk-management department, processing claims, actuarial fees, and service fees paid to insurance companies, trustees, or technical consultants.

"Intangible capital asset" means an asset that has no physical substance, has more than minimal value, and is expected to be held by an enterprise for continued use or possession beyond the current accounting period for the benefits it yields.

"Job" means a homogeneous cluster of work tasks, the completion of which serves an enduring purpose for the organization. Taken as a whole, the collection of tasks, duties, and responsibilities constitutes the assignment for one or more individuals whose work is of the same nature and is performed at the same skill/responsibility level—as opposed to a position, which is a collection of tasks assigned to a specific individual. Within a job, there may be pay categories which are dependent on the degree of supervision required by the employee while performing assigned tasks which are performed by all persons with the same job.

"Job class of employees" means employees performing in positions within the same job.

"Labor cost at standard" means a preestablished measure of the labor element of cost, computed by multiplying labor-rate standard by labor-time standard.

"Labor market" means a place where individuals exchange their labor for compensation. Labor markets are identified and defined by a combination of the following factors—

(1) Geography,
(2) Education and/or technical background required,
(3) Experience required by the job,
(4) Licensing or certification requirements,
(5) Occupational membership, and
(6) Industry.

"Labor-rate standard" means a preestablished measure, expressed in monetary terms, of the price of labor.

"Labor-time standard" means a preestablished measure, expressed in temporal terms, of the quantity of labor.

"Material cost at standard" means a preestablished measure of the material elements of cost, computed by multiplying material-price standard by material-quantity standard.

"Material-price standard" means a preestablished measure, expressed in monetary terms, of the price of material.

"Material-quantity standard" means a preestablished measure, expressed in physical terms, of the quantity of material.

"Moving average cost" means an inventory costing method under which an average unit cost is computed after each acquisition by adding the cost of the newly acquired units to the cost of the units of inventory on hand and dividing this figure by the new total number of units.

"Nonqualified pension plan" means any pension plan other than a qualified pension plan as defined in this part.

"Normal cost" means the annual cost attributable, under the actuarial cost method in use, to current and future years as of a particular valuation date excluding any payment in respect of an unfunded actuarial liability.

"Original complement of low cost equipment" means a group of items acquired for the initial outfitting of a tangible capital asset or an operational unit, or a new addition to either. The items in the group individually cost less than the minimum amount established

by the contractor for capitalization for the classes of assets acquired but in the aggregate they represent a material investment. The group, as a complement, is expected to be held for continued service beyond the current period. Initial outfitting of the unit is completed when the unit is ready and available for normal operations.

"Pay-as-you-go cost method" means a method of recognizing pension cost only when benefits are paid to retired employees or their beneficiaries.

"Pension plan" means a deferred compensation plan established and maintained by one or more employers to provide systematically for the payment of benefits to plan participants after their retirements, provided that the benefits are paid for life or are payable for life at the option of the employees. Additional benefits such as permanent and total disability and death payments, and survivorship payments to beneficiaries of deceased employees, may be an integral part of a pension plan.

"Pension plan participant" means any employee or former employee of an employer or any member or former member of an employee organization, who is or may become eligible to receive a benefit from a pension plan which covers employees of such employer or members of such organization who have satisfied the plan's participation requirements, or whose beneficiaries are receiving or may be eligible to receive any such benefit. A participant whose employment status with the employer has not been terminated is an active participant of the employer's pension plan.

"Profit center" means (except for Subparts 31.3 and 31.6) the smallest organizationally independent segment of a company charged by management with profit and loss responsibilities.

"Projected benefit cost method" means either—

(1) Any of the several actuarial cost methods that distribute the estimated total cost of all of the employees' prospective benefits over a period of years, usually their working careers; or

(2) A modification of the accrued benefit cost method that considers projected compensation levels.

"Proposal" means any offer or other submission used as a basis for pricing a contract, contract modification, or termination settlement or for securing payments thereunder.

"Qualified pension plan" means a pension plan comprising a definite written program communicated to and for the exclusive benefit of employees that meets the criteria deemed essential by the Internal Revenue Service as set forth in the Internal Revenue Code for preferential tax treatment regarding contributions, investments, and distributions. Any other plan is a nonqualified pension plan.

"Self-insurance charge" means a cost which represents the projected average loss under a self-insurance plan.

"Service life" means the period of usefulness of a tangible capital asset (or group of assets) to its current owner. The period may be expressed in units of time or output. The estimated service life of a tangible capital asset (or group of assets) is a current forecast of its service life and is the period over which depreciation cost is to be assigned.

"Spread-gain actuarial cost method" means any of the several projected benefit actuarial cost methods under which actuarial gains and losses are included as part of the current and future normal costs of the pension plan.

"Standard cost" means any cost computed with the use of preestablished measures.

"Tangible capital asset" means an asset that has physical substance, more than minimal value, and is expected to be held by an enterprise for continued use or possession beyond the current accounting period for the services it yields.

"Termination of employment gain or loss" means an actuarial gain or loss resulting from the difference between the assumed and actual rates at which pension plan participants separate from employment for reasons other than retirement, disability, or death.

"Variance" means the difference between a preestablished measure and an actual measure.

"Weighted average cost" means an inventory costing method under which an average unit cost is computed periodically by dividing the sum of the cost of beginning inventory plus the cost of acquisitions by the total number of units included in these two categories.

"Welfare benefit fund" means a trust or organization which receives and accumulates assets to be used either for the payment of postretirement benefits, or for the purchase of such benefits, provided such accumulated assets form a part of a postretirement benefit plan.

31.002 Availability of accounting guide

Contractors needing assistance in developing or improving their accounting systems and procedures may request a copy of the Defense Contract Audit Agency Pamphlet No. 7641.90, Information for Contractors. The pamphlet is available via the Internet at http://www.dcaa.mil.

A-300 Subpart 31.1 --- Applicability

31.100 Scope of subpart

This subpart describes the applicability of the cost principles and procedures in succeeding subparts of this part to various types of contracts and subcontracts. It also describes the need for advance agreements.

31.101 Objectives

In recognition of differing organizational characteristics, the cost principles and procedures in the succeeding subparts are grouped basically by organizational type; *e.g.*, commercial concerns and educational institutions. The overall objective is to provide that, to the extent practicable, all organizations of similar types doing similar work will follow the same cost principles and procedures. To achieve this uniformity, individual deviations concerning cost principles require advance approval of the agency head or designee. Class deviations for the civilian agencies require advance approval of the Civilian Agency Acquisition Council. Class deviations for the National Aeronautics and Space Administration require advance approval of the Deputy Chief Acquisition Officer. Class deviations for the Department of Defense require advance approval of the Director of Defense Procurement, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics.

31.102 Fixed-price contracts

The applicable subparts of Part 31 shall be used in the pricing of fixed-price contracts, subcontracts, and modifications to contracts and subcontracts whenever (a) cost analysis is performed, or (b) a fixed-price contract clause requires the determination or negotiation of costs. However, application of cost principles to fixed-price contracts and subcontracts shall not be construed as a requirement to negotiate agreements on individual elements of cost in arriving at agreement on the total price. The final price accepted by the parties reflects agreement only on the total price. Further, notwithstanding the mandatory use of cost principles, the objective will continue to be to negotiate prices that are fair and reasonable, cost and other factors considered.

31.103 Contracts with commercial organizations

This category includes all contracts and contract modifications for supplies, services, or experimental, developmental, or research work negotiated with organizations other than

educational institutions (see 31.104), construction and architect-engineer contracts (see 31.105), State and local governments (see 31.107) and nonprofit organizations (see 31.108) on the basis of cost.

(a) The cost principles and procedures in Subpart 31.2 and agency supplements shall be used in pricing negotiated supply, service, experimental, developmental, and research contracts and contract modifications with commercial organizations whenever cost analysis is performed as required by 15.404-1(c).

(b) In addition, the contracting officer shall incorporate the cost principles and procedures in Subpart 31.2 and agency supplements by reference in contracts with commercial organizations as the basis for—

(1) Determining reimbursable costs under—

(i) Cost-reimbursement contracts and cost-reimbursement subcontracts under these contracts performed by commercial organizations and

(ii) The cost-reimbursement portion of time-and-materials contracts except when material is priced on a basis other than at cost (see 16.601(b)(3));

(2) Negotiating indirect cost rates (see Subpart 42.7);

(3) Proposing, negotiating, or determining costs under terminated contracts (see 49.103 and 49.113);

(4) Price revision of fixed-price incentive contracts (see 16.204 and 16.403);

(5) Price redetermination of price redetermination contracts (see 16.205 and 16.206); and

(6) Pricing changes and other contract modifications.

31.104 Contracts with educational institutions

This category includes all contracts and contract modifications for research and development, training, and other work performed by educational institutions.

(a) The contracting officer shall incorporate the cost principles and procedures in Subpart 31.3 by reference in cost-reimbursement contracts with educational institutions as the basis for—

(1) Determining reimbursable costs under the contracts and cost-reimbursement subcontracts thereunder performed by educational institutions;

(2) Negotiating indirect cost rates; and

(3) Settling costs of cost-reimbursement terminated contracts (see Subpart 49.3 and 49.109-7).

(b) The cost principles in this subpart are to be used as a guide in evaluating costs in connection with negotiating fixed-price contracts and termination settlements.

31.105 Construction and architect-engineer contracts

(a) This category includes all contracts and contract modifications negotiated on the basis of cost with organizations other than educational institutions (see 31.104), State and local governments (see 31.107), and nonprofit organizations except those exempted under OMB Circular A-122 (see 31.108) for construction management or construction, alteration or repair of buildings, bridges, roads, or other kinds of real property. It also includes architect-engineer contracts related to construction projects. It does not include contracts for vessels, aircraft, or other kinds of personal property.

(b) Except as otherwise provided in (d) of this section, the cost principles and procedures in Subpart 31.2 shall be used in the pricing of contracts and contract modifications in this category if cost analysis is performed as required by 15.404-1(c).

(c) In addition, the contracting officer shall incorporate the cost principles and procedures in Subpart 31.2 (as modified by (d) of this section by reference in contracts in this category as the basis for—

(1) Determining reimbursable costs under cost-reimbursement contracts, including cost-reimbursement subcontracts thereunder;

(2) Negotiating indirect cost rates;
(3) Proposing, negotiating, or determining costs under terminated contracts;
(4) Price revision of fixed-price incentive contracts; and
(5) Pricing changes and other contract modifications.

(d) Except as otherwise provided in this paragraph (d), the allowability of costs for construction and architect-engineer contracts shall be determined in accordance with Subpart 31.2.

(1) Because of widely varying factors such as the nature, size, duration, and location of the construction project, advance agreements as set forth in 31.109, for such items as home office overhead, partners' compensation, employment of consultants, and equipment usage costs, are particularly important in construction and architect-engineer contracts. When appropriate, they serve to express the parties' understanding and avoid possible subsequent disputes or disallowances.

(2) "Construction equipment," as used in this section, means equipment (including marine equipment) in sound workable condition, either owned or controlled by the contractor or the subcontractor at any tier, or obtained from a commercial rental source, and furnished for use under Government contracts.

(i) Allowable ownership and operating costs shall be determined as follows:

(A) Actual cost data shall be used when such data can be determined for both ownership and operations costs for each piece of equipment, or groups of similar serial or series equipment, from the contractor's accounting records. When such costs cannot be so determined, the contracting agency may specify the use of a particular schedule of predetermined rates or any part thereof to determine ownership and operating costs of construction equipment (see subdivisions (d)(2)(i)(B) and (C) of this section). However, costs otherwise unallowable under this part shall not become allowable through the use of any schedule (see 31.109(c)). For example, schedules need to be adjusted for Government contract costing purposes if they are based on replacement cost, include unallowable interest costs, or use improper cost of money rates or computations. Contracting officers should review the computations and factors included within the specified schedule and ensure that unallowable or unacceptably computed factors are not allowed in cost submissions.

(B) Predetermined schedules of construction equipment use rates (*e.g.,* the Construction Equipment Ownership and Operating Expense Schedule, published by the U.S. Army Corps of Engineers, industry sponsored construction equipment cost guides, or commercially published schedules of construction equipment use cost) provide average ownership and operating rates for construction equipment. The allowance for operating costs may include costs for such items as fuel, filters, oil, and grease; servicing, repairs, and maintenance; and tire wear and repair. Costs of labor, mobilization, demobilization, overhead, and profit are generally not reflected in schedules, and separate consideration may be necessary.

(C) When a schedule of predetermined use rates for construction equipment is used to determine direct costs, all costs of equipment that are included in the cost allowances provided by the schedule shall be identified and eliminated from the contractor's other direct and indirect costs charged to the contract. If the contractor's accounting system provides for site or home office overhead allocations, all costs which are included in the equipment allowances may need to be included in any cost input base before computing the contractor's overhead rate. In periods of suspension of work pursuant to a contract clause, the allowance for equipment ownership shall not exceed an amount for standby cost as determined by the schedule or contract provision.

(ii) Reasonable costs of renting construction equipment are allowable (but see paragraph (C) of this subsection).

(A) Costs, such as maintenance and minor or running repairs incident to operating such rented equipment, that are not included in the rental rate are allowable.

(B) Costs incident to major repair and overhaul of rental equipment are unallowable.

(C) The allowability of charges for construction equipment rented from any division, subsidiary, or organization under common control, will be determined in accordance with 31.205-36(b)(3).

(3) Costs incurred at the job site incident to performing the work, such as the cost of superintendence, timekeeping and clerical work, engineering, utility costs, supplies, material handling, restoration and cleanup, etc., are allowable as direct or indirect costs, provided the accounting practice used is in accordance with the contractor's established and consistently followed cost accounting practices for all work.

(4) Rental and any other costs, less any applicable credits incurred in acquiring the temporary use of land, structures, and facilities are allowable. Costs, less any applicable credits, incurred in constructing or fabricating structures and facilities of a temporary nature are allowable.

31.106 [Reserved]

31.107 Contracts with State, local, and federally recognized Indian Tribal Governments

(a) Subpart 31.6 provides principles and standards for determining costs applicable to contracts with State, local, and federally recognized Indian tribal governments. They provide the basis for a uniform approach to the problem of determining costs and to promote efficiency and better relationships between State, local, and federally recognized Indian tribal governments, and Federal Government entities. They apply to all programs that involve contracts with State, local, and federally recognized Indian tribal governments, except contracts with—

(1) Publicly financed educational institutions subject to Subpart 31.3; or

(2) Publicly owned hospitals and other providers of medical care subject to requirements promulgated by the sponsoring Government agencies.

(b) The Office of Management and Budget will approve any other exceptions in particular cases when adequate justification is presented.

31.108 Contracts with nonprofit organizations

Subpart 31.7 provides principles and standards for determining costs applicable to contracts with nonprofit organizations other than educational institutions, State and local governments, and those nonprofit organizations exempted under OMB Circular No. A-122.

31.109 Advance agreements

(a) The extent of allowability of the costs covered in this part applies broadly to many accounting systems in varying contract situations. Thus, the reasonableness, the allocability and the allowability under the specific cost principles at Subparts 31.2, 31.3, 31.6, and 31.7 of certain costs may be difficult to determine. To avoid possible subsequent disallowance or dispute based on unreasonableness, unallocability or unallowability under the specific cost principles at Subparts 31.2, 31.3, 31.6, and 31.7, contracting officers and contractors should seek advance agreement on the treatment of special or unusual costs and on statistical sampling methodologies at 31.201-6(c). However, an advance agreement is not an absolute requirement and the absence of an advance agreement on any cost will not, in itself, affect the reasonableness, allocability or the allowability under the specific cost principles at Subparts 31.2, 31.3, 31.6, and 31.7 of that cost.

(b) Advance agreements may be negotiated either before or during a contract but should be negotiated before incurrence of the costs involved. The agreements must be in writing, executed by both contracting parties, and incorporated into applicable current and

future contracts. An advance agreement shall contain a statement of its applicability and duration.

(c) The contracting officer is not authorized by this 31.109 to agree to a treatment of costs inconsistent with this part. For example, an advance agreement may not provide that, notwithstanding 31.205-20, interest is allowable.

(d) Advance agreements may be negotiated with a particular contractor for a single contract, a group of contracts, or all the contracts of a contracting office, an agency, or several agencies.

(e) The cognizant administrative contracting officer (ACO), or other contracting officer established in Part 42, shall negotiate advance agreements except that an advance agreement affecting only one contract, or class of contracts from a single contracting office, shall be negotiated by a contracting officer in the contracting office, or an ACO when delegated by the contracting officer. When the negotiation authority is delegated, the ACO shall coordinate the proposed agreement with the contracting officer before executing the advance agreement.

(f) Before negotiating an advance agreement, the Government negotiator shall—

(1) Determine if other contracting offices inside the agency or in other agencies have a significant unliquidated dollar balance in contracts with the same contractor;

(2) Inform any such office or agency of the matters under consideration for negotiation; and

(3) As appropriate, invite the office or agency and the responsible audit agency to participate in prenegotiation discussions and/or in the subsequent negotiations.

(g) Upon completion of the negotiation, the sponsor shall prepare and distribute to other interested agencies and offices, including the audit agency, copies of the executed agreement and a memorandum providing the information specified in 15.406-3, as applicable.

(h) Examples for which advance agreements may be particularly important are—

(1) Compensation for personal services, including but not limited to allowances for off-site pay, incentive pay, location allowances, hardship pay, cost of living differential, and termination of defined benefit pension plans;

(2) Use charges for fully depreciated assets;

(3) Deferred maintenance costs;

(4) Precontract costs;

(5) Independent research and development and bid and proposal costs;

(6) Royalties and other costs for use of patents;

(7) Selling and distribution costs;

(8) Travel and relocation costs, as related to special or mass personnel movements, as related to travel via contractor-owned, -leased, or -chartered aircraft; or as related to maximum per diem rates;

(9) Costs of idle facilities and idle capacity;

(10) Severance pay to employees on support service contracts;

(11) Plant reconversion;

(12) Professional services (*e.g.*, legal, accounting, and engineering);

(13) General and administrative costs (*e.g.*, corporate, division, or branch allocations) attributable to the general management, supervision, and conduct of the contractor's business as a whole. These costs are particularly significant in construction, job-site, architect-engineer, facilities, and Government-owned contractor operated (GOCO) plant contracts (see 31.203(h));

(14) Costs of construction plant and equipment (see 31.105(d));

(15) Costs of public relations and advertising;

(16) Training and education costs (see 31.205-44(h)); and

(17) Statistical sampling methods (see 31.201-6(c)(4).

31.110 Indirect cost rate certification and penalties on unallowable costs

(a) Certain contracts require certification of the indirect cost rates proposed for final payment purposes. See 42.703-2 for administrative procedures regarding the certification provisions and the related contract clause prescription.

(b) If unallowable costs are included in final indirect cost settlement proposals, penalties may be assessed. See 42.709 for administrative procedures regarding the penalty assessment provisions and the related contract clause prescription.

A-300 Subpart 31.2 --- Contracts with Commercial Organizations

31.201 General

31.201-1 Composition of total cost

a) The total cost, including standard costs properly adjusted for applicable variances, of a contract is the sum of the direct and indirect costs allocable to the contract, incurred or to be incurred, plus any allocable cost of money pursuant to 31.205-10, less any allocable credits. In ascertaining what constitutes a cost, any generally accepted method of determining or estimating costs that is equitable and is consistently applied may be used.

(b) While the total cost of a contract includes all costs properly allocable to the contract, the allowable costs to the Government are limited to those allocable costs which are allowable pursuant to Part 31 and applicable agency supplements.

31.201-2 Determining allowability

(a) A cost is allowable only when the cost complies with all of the following requirements:

(1) Reasonableness.

(2) Allocability.

(3) Standards promulgated by the CAS Board, if applicable, otherwise, generally accepted accounting principles and practices appropriate to the circumstances.

(4) Terms of the contract.

(5) Any limitations set forth in this subpart.

(b) Certain cost principles in this subpart incorporate the measurement, assignment, and allocability rules of selected CAS and limit the allowability of costs to the amounts determined using the criteria in those selected standards. Only those CAS or portions of standards specifically made applicable by the cost principles in this subpart are mandatory unless the contract is CAS-covered (see Part 30). Business units that are not otherwise subject to these standards under a CAS clause are subject to the selected standards only for the purpose of determining allowability of costs on Government contracts. Including the selected standards in the cost principles does not subject the business unit to any other CAS rules and regulations. The applicability of the CAS rules and regulations is determined by the CAS clause, if any, in the contract and the requirements of the standards themselves.

(c) When contractor accounting practices are inconsistent with this Subpart 31.2, costs resulting from such inconsistent practices in excess of the amount that would have resulted from using practices consistent with this subpart are unallowable.

(d) A contractor is responsible for accounting for costs appropriately and for maintaining records, including supporting documentation, adequate to demonstrate that costs claimed have been incurred, are allocable to the contract, and comply with applicable cost principles in this subpart and agency supplements. The contracting officer may disallow all or part of a claimed cost that is inadequately supported.

31.201-3 Determining reasonableness

(a) A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business. Reasonableness of specific costs must be examined with particular care in connection with firms or their separate divisions that may not be subject to effective competitive restraints. No presumption of reasonableness shall be attached to the incurrence of costs by a contractor. If an initial review of the facts results in a challenge of a specific cost by the

contracting officer or the contracting officer's representative, the burden of proof shall be upon the contractor to establish that such cost is reasonable.

(b) What is reasonable depends upon a variety of considerations and circumstances, including—

(1) Whether it is the type of cost generally recognized as ordinary and necessary for the conduct of the contractor's business or the contract performance;

(2) Generally accepted sound business practices, arm's-length bargaining, and Federal and State laws and regulations;

(3) The contractor's responsibilities to the Government, other customers, the owners of the business, employees, and the public at large; and

(4) Any significant deviations from the contractor's established practices.

31.201-4 Determining allocability

A cost is allocable if it is assignable or chargeable to one or more cost objectives on the basis of relative benefits received or other equitable relationship. Subject to the foregoing, a cost is allocable to a Government contract if it—

(a) Is incurred specifically for the contract;

(b) Benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received; or

(c) Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown.

31.201-5 Credits

The applicable portion of any income, rebate, allowance, or other credit relating to any allowable cost and received by or accruing to the contractor shall be credited to the Government either as a cost reduction or by cash refund. See 31.205-6(j)(3) for rules governing refund or credit to the Government associated with pension adjustments and asset reversions.

31.201-6 Accounting for unallowable costs

(a) Costs that are expressly unallowable or mutually agreed to be unallowable, including mutually agreed to be unallowable directly associated costs, shall be identified and excluded from any billing, claim, or proposal applicable to a Government contract. A directly associated cost is any cost that is generated solely as a result of incurring another cost, and that would not have been incurred had the other cost not been incurred. When an unallowable cost is incurred, its directly associated costs are also unallowable.

(b) Costs that specifically become designated as unallowable or as unallowable directly associated costs of unallowable costs as a result of a written decision furnished by a contracting officer shall be identified if included in or used in computing any billing, claim, or proposal applicable to a Government contract. This identification requirement applies also to any costs incurred for the same purpose under like circumstances as the costs specifically identified as unallowable under either this paragraph or paragraph (a) of this subsection.

(c)(1) The practices for accounting for and presentation of unallowable costs must be those described in 48 CFR 9904.405, Accounting for Unallowable Costs.

(2) Statistical sampling is an acceptable practice for contractors to follow in accounting for and presenting unallowable costs provided the criteria in paragraphs (c)(2)(i), (c)(2)(ii), and (c)(2)(iii) of this subsection are met:

(i) The statistical sampling results in an unbiased sample that is a reasonable representation of the sampling universe.

(ii) Any large dollar value or high risk transaction is separately reviewed for unallowable costs and excluded from the sampling process.

(iii) The statistical sampling permits audit verification.

(3) For any indirect cost in the selected sample that is subject to the penalty provisions at 42.709, the amount projected to the sampling universe from that sampled cost is also subject to the same penalty provisions.

(4) Use of statistical sampling methods for identifying and segregating unallowable costs should be the subject of an advance agreement under the provisions of 31.109 between the contractor and the cognizant administrative contracting officer or Federal official. The advance agreement should specify the basic characteristics of the sampling process. The cognizant administrative contracting officer or Federal official shall request input from the cognizant auditor before entering into any such agreements.

(5) In the absence of an advance agreement, if an initial review of the facts results in a challenge of the statistical sampling methods by the contracting officer or the contracting officer's representative, the burden of proof shall be on the contractor to establish that such a method meets the criteria in paragraph (c)(2) of this subsection.

(d) If a directly associated cost is included in a cost pool that is allocated over a base that includes the unallowable cost with which it is associated, the directly associated cost shall remain in the cost pool. Since the unallowable costs will attract their allocable share of costs from the cost pool, no further action is required to assure disallowance of the directly associated costs. In all other cases, the directly associated costs, if material in amount, must be purged from the cost pool as unallowable costs.

(e)(1) In determining the materiality of a directly associated cost, consideration should be given to the significance of—

(i) The actual dollar amount,

(ii) The cumulative effect of all directly associated costs in a cost pool, and

(iii) The ultimate effect on the cost of Government contracts.

(2) Salary expenses of employees who participate in activities that generate unallowable costs shall be treated as directly associated costs to the extent of the time spent on the proscribed activity, provided the costs are material in accordance with paragraph (e)(1) of this subsection (except when such salary expenses are, themselves, unallowable). The time spent in proscribed activities should be compared to total time spent on company activities to determine if the costs are material. Time spent by employees outside the normal working hours should not be considered except when it is evident that an employee engages so frequently in company activities during periods outside normal working hours as to indicate that such activities are a part of the employee's regular duties.

(3) When a selected item of cost under 31.205 provides that directly associated costs be unallowable, such directly associated costs are unallowable only if determined to be material in amount in accordance with the criteria provided in paragraphs (e)(1) and (e)(2) of this subsection, except in those situations where allowance of any of the directly associated costs involved would be considered to be contrary to public policy.

31.201-7 Construction and architect-engineer contracts

Specific principles and procedures for evaluating and determining costs in connection with contracts and subcontracts for construction, and architect-engineer contracts related to construction projects, are in 31.105. The applicability of these principles and procedures is set forth in 31.000 and 31.100.

31.202 Direct costs

(a) No final cost objective shall have allocated to it as a direct cost any cost, if other costs incurred for the same purpose in like circumstances have been included in any indirect cost pool to be allocated to that or any other final cost objective. Direct costs of the contract shall be charged directly to the contract. All costs specifically identified

with other final cost objectives of the contractor are direct costs of those cost objectives and are not to be charged to the contract directly or indirectly.

(b) For reasons of practicality, the contractor may treat any direct cost of a minor dollar amount as an indirect cost if the accounting treatment—

(1) Is consistently applied to all final cost objectives; and

(2) Produces substantially the same results as treating the cost as a direct cost.

31.203 Indirect costs

(a) For contracts subject to full CAS coverage, allocation of indirect costs shall be based on the applicable provisions. For all other contracts, the applicable CAS provisions in paragraphs (b) through (h) of this section apply.

(b) After direct costs have been determined and charged directly to the contract or other work, indirect costs are those remaining to be allocated to intermediate or two or more final cost objectives. No final cost objective shall have allocated to it as an indirect cost any cost, if other costs incurred for the same purpose, in like circumstances, have been included as a direct cost of that or any other final cost objective.

(c) The contractor shall accumulate indirect costs by logical cost groupings with due consideration of the reasons for incurring such costs. The contractor shall determine each grouping so as to permit use of an allocation base that is common to all cost objectives to which the grouping is to be allocated. The base selected shall allocate the grouping on the basis of the benefits accruing to intermediate and final cost objectives. When substantially the same results can be achieved through less precise methods, the number and composition of cost groupings should be governed by practical considerations and should not unduly complicate the allocation.

(d) Once an appropriate base for allocating indirect costs has been accepted, the contractor shall not fragment the base by removing individual elements. All items properly includable in an indirect cost base shall bear a pro rata share of indirect costs irrespective of their acceptance as Government contract costs. For example, when a cost input base is used for the allocation of G&A costs, the contractor shall include in the base all items that would properly be part of the cost input base, whether allowable or unallowable, and these items shall bear their pro rata share of G&A costs.

(e) The method of allocating indirect costs may require revision when there is a significant change in the nature of the business, the extent of subcontracting, fixed-asset improvement programs, inventories, the volume of sales and production, manufacturing processes, the contractor's products, or other relevant circumstances.

(f) Separate cost groupings for costs allocable to offsite locations may be necessary to permit equitable distribution of costs on the basis of the benefits accruing to the several cost objectives.

(g) A base period for allocating indirect costs is the cost accounting period during which such costs are incurred and accumulated for allocation to work performed in that period.

(1) For contracts subject to full or modified CAS coverage, the contractor shall follow the criteria and guidance in 48 CFR 9904.406 for selecting the cost accounting periods to be used in allocating indirect costs.

(2) For contracts other than those subject to paragraph (g)(1) of this section, the base period for allocating indirect costs shall be the contractor's fiscal year used for financial reporting purposes in accordance with generally accepted accounting principles. The fiscal year will normally be 12 months, but a different period may be appropriate (*e.g.*, when a change in fiscal year occurs due to a business combination or other circumstances).

(h) Special care should be exercised in applying the principles of paragraphs (c), (d), and (e) of this section when Government-owned contractor-operated (GOCO) plants are involved. The distribution of corporate, division or branch office G&A expenses to such plants operating with little or no dependence on corporate administrative activities may

require more precise cost groupings, detailed accounts screening, and carefully developed distribution bases.

(i) Indirect costs that meet the definition of "excessive pass-through charge" in 52.215-23, are unallowable.

31.204 Application of principles and procedures

(a) Costs are allowable to the extent they are reasonable, allocable, and determined to be allowable under 31.201, 31.202, 31.203, and 31.205. These criteria apply to all of the selected items that follow, even if particular guidance is provided for certain items for emphasis or clarity.

(b)(1) For the following subcontract types, costs incurred as reimbursements or payments to a subcontractor are allowable to the extent the reimbursements or payments are for costs incurred by the subcontractor that are consistent with this part:

(i) Cost-reimbursement.

(ii) Fixed-price incentive.

(iii) Price redeterminable (*i.e.*, fixed-price contracts with prospective price redetermination and fixed-ceiling-price contracts with retroactive price redetermination).

(2) The requirements of paragraph (b)(1) of this section apply to any tier above the first firm-fixed-price subcontract or fixed-price subcontract with economic price adjustment provisions.

(c) Costs incurred as payments under firm-fixed-price subcontracts or fixed-price subcontracts with economic price adjustment provisions or modifications thereto, for which subcontract cost analysis was performed are allowable if the price was negotiated in accordance with 31.102.

(d) Section 31.205 does not cover every element of cost. Failure to include any item of cost does not imply that it is either allowable or unallowable. The determination of allowability shall be based on the principles and standards in this subpart and the treatment of similar or related selected items. When more than one subsection in 31.205 is relevant to a contractor cost, the cost shall be apportioned among the applicable subsections, and the determination of allowability of each portion shall be based on the guidance contained in the applicable subsection. When a cost, to which more than one subsection in 31.205 is relevant, cannot be apportioned, the determination of allowability shall be based on the guidance contained in the subsection that most specifically deals with, or best captures the essential nature of, the cost at issue.

31.205 Selected costs

31.205-1 Public relations and advertising costs

(a) "Public relations" means all functions and activities dedicated to—

(1) Maintaining, protecting, and enhancing the image of a concern or its products; or

(2) Maintaining or promoting reciprocal understanding and favorable relations with the public at large, or any segment of the public. The term public relations includes activities associated with areas such as advertising, customer relations, etc.

(b) "Advertising" means the use of media to promote the sale of products or services and to accomplish the activities referred to in paragraph (d) of this subsection, regardless of the medium employed, when the advertiser has control over the form and content of what will appear, the media in which it will appear, and when it will appear. Advertising media include but are not limited to conventions, exhibits, free goods, samples, magazines, newspapers, trade papers, direct mail, dealer cards, window displays, outdoor advertising, radio, and television.

(c) Public relations and advertising costs include the costs of media time and space, purchased services performed by outside organizations, as well as the applicable portion of

salaries, travel, and fringe benefits of employees engaged in the functions and activities identified in paragraphs (a) and (b) of this subsection.

(d) The only allowable advertising costs are those that are—

(1) Specifically required by contract, or that arise from requirements of Government contracts, and that are exclusively for—

(i) Acquiring scarce items for contract performance; or

(ii) Disposing of scrap or surplus materials acquired for contract performance;

(2) Costs of activities to promote sales of products normally sold to the U.S. Government, including trade shows, which contain a significant effort to promote exports from the United States. Such costs are allowable, notwithstanding paragraphs (f)(1), (f)(3), (f)(4)(ii), and (f)(5) of this subsection. However, such costs do not include the costs of memorabilia (*e.g.*, models, gifts, and souvenirs), alcoholic beverages, entertainment, and physical facilities that are used primarily for entertainment rather than product promotion; or

(3) Allowable in accordance with 31.205-34.

(e) Allowable public relations costs include the following:

(1) Costs specifically required by contract.

(2) Costs of—

(i) Responding to inquiries on company policies and activities;

(ii) Communicating with the public, press, stockholders, creditors, and customers; and

(iii) Conducting general liaison with news media and Government public relations officers, to the extent that such activities are limited to communication and liaison necessary to keep the public informed on matters of public concern such as notice of contract awards, plant closings or openings, employee layoffs or rehires, financial information, etc.

(3) Costs of participation in community service activities (*e.g.*, blood bank drives, charity drives, savings bond drives, disaster assistance, etc.). (But see paragraph (f)(8) of this section.)

(4) Costs of plant tours and open houses (but see paragraph (f)(5) of this subsection).

(5) Costs of keel laying, ship launching, commissioning, and roll-out ceremonies, to the extent specifically provided for by contract.

(f) Unallowable public relations and advertising costs include the following:

(1) All public relations and advertising costs, other than those specified in paragraphs (d) and (e) of this subsection, whose primary purpose is to promote the sale of products or services by stimulating interest in a product or product line (except for those costs made allowable under 31.205-38(b)(5)), or by disseminating messages calling favorable attention to the contractor for purposes of enhancing the company image to sell the company's products or services.

(2) All costs of trade shows and other special events which do not contain a significant effort to promote the export sales of products normally sold to the U.S. Government.

(3) Costs of sponsoring meetings, conventions, symposia, seminars, and other special events when the principal purpose of the event is other than dissemination of technical information or stimulation of production.

(4) Costs of ceremonies such as—

(i) Corporate celebrations and

(ii) New product announcements.

(5) Costs of promotional material, motion pictures, videotapes, brochures, handouts, magazines, and other media that are designed to call favorable attention to the contractor and its activities.

(6) Costs of souvenirs, models, imprinted clothing, buttons, and other mementos provided to customers or the public.

(7) Costs of memberships in civic and community organizations.

(8) Cost associated with the donation of excess food to nonprofit organizations in accordance with the Federal Food Donation Act of 2008 (Pub.L. 110-247) (see FAR Subpart 26.4).

31.205-2 Reserved

31.205-3 Bad debts

Bad debts, including actual or estimated losses arising from uncollectible accounts receivable due from customers and other claims, and any directly associated costs such as collection costs, and legal costs are unallowable.

31.205-4 Bonding costs

(a) Bonding costs arise when the Government requires assurance against financial loss to itself or others by reason of the act or default of the contractor. They arise also in instances where the contractor requires similar assurance. Included are such bonds as bid, performance, payment, advance payment, infringement, and fidelity bonds.

(b) Costs of bonding required pursuant to the terms of the contract are allowable.

(c) Costs of bonding required by the contractor in the general conduct of its business are allowable to the extent that such bonding is in accordance with sound business practice and the rates and premiums are reasonable under the circumstances.

31.205-5 Reserved

31.205-6 Compensation for personal services

(a) *General.* Compensation for personal services is allowable subject to the following general criteria and additional requirements contained in other parts of this cost principle:

(1) Compensation for personal services must be for work performed by the employee in the current year and must not represent a retroactive adjustment of prior years' salaries or wages (but see paragraphs (g), (h), (j), (k), (m), and (o) of this subsection).

(2) The total compensation for individual employees or job classes of employees must be reasonable for the work performed; however, specific restrictions on individual compensation elements apply when prescribed.

(3) The compensation must be based upon and conform to the terms and conditions of the contractor's established compensation plan or practice followed so consistently as to imply, in effect, an agreement to make the payment.

(4) No presumption of allowability will exist where the contractor introduces major revisions of existing compensation plans or new plans and the contractor has not provided the cognizant ACO, either before implementation or within a reasonable period after it, an opportunity to review the allowability of the changes.

(5) Costs that are unallowable under other paragraphs of this Subpart 31.2 are not allowable under this subsection 31.205-6 solely on the basis that they constitute compensation for personal services.

(6)(i) Compensation costs for certain individuals give rise to the need for special consideration. Such individuals include:

(A) Owners of closely held corporations, members of limited liability companies, partners, sole proprietors, or members of their immediate families; and

(B) Persons who are contractually committed to acquire a substantial financial interest in the contractor's enterprise.

(ii) For these individuals, compensation must—

(A) Be reasonable for the personal services rendered; and

(B) Not be a distribution of profits (which is not an allowable contract cost).

(iii) For owners of closely held companies, compensation in excess of the costs that are deductible as compensation under the Internal Revenue Code (26 U.S.C.) and regulations under it is unallowable.

(b) Reasonableness—

(1) *Compensation pursuant to labor-management agreements*. If costs of compensation established under "arm's length" labor-management agreements negotiated under the terms of the Federal Labor Relations Act or similar state statutes are otherwise allowable, the costs are reasonable unless, as applied to work in performing Government contracts, the costs are unwarranted by the character and circumstances of the work or discriminatory against the Government. The application of the provisions of a labor-management agreement designed to apply to a given set of circumstances and conditions of employment (*e.g.*, work involving extremely hazardous activities or work not requiring recurrent use of overtime) is unwarranted when applied to a Government contract involving significantly different circumstances and conditions of employment (*e.g.*, work involving less hazardous activities or work continually requiring use of overtime). It is discriminatory against the Government if it results in employee compensation (in whatever form or name) in excess of that being paid for similar non-Government work under comparable circumstances.

(2) *Compensation not covered by labor-management agreements*. Compensation for each employee or job class of employees must be reasonable for the work performed. Compensation is reasonable if the aggregate of each measurable and allowable element sums to a reasonable total. In determining the reasonableness of total compensation, consider only allowable individual elements of compensation. In addition to the provisions of 31.201-3, in testing the reasonableness of compensation for particular employees or job classes of employees, consider factors determined to be relevant by the contracting officer. Factors that may be relevant include, but are not limited to, conformity with compensation practices of other firms—

(i) Of the same size;

(ii) In the same industry;

(iii) In the same geographic area; and

(iv) Engaged in similar non-Government work under comparable circumstances.

(c) [Reserved]

(d) Form of payment.

(1) Compensation for personal services includes compensation paid or to be paid in the future to employees in the form of—

(i) Cash;

(ii) Corporate securities, such as stocks, bonds, and other financial instruments (see paragraph (d)(2) of this subsection regarding valuation); or

(iii) Other assets, products, or services.

(2) When compensation is paid with securities of the contractor or of an affiliate, the following additional restrictions apply:

(i) Valuation placed on the securities is the fair market value on the first date the number of shares awarded is known, determined upon the most objective basis available.

(ii) Accruals for the cost of securities before issuing the securities to the employees are subject to adjustment according to the possibilities that the employees will not receive the securities and that their interest in the accruals will be forfeited.

(e) Income tax differential pay.

(1) Differential allowances for additional income taxes resulting from foreign assignments are allowable.

(2) Differential allowances for additional income taxes resulting from domestic assignments are unallowable. (However, payments for increased employee income or Federal Insurance Contributions Act taxes incident to allowable reimbursed relocation costs are allowable under 31.205-35(a)(10).)

(f) Bonuses and incentive compensation.

(1) Bonuses and incentive compensation are allowable provided the—

(i) Awards are paid or accrued under an agreement entered into in good faith between the contractor and the employees before the services are rendered or pursuant to an established plan or policy followed by the contractor so consistently as to imply, in effect, an agreement to make such payment; and

(ii) Basis for the award is supported.

(2) When the bonus and incentive compensation payments are deferred, the costs are subject to the requirements of paragraphs (f)(1) and (k) of this subsection.

(g) Severance pay.

(1) Severance pay is a payment in addition to regular salaries and wages by contractors to workers whose employment is being involuntarily terminated. Payments for early retirement incentive plans are covered in paragraph (j)(6) of this subsection.

(2) Severance pay is allowable only to the extent that, in each case, it is required by—

(i) Law;

(ii) Employer-employee agreement;

(iii) Established policy that constitutes, in effect, an implied agreement on the contractor's part; or

(iv) Circumstances of the particular employment.

(3) Payments made in the event of employment with a replacement contractor where continuity of employment with credit for prior length of service is preserved under substantially equal conditions of employment, or continued employment by the contractor at another facility, subsidiary, affiliate, or parent company of the contractor are not severance pay and are unallowable.

(4) Actual normal turnover severance payments shall be allocated to all work performed in the contractor's plant. However, if the contractor uses the accrual method to account for normal turnover severance payments, that method will be acceptable if the amount of the accrual is—

(i) Reasonable in light of payments actually made for normal severances over a representative past period; and

(ii) Allocated to all work performed in the contractor's plant.

(5) Abnormal or mass severance pay is of such a conjectural nature that accruals for this purpose are not allowable. However, the Government recognizes its obligation to participate, to the extent of its fair share, in any specific payment. Thus, the Government will consider allowability on a case-by-case basis.

(6) Under 10 U.S.C. 2324(e)(1)(M) and 41 U.S.C. 256(e)(1)(M), the costs of severance payments to foreign nationals employed under a service contract performed outside the United States are unallowable to the extent that such payments exceed amounts typically paid to employees providing similar services in the same industry in the United States. Further, under 10 U.S.C. 2324(e)(1)(N) and 41 U.S.C. 256(e)(1)(N), all such costs of severance payments that are otherwise allowable are unallowable if the termination of employment of the foreign national is the result of the closing of, or the curtailment of activities at, a United States facility in that country at the request of the government of that country; this does not apply if the closing of a facility or curtailment of activities is made pursuant to a status-of-forces or other country-to-country agreement entered into with the government of that country before November 29, 1989. 10 U.S.C. 2324(e)(3) and 41 U.S.C. 256(e)(2) permit the head of the agency to waive these cost allowability limitations under certain circumstances (see 37.113 and the solicitation provision at 52.237-8).

(h) *Backpay*. Backpay is a retroactive adjustment of prior years' salaries or wages. Backpay is unallowable except as follows:

(1) Payments to employees resulting from underpaid work actually performed are allowable, if required by a negotiated settlement, order, or court decree.

(2) Payments to union employees for the difference in their past and current wage rates for working without a contract or labor agreement during labor management negotiation are allowable.

(3) Payments to nonunion employees based upon results of union agreement negotiation are allowable only if—

(i) A formal agreement or understanding exists between management and the employees concerning these payments; or

(ii) An established policy or practice exists and is followed by the contractor so consistently as to imply, in effect, an agreement to make such payments.

(i) Compensation based on changes in the prices of corporate securities or corporate security ownership, such as stock options, stock appreciation rights, phantom stock plans, and junior stock conversions.

(1) Any compensation which is calculated, or valued, based on changes in the price of corporate securities is unallowable.

(2) Any compensation represented by dividend payments or which is calculated based on dividend payments is unallowable.

(3) If a contractor pays an employee in lieu of the employee receiving or exercising a right, option, or benefit which would have been unallowable under this paragraph (i), such payments are also unallowable.

(j) Pension costs.

(1) Pension plans are normally segregated into two types of plans: defined-benefit and defined-contribution pension plans. The contractor shall measure, assign, and allocate the costs of all defined-benefit pension plans and the costs of all defined-contribution pension plans in compliance with 48 CFR 9904.412—Cost Accounting Standard for Composition and Measurement of Pension Cost, and 48 CFR 9904.413—Adjustment and Allocation of Pension Cost. Pension costs are allowable subject to the referenced standards and the cost limitations and exclusions set forth in paragraph (j)(1)(i) and in paragraphs (j)(2) through (j)(6) of this subsection.

(i) Except for nonqualified pension plans using the pay-as-you-go cost method, to be allowable in the current year, the contractor shall fund pension costs by the time set for filing of the Federal income tax return or any extension. Pension costs assigned to the current year, but not funded by the tax return time, are not allowable in any subsequent year. For nonqualified pension plans using the pay-as-you-go method, to be allowable in the current year, the contractor shall allocate pension costs in the cost accounting period that the pension costs are assigned.

(ii) Pension payments must be paid pursuant to an agreement entered into in good faith between the contractor and employees before the work or services are performed and to the terms and conditions of the established plan. The cost of changes in pension plans are not allowable if the changes are discriminatory to the Government or are not intended to be applied consistently for all employees under similar circumstances in the future.

(iii) Except as provided for early retirement benefits in paragraph (j)(6) of this subsection, one-time-only pension supplements not available to all participants of the basic plan are not allowable as pension costs, unless the supplemental benefits represent a separate pension plan and the benefits are payable for life at the option of the employee.

(iv) Increases in payments to previously retired plan participants covering cost-of-living adjustments are allowable if paid in accordance with a policy or practice consistently followed.

(2) *Defined-benefit pension plans*. The cost limitations and exclusions pertaining to defined-benefit plans are as follows:

(i)(A) Except for nonqualified pension plans, pension costs (see 48 CFR 9904.412-40(a)(1)) assigned to the current accounting period, but not funded during it, are not allowable in subsequent years (except that a payment made to a fund by the time set for filing the Federal income tax return or any extension thereof is considered to have been made during such taxable year). However, any portion of pension cost computed for a cost accounting period, that exceeds the amount required to be funded pursuant to a waiver granted under the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), will be allowable in those future accounting periods in which the funding of such excess amounts occurs (see 48 CFR 9904.412-50(c)(5)).

(B) For nonqualified pension plans, except those using the pay-as-you-go cost method, allowable costs are limited to the amount allocable in accordance with 48 CFR 9904.412-50(d)(2).

(C) For nonqualified pension plans using the pay-as-you-go cost method, allowable costs are limited to the amounts allocable in accordance with 48 CFR 9904.412-50(d)(3).

(ii) Any amount funded in excess of the pension cost assigned to a cost accounting period is not allowable in that period and shall be accounted for as set forth at 48 CFR 9904.412-50(a)(4). The excess amount is allowable in the future period to which it is assigned, to the extent it is not otherwise unallowable.

(iii) Increased pension costs are unallowable if the increase is caused by a delay in funding beyond 30 days after each quarter of the year to which they are assignable. If a composite rate is used for allocating pension costs between the segments of a company and if, because of differences in the timing of the funding by the segments, an inequity exists, allowable pension costs for each segment will be limited to that particular segment's calculation of pension costs as provided for in 48 CFR 9904.413-50(c). The contractor shall make determinations of unallowable costs in accordance with the actuarial method used in calculating pension costs.

(iv) The contracting officer will consider the allowability of the cost of indemnifying the Pension Benefit Guaranty Corporation (PBGC) under ERISA Section 4062 or 4064 arising from terminating an employee deferred compensation plan on a case-by-case basis, provided that if insurance was required by the PBGC under ERISA Section 4023, it was so obtained and the indemnification payment is not recoverable under the insurance. Consideration under the foregoing circumstances will be primarily for the purpose of appraising the extent to which the indemnification payment is allocable to Government work. If a beneficial or other equitable relationship exists, the Government will participate, despite the requirements of 31.205-19(c)(3) and (d)(3), in the indemnification payment to the extent of its fair share.

(v) Increased pension costs resulting from the withdrawal of assets from a pension fund and transfer to another employee benefit plan fund, or transfer of assets to another account within the same fund, are unallowable except to the extent authorized by an advance agreement. If the withdrawal of assets from a pension fund is a plan termination under ERISA, the provisions of paragraph (j)(3) of this subsection apply. The advance agreement shall—

(A) State the amount of the Government's equitable share in the gross amount withdrawn or transferred; and

(B) Provide that the Government receives a credit equal to the amount of the Government's equitable share of the gross withdrawal or transfer.

(3) Pension adjustments and asset reversions.

(i) For segment closings, pension plan terminations, or curtailment of benefits, the amount of the adjustment shall be—

(A) For contracts and subcontracts that are subject to full coverage under the Cost Accounting Standards (CAS) Board rules and regulations, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12); and

(B) For contracts and subcontracts that are not subject to full coverage under the CAS, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12), except the numerator of the fraction at 48 CFR 9904.413-50(c)(12)(vi) is the sum of the pension plan costs allocated to all non-CAS-covered contracts and subcontracts that are subject to Subpart 31.2 or for which cost or pricing data were submitted.

(ii) For all other situations where assets revert to the contractor, or such assets are constructively received by it for any reason, the contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which cost or pricing data were submitted or that are subject to Subpart 31.2. Excise taxes on pension plan asset reversions or withdrawals under this paragraph (j)(3)(ii) are unallowable in accordance with 31.205-41(b)(6).

(4) *Defined-contribution pension plans.* In addition to defined-contribution pension plans, this paragraph also covers profit sharing, savings plans, and other such plans, provided the plans fall within the definition of a pension plan at 31.001.

(i) Allowable pension cost is limited to the net contribution required to be made for a cost accounting period after taking into account dividends and other credits, where applicable. However, any portion of pension cost computed for a cost accounting period that exceeds the amount required to be funded pursuant to a waiver granted under the provisions of ERISA will be allowable in those future accounting periods in which the funding of such excess amounts occurs (see 48 CFR 9904.412-50(c)(5)).

(ii) The provisions of paragraphs (j)(2)(ii) and (iv) of this subsection apply to defined-contribution plans.

(5) *Pension plans using the pay-as-you-go cost method*. When using the pay-as-you-go cost method, the contractor shall measure, assign, and allocate the cost of pension plans in accordance with 48 CFR 9904.412 and 9904.413. Pension costs for a pension plan using the pay-as-you-go cost method are allowable to the extent they are not otherwise unallowable.

(6) *Early retirement incentives*. An early retirement incentive is an incentive given to an employee to retire early. For contract costing purposes, costs of early retirement incentives are allowable subject to the pension cost criteria contained in paragraphs (j)(2)(i) through (iv) of this subsection provided—

(i) The contractor measures, assigns, and allocates the costs in accordance with the contractor's accounting practices for pension costs;

(ii) The incentives are in accordance with the terms and conditions of an early retirement incentive plan;

(iii) The contractor applies the plan only to active employees. The cost of extending the plan to employees who retired or were terminated before the adoption of the plan is unallowable; and

(iv) The present value of the total incentives given to any employee in excess of the amount of the employee's annual salary for the previous fiscal year before the employee's retirement is unallowable. The contractor shall compute the present value in accordance with its accounting practices for pension costs. The contractor shall account for any unallowable costs in accordance with 48 CFR 9904.412-50(a)(2).

(k) *Deferred compensation other than pensions.* The costs of deferred compensation awards are allowable subject to the following limitations:

(1) The costs shall be measured, assigned, and allocated in accordance with 48 CFR 9904.415, Accounting for the Cost of Deferred Compensation.

(2) The costs of deferred compensation awards are unallowable if the awards are made in periods subsequent to the period when the work being remunerated was performed.

(l) Compensation incidental to business acquisitions. The following costs are unallowable:

(1) Payments to employees under agreements in which they receive special compensation, in excess of the contractor's normal severance pay practice, if their employment terminates following a change in the management control over, or ownership of, the contractor or a substantial portion of its assets.

(2) Payments to employees under plans introduced in connection with a change (whether actual or prospective) in the management control over, or ownership of, the contractor or a substantial portion of its assets in which those employees receive special compensation, which is contingent upon the employee remaining with the contractor for a specified period of time.

(m) Fringe benefits.

(1) Fringe benefits are allowances and services provided by the contractor to its employees as compensation in addition to regular wages and salaries. Fringe benefits include, but are not limited to, the cost of vacations, sick leave, holidays, military leave, employee insurance, and supplemental unemployment benefit plans. Except as provided otherwise in Subpart 31.2, the costs of fringe benefits are allowable to the extent that they

are reasonable and are required by law, employer-employee agreement, or an established policy of the contractor.

(2) That portion of the cost of company-furnished automobiles that relates to personal use by employees (including transportation to and from work) is unallowable regardless of whether the cost is reported as taxable income to the employees (see 31.205-46(d)).

(n) *Employee rebate and purchase discount plans*. Rebates and purchase discounts, in whatever form, granted to employees on products or services produced by the contractor or affiliates are unallowable.

(o) Postretirement benefits other than pensions (PRB).

(1) PRB covers all benefits, other than cash benefits and life insurance benefits paid by pension plans, provided to employees, their beneficiaries, and covered dependents during the period following the employees' retirement. Benefits encompassed include, but are not limited to, postretirement health care; life insurance provided outside a pension plan; and other welfare benefits such as tuition assistance, day care, legal services, and housing subsidies provided after retirement.

(2) To be allowable, PRB costs shall be incurred pursuant to law, employer-employee agreement, or an established policy of the contractor, and shall comply with paragraphs (o)(2)(i), (ii), or (iii) of this subsection.

(i) *Pay-as-you-go*. PRB costs are not accrued during the working lives of employees. Costs are assigned to the period in which—

(A) Benefits are actually provided; or

(B) The costs are paid to an insurer, provider, or other recipient for current year benefits or premiums.

(ii) *Terminal funding*. PRB costs are not accrued during the working lives of the employees.

(A) Terminal funding occurs when the entire PRB liability is paid in a lump sum upon the termination of employees (or upon conversion to such a terminal-funded plan) to an insurer or trustee to establish and maintain a fund or reserve for the sole purpose of providing PRB to retirees.

(B) Terminal funded costs shall be amortized over a period of 15 years.

(iii) *Accrual basis*. PRB costs are accrued during the working lives of employees. Accrued PRB costs shall comply with the following:

(A) Be measured and assigned in accordance with one of the following two methods:

(1) Generally accepted accounting principles, provided the portion of PRB costs attributable to the transition obligation assigned to the current year that is in excess of the amount assignable under the delayed recognition methodology described in paragraphs 112 and 113 of Financial Accounting Standards Board Statement 106 is unallowable. The transition obligation is defined in Statement 106, paragraph 110; or

(2) Contributions to a welfare benefit fund determined in accordance with applicable Internal Revenue Code. Allowable PRB costs based on such contributions shall—

(i) Be measured using reasonable actuarial assumptions, which shall include a healthcare inflation assumption unless prohibited by the Internal Revenue Code provisions governing welfare benefit funds;

(ii) Be assigned to accounting periods on the basis of the average working lives of active employees covered by the PRB plan or a 15 year period, whichever period is longer. However, if the plan is comprised of inactive participants only, the cost shall be spread over the average future life expectancy of the participants; and

(iii) Exclude Federal income taxes, whether incurred by the fund or the contractor (including any increase in PRB costs associated with such taxes), unless the fund holding the plan assets is tax-exempt under the provisions of 26 USC §501(c).

(B) Be paid to an insurer or trustee to establish and maintain a fund or reserve for the sole purpose of providing PRB to retirees. The assets shall be segregated in the trust, or otherwise effectively restricted, so that they cannot be used by the employer for other purposes.

(C) Be calculated in accordance with generally accepted actuarial principles and practices as promulgated by the Actuarial Standards Board.

(D) Eliminate from costs of current and future periods the accumulated value of any prior period costs that were unallowable in accordance with paragraph (o)(3) of this section, adjusted for interest under paragraph (o)(4) of this section.

(E) Calculate the unfunded actuarial liability (unfunded accumulated postretirement benefit obligation) using market (fair) value assets that have been accumulated by funding costs assigned to prior periods for contract accounting purposes.

(F) Recognize as a prepayment credit the market (fair) value of assets that were accumulated by deposits or contributions that were not used to fund costs assigned to previous periods for contract accounting purposes.

(G) Comply with the following when changing from one accrual accounting method to another: the contractor shall—

(1) Treat the change in the unfunded actuarial liability (unfunded accumulated postretirement benefit obligation) as a gain or loss; and

(2) Present an analysis demonstrating that all costs assigned to prior periods have been accounted for in accordance with paragraphs (o)(2)(iii)(D), (E), and (F) of this section to ensure that no duplicate recovery of costs exists. Any duplicate recovery of costs due to the change from one method to another is unallowable. The analysis and new accrual accounting method may be a subject appropriate for an advance agreement in accordance with 31.109.

(p) Limitation on allowability of compensation for certain contractor personnel.

(1) Costs incurred after January 1, 1998, for compensation of a senior executive in excess of the benchmark compensation amount determined applicable for the contractor fiscal year by the Administrator, Office of Federal Procurement Policy (OFPP), under Section 39 of the OFPP Act (41 U.S.C. 435) are unallowable (10 U.S.C. 2324(e)(1)(P) and 41 U.S.C. 256(e)(1)(P)). This limitation is the sole statutory limitation on allowable senior executive compensation costs incurred after January 1, 1998, under new or previously existing contracts. This limitation applies whether or not the affected contracts were previously subject to a statutory limitation on such costs. (Note that pursuant to Section 804 of Pub. L. 105-261, the definition of "senior executive" in (p)(2)(ii) has been changed for compensation costs incurred after January 1, 1999.)

(2) As used in this paragraph—

(i) "Compensation" means the total amount of wages, salary, bonuses, deferred compensation (see paragraph (k) of this subsection), and employer contributions to defined contribution pension plans (see paragraphs (j)(4) and (q) of this subsection), for the fiscal year, whether paid, earned, or otherwise accruing, as recorded in the contractor's cost accounting records for the fiscal year.

(ii) "Senior executive" means—

(A) Prior to January 2, 1999—

(1) The Chief Executive Officer (CEO) or any individual acting in a similar capacity at the contractor's headquarters;

(2) The four most highly compensated employees in management positions at the contractor's headquarters, other than the CEO; and

(3) If the contractor has intermediate home offices or segments that report directly to the contractor's headquarters, the five most highly compensated employees in management positions at each such intermediate home office or segment.

(B) Effective January 2, 1999, the five most highly compensated employees in management positions at each home office and each segment of the contractor, whether or not the home office or segment reports directly to the contractor's headquarters.

(iii) "Fiscal year" means the fiscal year established by the contractor for accounting purposes.

(iv) "Contractor's headquarters" means the highest organizational level from which executive compensation costs are allocated to Government contracts.

(q) Employee stock ownership plans (ESOP).

(1) An ESOP is a stock bonus plan designed to invest primarily in the stock of the employer corporation. The contractor's contributions to an Employee Stock Ownership Trust (ESOT) may be in the form of cash, stock, or property.

(2) Costs of ESOPs are allowable subject to the following conditions:

(i) For ESOPs that meet the definition of a pension plan at 31.001, the contractor—

(A) Measures, assigns, and allocates the costs in accordance with 48 CFR 9904.412;

(B) Funds the pension costs by the time set for filing of the Federal income tax return or any extension. Pension costs assigned to the current year, but not funded by the tax return time, are not allowable in any subsequent year; and

(C) Meets the requirements of paragraph (j)(2)(ii) of this subsection.

(ii) For ESOPs that do not meet the definition of a pension plan at 31.001, the contractor measures, assigns, and allocates costs in accordance with 48 CFR 9904.415.

(iii) Contributions by the contractor in any one year that exceed the deductibility limits of the Internal Revenue Code for that year are unallowable.

(iv) When the contribution is in the form of stock, the value of the stock contribution is limited to the fair market value of the stock on the date that title is effectively transferred to the trust.

(v) When the contribution is in the form of cash—

(A) Stock purchases by the ESOT in excess of fair market value are unallowable; and

(B) When stock purchases are in excess of fair market value, the contractor shall credit the amount of the excess to the same indirect cost pools that were charged for the ESOP contributions in the year in which the stock purchase occurs. However, when the trust purchases the stock with borrowed funds which will be repaid over a period of years by cash contributions from the contractor to the trust, the contractor shall credit the excess price over fair market value to the indirect cost pools pro rata over the period of years during which the contractor contributes the cash used by the trust to repay the loan.

(vi) When the fair market value of unissued stock or stock of a closely held corporation is not readily determinable, the valuation will be made on a case-by-case basis taking into consideration the guidelines for valuation used by the IRS.

31.205-7 Contingencies

(a) "Contingency," as used in this subpart, means a possible future event or condition arising from presently known or unknown causes, the outcome of which is indeterminable at the present time.

(b) Costs for contingencies are generally unallowable for historical costing purposes because such costing deals with costs incurred and recorded on the contractor's books. However, in some cases, as for example, terminations, a contingency factor may be recognized when it is applicable to a past period to give recognition to minor unsettled factors in the interest of expediting settlement.

(c) In connection with estimates of future costs, contingencies fall into two categories:

(1) Those that may arise from presently known and existing conditions, the effects of which are foreseeable within reasonable limits of accuracy; *e.g.*, anticipated costs of rejects and defective work. Contingencies of this category are to be included in the estimates of future costs so as to provide the best estimate of performance cost.

(2) Those that may arise from presently known or unknown conditions, the effect of which cannot be measured so precisely as to provide equitable results to the contractor and to the Government; *e.g.*, results of pending litigation. Contingencies of this category are to be excluded from cost estimates under the several items of cost, but should be disclosed separately (including the basis upon which the contingency is computed) to facilitate the negotiation of appropriate contractual coverage. (See, for example, 31.205-6(g) and 31.205-19.)

31.205-8 Contributions or donations

Contributions or donations, including cash, property and services, regardless of recipient, are unallowable, except as provided in 31.205-1(e)(3).

31.205-9 Reserved

31.205-10 Cost of money

(a) *General*. Cost of money—
(1) Is an imputed cost that is not a form of interest on borrowings (see 31.205-20);
(2) Is an "incurred cost" for cost-reimbursement purposes under applicable cost-reimbursement contracts and for progress payment purposes under fixed-price contracts; and
(3) Refers to—
(i) Facilities capital cost of money (48 CFR 9904.414); and
(ii) Cost of money as an element of the cost of capital assets under construction (48 CFR 9904.417).
(b) Cost of money is allowable, provided—
(1) It is measured, assigned, and allocated to contracts in accordance with 48 CFR 9904.414 or measured and added to the cost of capital assets under construction in accordance with 48 CFR 9904.417, as applicable;
(2) The requirements of 31.205-52, which limit the allowability of cost of money, are followed; and
(3) The estimated facilities capital cost of money is specifically identified and proposed in cost proposals relating to the contract under which the cost is to be claimed.
(c) Actual interest cost in lieu of the calculated imputed cost of money is unallowable.

31.205-11 Depreciation

(a) Depreciation on a contractor's plant, equipment, and other capital facilities is an allowable contract cost, subject to the limitations contained in this cost principle. For tangible personal property, only estimated residual values that exceed 10 percent of the capitalized cost of the asset need be used in establishing depreciable costs. Where either the declining balance method of depreciation or the class life asset depreciation range system is used, the residual value need not be deducted from capitalized cost to determine depreciable costs. Depreciation cost that would significantly reduce the book value of a tangible capital asset below its residual value is unallowable.
(b) Contractors having contracts subject to 48 CFR 9904.409, Depreciation of Tangible Capital Assets, shall adhere to the requirement of that standard for all fully CAS-covered contracts and may elect to adopt the standard for all other contracts. All requirements of 48 CFR 9904.409 are applicable if the election is made, and contractors must continue to follow it until notification of final acceptance of all deliverable items on all open negotiated Government contracts.
(c) For contracts to which 48 CFR 9904.409 is not applied, except as indicated in paragraphs (g) and (h) of this subsection, allowable depreciation shall not exceed the amount used for financial accounting purposes, and shall be determined in a manner consistent with the depreciation policies and procedures followed in the same segment on non-Government business.
(d) Depreciation, rental, or use charges are unallowable on property acquired from the Government at no cost by the contractor or by any division, subsidiary, or affiliate of the contractor under common control.
(e) The depreciation on any item which meets the criteria for allowance at price under 31.205-26(e) may be based on that price, provided the same policies and procedures are

used for costing all business of the using division, subsidiary, or organization under common control.

(f) No depreciation or rental is allowed on property fully depreciated by the contractor or by any division, subsidiary, or affiliate of the contractor under common control. However, a reasonable charge for using fully depreciated property may be agreed upon and allowed (but, see 31.109(h)(2)). In determining the charge, consideration shall be given to cost, total estimated useful life at the time of negotiations, effect of any increased maintenance charges or decreased efficiency due to age, and the amount of depreciation previously charged to Government contracts or subcontracts.

(g) Whether or not the contract is otherwise subject to CAS the following apply:

(1) The requirements of 31.205-52 shall be observed.

(2) In the event of a write-down from carrying value to fair value as a result of impairments caused by events or changes in circumstances, allowable depreciation of the impaired assets is limited to the amounts that would have been allowed had the assets not been written down (see 31.205-16(g)). However, this does not preclude a change in depreciation resulting from other causes such as permissible changes in estimates of service life, consumption of services, or residual value.

(3)

(i) In the event the contractor reacquires property involved in a sale and leaseback arrangement, allowable depreciation of reacquired property shall be based on the net book value of the asset as of the date the contractor originally became a lessee of the property in the sale and leaseback arrangement—

(A) Adjusted for any allowable gain or loss determined in accordance with 31.205 16(b); and

(B) Less any amount of depreciation expense included in the calculation of the amount that would have been allowed had the contractor retained title under 31.205-11(h)(1) and 31.205-36(b)(2).

(ii) As used in this paragraph (g)(3), “reacquired property” is property that generated either any depreciation expense or any cost of money considered in the calculation of the limitations under 31.205-11(h)(1) and 31.205-36(b)(2) during the most recent accounting period prior to the date of reacquisition.

(h) A “capital lease,” as defined in Statement of Financial Accounting Standard No. 13 (FAS-13), Accounting for Leases, is subject to the requirements of this cost principle. (See 31.205-36 for Operating Leases.) FAS-13 requires that capital leases be treated as purchased assets, *i.e.*, be capitalized, and the capitalized value of such assets be distributed over their useful lives as depreciation charges or over the leased life as amortization charges, as appropriate, except that—

(1) Lease costs under a sale and leaseback arrangement are allowable only up to the amount that would be allowed if the contractor retained title, computed based on the net book value of the asset on the date the contractor becomes a lessee of the property adjusted for any gain or loss recognized in accordance with 31.205-16(b); and

(2) If it is determined that the terms of the capital lease have been significantly affected by the fact that the lessee and lessor are related, depreciation charges are not allowable in excess of those that would have occurred if the lease contained terms consistent with those found in a lease between unrelated parties.

31.205-12 Economic planning costs

Economic planning costs are the costs of general long-range management planning that is concerned with the future overall development of the contractor’s business and that may take into account the eventual possibility of economic dislocations or fundamental alterations in those markets in which the contractor currently does business. Economic planning costs are allowable. Economic planning costs do not include organization or reorganization costs covered by 31.205-27. See 31.205-38 for market planning costs other than economic planning costs.

31.205-13 Employee morale, health, welfare, food service, and dormitory costs and credits

(a) Aggregate costs incurred on activities designed to improve working conditions, employer-employee relations, employee morale, and employee performance (less income generated by these activities) are allowable, subject to the limitations contained in this subsection. Some examples of allowable activities are—

(1) House publications;

(2) Health clinics;

(3) Wellness/fitness centers;

(4) Employee counseling services; and

(5) Food and dormitory services for the contractor's employees at or near the contractor's facilities. These services include—

(i) Operating or furnishing facilities for cafeterias, dining rooms, canteens, lunch wagons, vending machines, living accommodations; and

(ii) Similar types of services.

(b) Costs of gifts are unallowable. (Gifts do not include awards for performance made pursuant to 31.205-6(f) or awards made in recognition of employee achievements pursuant to an established contractor plan or policy.)

(c) Costs of recreation are unallowable, except for the costs of employees' participation in company sponsored sports teams or employee organizations designed to improve company loyalty, team work, or physical fitness.

(d)(1) The allowability of food and dormitory losses are determined by the following factors:

(i) Losses from operating food and dormitory services are allowable only if the contractor's objective is to operate such services on a break-even basis.

(ii) Losses sustained because food services or lodging accommodations are furnished without charge or at prices or rates which obviously would not be conducive to the accomplishment of the objective in paragraph (d)(1)(i) of this subsection are not allowable, except as described in paragraph (d)(1)(iii) of this subsection.

(iii) A loss may be allowed to the extent that the contractor can demonstrate that unusual circumstances exist such that even with efficient management, operating the services on a break-even basis would require charging inordinately high prices, or prices or rates higher than those charged by commercial establishments offering the same services in the same geographical areas. The following are examples of unusual circumstances:

(A) The contractor must provide food or dormitory services at remote locations where adequate commercial facilities are not reasonably available.

(B) The contractor's charged (but unproductive) labor costs would be excessive if the services were not available.

(C) If cessation or reduction of food or dormitory operations will not otherwise yield net cost savings.

(2) Costs of food and dormitory services shall include an allocable share of indirect expenses pertaining to these activities.

(e) When the contractor has an arrangement authorizing an employee association to provide or operate a service, such as vending machines in the contractor's plant, and retain the profits, such profits shall be treated in the same manner as if the contractor were providing the service (but see paragraph (f) of this subsection).

(f) Contributions by the contractor to an employee organization, including funds from vending machine receipts or similar sources, are allowable only to the extent that the contractor demonstrates that an equivalent amount of the costs incurred by the employee organization would be allowable if directly incurred by the contractor.

31.205-14 Entertainment costs

Costs of amusement, diversions, social activities, and any directly associated costs such as tickets to shows or sports events, meals, lodging, rentals, transportation, and gratuities are unallowable. Costs made specifically unallowable under this cost principle are not allowable under any other cost principle. Costs of membership in social, dining, or country clubs or other organizations having the same purposes are also unallowable, regardless of whether the cost is reported as taxable income to the employees.

31.205-15 Fines, penalties, and mischarging costs

(a) Costs of fines and penalties resulting from violations of, or failure of the contractor to comply with, Federal, State, local, or foreign laws and regulations, are unallowable except when incurred as a result of compliance with specific terms and conditions of the contract or written instructions from the contracting officer.

(b) Costs incurred in connection with, or related to, the mischarging of costs on Government contracts are unallowable when the costs are caused by, or result from, alteration or destruction of records, or other false or improper charging or recording of costs. Such costs include those incurred to measure or otherwise determine the magnitude of the improper charging, and costs incurred to remedy or correct the mischarging, such as costs to rescreen and reconstruct records.

31.205-16 Gains and losses on disposition or impairment of depreciable property or other capital assets

(a) Gains and losses from the sale, retirement, or other disposition (but see 31.205-19) of depreciable property shall be included in the year in which they occur as credits or charges to the cost grouping(s) in which the depreciation or amortization applicable to those assets was included (but see paragraph (f) of this subsection). However, no gain or loss shall be recognized as a result of the transfer of assets in a business combination (see 31.205-52).

(b) Notwithstanding the provisions in paragraph (c) of this subsection, when costs of depreciable property are subject to the sale and leaseback limitations in 31.205-11(h)(1) or 31.205 36(b)(2)—

(1) The gain or loss is the difference between the net amount realized and the undepreciated balance of the asset on the date the contractor becomes a lessee; and

(2) When the application of (b)(1) of this subsection results in a loss—

(i) The allowable portion of the loss is zero if the fair market value exceeds the undepreciated balance of the asset on the date the contractor becomes a lessee; and

(ii) The allowable portion of the loss is limited to the difference between the fair market value and the undepreciated balance of the asset on the date the contractor becomes a lessee if the fair market value is less than the undepreciated balance of the asset on the date the contractor becomes a lessee.

(c) Gains and losses on disposition of tangible capital assets, including those acquired under capital leases (see 31.205-11(h)), shall be considered as adjustments of depreciation costs previously recognized. The gain or loss for each asset disposed of is the difference between the net amount realized, including insurance proceeds from involuntary conversions, and its undepreciated balance. The gain recognized for contract costing purposes shall be limited to the difference between the acquisition cost (or for assets acquired under a capital lease, the value at which the leased asset is capitalized) of the asset and its undepreciated balance (except see subdivisions (c)(2)(i) or (ii) of this section).

(d) The gain recognized for contract costing purposes shall be limited to the difference between the acquisition cost (or for assets acquired under a capital lease, the value at

which the leased asset is capitalized) of the asset and its undepreciated balance (except see paragraphs (e)(2)(i) or (ii) of this subsection).

(e) Special considerations apply to an involuntary con-version which occurs when a contractor's property is destroyed by events over which the owner has no control, such as fire, windstorm, flood, accident, theft, etc., and an insurance award is recovered. The following govern involuntary conversions:

(1) When there is a cash award and the converted asset is not replaced, gain or loss shall be recognized in the period of disposition. The gain recognized for contract costing purposes shall be limited to the difference between the acquisition cost of the asset and its undepreciated balance.

(2) When the converted asset is replaced, the contractor shall either—

(i) Adjust the depreciable basis of the new asset by the amount of the total realized gain or loss; or

(ii) Recognize the gain or loss in the period of disposition, in which case the Government shall participate to the same extent as outlined in paragraph (e)(1) of this subsection.

(f) Gains and losses on the disposition of depreciable property shall not be recognized as a separate charge or credit when—

(1) Gains and losses are processed through the depreciation reserve account and reflected in the depreciation allowable under 31.205-11; or

(2) The property is exchanged as part of the purchase price of a similar item, and the gain or loss is taken into consideration in the depreciation cost basis of the new item.

(g) Gains and losses arising from mass or extraordinary sales, retirements, or other disposition other than through business combinations shall be considered on a case-by-case basis.

(h) Gains and losses of any nature arising from the sale or exchange of capital assets other than depreciable property shall be excluded in computing contract costs.

(i) With respect to long-lived tangible and identifiable intangible assets held for use, no loss shall be allowed for a write-down from carrying value to fair value as a result of impairments caused by events or changes in circumstances (*e.g.*, environmental damage, idle facilities arising from a declining business base, etc.). If depreciable property or other capital assets have been written down from carrying value to fair value due to impairments, gains or losses upon disposition shall be the amounts that would have been allowed had the assets not been written down.

31.205-17 Idle facilities and idle capacity costs

(a) *Definitions*. As used in this subsection—

"Costs of idle facilities or idle capacity" means costs such as maintenance, repair, housing, rent, and other related costs; *e.g.*, property taxes, insurance, and depreciation.

"Facilities" means plant or any portion thereof (including land integral to the operation), equipment, individually or collectively, or any other tangible capital asset, wherever located, and whether owned or leased by the contractor.

"Idle capacity" means the unused capacity of partially used facilities. It is the difference between that which a facility could achieve under 100 percent operating time on a one-shift basis, less operating interruptions resulting from time lost for repairs, setups, unsatisfactory materials, and other normal delays, and the extent to which the facility was actually used to meet demands during the accounting period. A multiple-shift basis may be used in the calculation instead of a one-shift basis if it can be shown that this amount of usage could normally be expected for the type of facility involved.

"Idle facilities" means completely unused facilities that are excess to the contractor's current needs.

(b) The costs of idle facilities are unallowable unless the facilities—

(1) Are necessary to meet fluctuations in workload; or

(2) Were necessary when acquired and are now idle because of changes in requirements, production economies, reorganization, termination, or other causes which could not have been reasonably foreseen. (Costs of idle facilities are allowable for a reasonable period, ordinarily not to exceed 1 year, depending upon the initiative taken to use, lease, or dispose of the idle facilities (but see 31.205-42)).

(c) Costs of idle capacity are costs of doing business and are a factor in the normal fluctuations of usage or overhead rates from period to period. Such costs are allowable provided the capacity is necessary or was originally reasonable and is not subject to reduction or elimination by subletting, renting, or sale, in accordance with sound business, economics, or security practices. Widespread idle capacity throughout an entire plant or among a group of assets having substantially the same function may be idle facilities.

(d) Any costs to be paid directly by the Government for idle facilities or idle capacity reserved for defense mobilization production shall be the subject of a separate agreement.

31.205-18 Independent research and development and bid and proposal costs

(a) *Definitions.* As used in this subsection—

"Applied research" means that effort which (1) normally follows basic research, but may not be severable from the related basic research, (2) attempts to determine and exploit the potential of scientific discoveries or improvements in technology, materials, processes, methods, devices, or techniques, and (3) attempts to advance the state of the art. Applied research does not include efforts whose principal aim is design, development, or test of specific items or services to be considered for sale; these efforts are within the definition of the term "development," defined in this subsection.

"Basic research" (see 2.101).

"Bid and proposal (B&P) costs" means the costs incurred in preparing, submitting, and supporting bids and proposals (whether or not solicited) on potential Government or non-Government contracts. The term does not include the costs of effort sponsored by a grant or cooperative agreement, or required in the performance of a contract.

"Company" means all divisions, subsidiaries, and affiliates of the contractor under common control.

"Development" means the systematic use, under whatever name, of scientific and technical knowledge in the design, development, test, or evaluation of a potential new product or service (or of an improvement in an existing product or service) for the purpose of meeting specific performance requirements or objectives. Development includes the functions of design engineering, prototyping, and engineering testing. Development excludes—

(1) Subcontracted technical effort which is for the sole purpose of developing an additional source for an existing product, or

(2) Development effort for manufacturing or production materials, systems, processes, methods, equipment, tools, and techniques not intended for sale.

"Independent research and development (IR&D)" means a contractor's IR&D cost that consists of projects falling within the four following areas: (1) basic research, (2) applied research, (3) development, and (4) systems and other concept formulation studies. The term does not include the costs of effort sponsored by a grant or required in the performance of a contract. IR&D effort shall not include technical effort expended in developing and preparing technical data specifically to support submitting a bid or proposal.

"Systems and other concept formulation studies" means analyses and study efforts either related to specific IR&D efforts or directed toward identifying desirable new systems, equipment or components, or modifications and improvements to existing systems, equipment, or components.

(b) *Composition and allocation of costs.* The requirements of 48 CFR 9904.420, Accounting for independent research and development costs and bid and proposal costs, are incorporated in their entirety and shall apply as follows—

(1) *Fully-CAS-covered contracts.* Contracts that are fully-CAS-covered shall be subject to all requirements of 48 CFR 9904.420.

(2) *Modified CAS-covered and non-CAS-covered contracts.* Contracts that are not CAS-covered or that contain terms or conditions requiring modified CAS coverage shall be subject to all requirements of 48 CFR 9904.420 except 48 CFR 9904.420-50(e)(2) and 48 CFR 9904.420-50(f)(2), which are not then applicable. However, non-CAS-covered or modified CAS-covered contracts awarded at a time the contractor has CAS-covered contracts requiring compliance with 48 CFR 9904.420, shall be subject to all the requirements of 48 CFR 9904.420. When the requirements of 48 CFR 9904.420-50(e)(2) and 48 CFR 9904.420-50(f)(2) are not applicable, the following apply:

(i) IR&D and B&P costs shall be allocated to final cost objectives on the same basis of allocation used for the G&A expense grouping of the profit center (see 31.001) in which the costs are incurred. However, when IR&D and B&P costs clearly benefit other profit centers or benefit the entire company, those costs shall be allocated through the G&A of the other profit centers or through the corporate G&A, as appropriate.

(ii) If allocations of IR&D or B&P through the G&A base do not provide equitable cost allocation, the contracting officer may approve use of a different base.

(c) *Allowability.* Except as provided in paragraphs (d) and (e) of this subsection, or as provided in agency regulations, costs for IR&D and B&P are allowable as indirect expenses on contracts to the extent that those costs are allocable and reasonable.

(d) Deferred IR&D costs.

(1) IR&D costs that were incurred in previous accounting periods are unallowable, except when a contractor has developed a specific product at its own risk in anticipation of recovering the development costs in the sale price of the product provided that—

(i) The total amount of IR&D costs applicable to the product can be identified;

(ii) The proration of such costs to sales of the product is reasonable;

(iii) The contractor had no Government business during the time that the costs were incurred or did not allocate IR&D costs to Government contracts except to prorate the cost of developing a specific product to the sales of that product; and

(iv) No costs of current IR&D programs are allocated to Government work except to prorate the costs of developing a specific product to the sales of that product.

(2) When deferred costs are recognized, the contract (except firm-fixed-price and fixed-price with economic price adjustment) will include a specific provision setting forth the amount of deferred IR&D costs that are allocable to the contract. The negotiation memorandum will state the circumstances pertaining to the case and the reason for accepting the deferred costs.

(e) Cooperative arrangements.

(1) IR&D costs may be incurred by contractors working jointly with one or more non-Federal entities pursuant to a cooperative arrangement (for example, joint ventures, limited partnerships, teaming arrangements, and collaboration and consortium arrangements). IR&D costs also may include costs contributed by contractors in performing cooperative research and development agreements, or similar arrangements, entered into under—

(i) Section 12 of the Stevenson-Wydler Technology Transfer Act of 1980 (15 U.S.C. 3710(a));

(ii) Sections 203(c)(5) and (6) of the National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2473(c)(5) and (6));

(iii) 10 U.S.C. 2371 for the Defense Advanced Research Projects Agency; or

(iv) Other equivalent authority.

(2) IR&D costs incurred by a contractor pursuant to these types of cooperative arrangements should be considered as allowable IR&D costs if the work performed would have been allowed as contractor IR&D had there been no cooperative arrangement.

(3) Costs incurred in preparing, submitting, and supporting offers on potential cooperative arrangements are allowable to the extent they are allocable, reasonable, and not otherwise unallowable.

31.205-19 Insurance and indemnification

(a) Insurance by purchase or by self-insuring includes—

(1) Coverage the contractor is required to carry or to have approved, under the terms of the contract; and

(2) Any other coverage the contractor maintains in connection with the general conduct of its business.

(b) For purposes of applying the provisions of this subsection, the Government considers insurance provided by captive insurers (insurers owned by or under control of the contractor) as self-insurance, and charges for it shall comply with the provisions applicable to self-insurance costs in this subsection. However, if the captive insurer also sells insurance to the general public in substantial quantities and it can be demonstrated that the charge to the contractor is based on competitive market forces, the Government will consider the insurance as purchased insurance.

(c) Whether or not the contract is subject to CAS, self-insurance charges are allowable subject to paragraph (e) of this subsection and the following limitations:

(1) The contractor shall measure, assign, and allocate costs in accordance with 48 CFR 9904.416, Accounting for Insurance Costs.

(2) The contractor shall comply with (48 CFR) Part 28. However, approval of a contractor's insurance program in accordance with Part 28 does not constitute a determination as to the allowability of the program's cost.

(3) If purchased insurance is available, any self-insurance charge plus insurance administration expenses in excess of the cost of comparable purchased insurance plus associated insurance administration expenses is unallowable.

(4) Self-insurance charges for risks of catastrophic losses are unallowable (see 28.308(e)).

(d) Purchased insurance costs are allowable, subject to paragraph (e) of this subsection and the following limitations:

(1) For contracts subject to full CAS coverage, the contractor shall measure, assign, and allocate costs in accordance with 48 CFR 9904.416.

(2) For all contracts, premiums for insurance purchased from fronting insurance companies (insurance companies not related to the contractor but who reinsure with a captive insurer of the contractor) are unallowable to the extent they exceed the sum of—

(i) The amount that would have been allowed had the contractor insured directly with the captive insurer; and

(ii) Reasonable fronting company charges for services rendered.

(3) Actual losses are unallowable unless expressly provided for in the contract, except—

(i) Losses incurred under the nominal deductible provisions of purchased insurance, in keeping with sound business practice, are allowable; and

(ii) Minor losses, such as spoilage, breakage, and disappearance of small hand tools that occur in the ordinary course of business and that are not covered by insurance, are allowable.

(e) Self-insurance and purchased insurance costs are subject to the cost limitations in the following paragraphs:

(1) Costs of insurance required or approved pursuant to the contract are allowable.

(2) Costs of insurance maintained by the contractor in connection with the general conduct of its business are allowable subject to the following limitations:

(i) Types and extent of coverage shall follow sound business practice, and the rates and premiums shall be reasonable.

(ii) Costs allowed for business interruption or other similar insurance shall be limited to exclude coverage of profit.

(iii) The cost of property insurance premiums for insurance coverage in excess of the acquisition cost of the insured assets is allowable only when the contractor has a formal written policy assuring that in the event the insured property is involuntarily converted, the

new asset shall be valued at the book value of the replaced asset plus or minus adjustments for differences between insurance proceeds and actual replacement cost. If the contractor does not have such a formal written policy, the cost of premiums for insurance coverage in excess of the acquisition cost of the insured asset is unallowable.

(iv) Costs of insurance for the risk of loss, damage, destruction, or theft of Government property are allowable to the extent that—

(A) The contractor is liable for such loss, damage, destruction, or theft;

(B) The contracting officer has not revoked the Government's assumption of risk (see 45.104(b)); and

(C) Such insurance does not cover loss, damage, destruction, or theft which results from willful misconduct or lack of good faith on the part of any of the contractor's managerial personnel (as described in FAR 52.245-1(h)(1)(ii)).

(v) Costs of insurance on the lives of officers, partners, proprietors, or employees are allowable only to the extent that the insurance represents additional compensation (see 31.205-6).

(3) The cost of insurance to protect the contractor against the costs of correcting its own defects in materials and workmanship is unallowable. However, insurance costs to cover fortuitous or casualty losses resulting from defects in materials or workmanship are allowable as a normal business expense.

(4) Premiums for retroactive or backdated insurance written to cover losses that have occurred and are known are unallowable.

(5) The Government is obligated to indemnify the contractor only to the extent authorized by law, as expressly provided for in the contract, except as provided in paragraph (d)(3) of this subsection.

(6) Late premium payment charges related to employee deferred compensation plan insurance incurred pursuant to Section 4007 (29 U.S.C. 1307) or Section 4023 (29 U.S.C. 1323) of the Employee Retirement Income Security Act of 1974 are unallowable.

31.205-20 Interest and other financial costs

Interest on borrowings (however represented), bond discounts, costs of financing and refinancing capital (net worth plus long-term liabilities), legal and professional fees paid in connection with preparing prospectuses, and costs of preparing and issuing stock rights are unallowable (but see 31.205-28). However, interest assessed by State or local taxing authorities under the conditions specified in 31.205-41(a)(3) is allowable.

31.205-21 Labor relations costs

Costs incurred in maintaining satisfactory relations between the contractor and its employees, including costs of shop stewards, labor management committees, employee publications, and other related activities, are allowable.

31.205-22 Lobbying and Political Activity Costs

(a) Costs associated with the following activities are unallowable:

(1) Attempts to influence the outcomes of any Federal, State, or local election, referendum, initiative, or similar procedure, through in kind or cash contributions, endorsements, publicity, or similar activities;

(2) Establishing, administering, contributing to, or paying the expenses of a political party, campaign, political action committee, or other organization established for the purpose of influencing the outcomes of elections;

(3) Any attempt to influence—

(i) The introduction of Federal, state, or local legislation, or

(ii) The enactment or modification of any pending Federal, state, or local legislation through communication with any member or employee of the Congress or state legislature (including efforts to influence state or local officials to engage in similar lobbying activity), or with any government official or employee in connection with a decision to sign or veto enrolled legislation;

(4) Any attempt to influence—

(i) The introduction of Federal, state, or local legislation, or

(ii) The enactment or modification of any pending Federal, state, or local legislation by preparing, distributing or using publicity or propaganda, or by urging members of the general public or any segment thereof to contribute to or participate in any mass demonstration, march, rally, fund raising drive, lobbying campaign or letter writing or telephone campaign;

(5) Legislative liaison activities, including attendance at legislative sessions or committee hearings, gathering information regarding legislation, and analyzing the effect of legislation, when such activities are carried on in support of or in knowing preparation for an effort to engage in unallowable activities; or

(6) Costs incurred in attempting to improperly influence (see 3.401), either directly or indirectly, an employee or officer of the Executive branch of the Federal Government to give consideration to or act regarding a regulatory or contract matter.

(b) The following activities are excepted from the coverage of (a) of this section:

(1) Providing a technical and factual presentation of information on a topic directly related to the performance of a contract through hearing testimony, statements or letters to the Congress or a state legislature, or subdivision, member, or cognizant staff member thereof, in response to a documented request (including a Congressional Record notice requesting testimony or statements for the record at a regularly scheduled hearing) made by the recipient member, legislative body or subdivision, or a cognizant staff member thereof; provided such information is readily obtainable and can be readily put in deliverable form; and further provided that costs under this section for transportation, lodging or meals are unallowable unless incurred for the purpose of offering testimony at a regularly scheduled Congressional hearing pursuant to a written request for such presentation made by the Chairman or Ranking Minority Member of the Committee or Subcommittee conducting such hearing.

(2) Any lobbying made unallowable by paragraph (a)(3) of this subsection to influence state or local legislation in order to directly reduce contract cost, or to avoid material impairment of the contractor's authority to perform the contract.

(3) Any activity specifically authorized by statute to be undertaken with funds from the contract.

(c) When a contractor seeks reimbursement for indirect costs, total lobbying costs shall be separately identified in the indirect cost rate proposal, and thereafter treated as other unallowable activity costs.

(d) Contractors shall maintain adequate records to demonstrate that the certification of costs as being allowable or unallowable (see 42.703-2) pursuant to this subsection complies with the requirements of this subsection.

(e) Existing procedures should be utilized to resolve in advance any significant questions or disagreements concerning the interpretation or application of this subsection.

31.205-23 Losses on other contracts

An excess of costs over income under any other contract (including the contractor's contributed portion under cost-sharing contracts) is unallowable.

31.205-24 Reserved

31.205-25 Manufacturing and production engineering costs

(a) The costs of manufacturing and production engineering effort as described in (1) through (4) of this paragraph are all allowable:

(1) Developing and deploying new or improved materials, systems, processes, methods, equipment, tools and techniques that are or are expected to be used in producing products or services;

(2) Developing and deploying pilot production lines;

(3) Improving current production functions, such as plant layout, production scheduling and control, methods and job analysis, equipment capabilities and capacities, inspection techniques, and tooling analysis (including tooling design and application improvements); and

(4) Material and manufacturing producibility analysis for production suitability and to optimize manufacturing processes, methods, and techniques.

(b) This cost principle does not cover—

(1) Basic and applied research effort (as defined in 31.205-18(a)) related to new technology, materials, systems, processes, methods, equipment, tools and techniques. Such technical effort is governed by 31.205-18, Independent research and development and bid and proposal costs; and

(2) Development effort for manufacturing or production materials, systems, processes, methods, equipment, tools, and techniques that are intended for sale is also governed by 31.205-18.

(c) Where manufacturing or production development costs are capitalized or required to be capitalized under the contractor's capitalization policies, allowable cost will be determined in accordance with the requirements of 31.205-11, Depreciation.

31.205-26 Material costs

(a) Material costs include the costs of such items as raw materials, parts, subassemblies, components, and manufacturing supplies, whether purchased or manufactured by the contractor, and may include such collateral items as inbound transportation and in-transit insurance. In computing material costs, the contractor shall consider reasonable overruns, spoilage, or defective work (unless otherwise provided in any contract provision relating to inspecting and correcting defective work).

(b) The contractor shall—

(1) Adjust the costs of material for income and other credits, including available trade discounts, refunds, rebates, allowances, and cash discounts, and credits for scrap, salvage, and material returned to vendors; and

(2) Credit such income and other credits either directly to the cost of the material or allocate such income and other credits as a credit to indirect costs. When the contractor can demonstrate that failure to take cash discounts was reasonable, the contractor does not need to credit lost discounts.

(c) Reasonable adjustments arising from differences between periodic physical inventories and book inventories may be included in arriving at costs; provided such adjustments relate to the period of contract performance.

(d) When materials are purchased specifically for and are identifiable solely with performance under a contract, the actual purchase cost of those materials should be charged to the contract. If material is issued from stores, any generally recognized method of pricing such material is acceptable if that method is consistently applied and the results are equitable.

(e) Allowance for all materials, supplies and services that are sold or transferred between any divisions, subdivisions, subsidiaries, or affiliates of the contractor under a

common control shall be on the basis of cost incurred in accordance with this subpart. However, allowance may be at price when—

(1) It is the established practice of the transferring organization to price interorganizational transfers at other than cost for commercial work of the contractor or any division, subsidiary or affiliate of the contractor under a common control; and

(2) The item being transferred qualifies for an exception under 15.403-1(b) and the contracting officer has not determined the price to be unreasonable.

(f) When a commercial item under paragraph (e) of this subsection is transferred at a price based on a catalog or market price, the contractor—

(1) Should adjust the price to reflect the quantities being acquired; and

(2) May adjust the price to reflect the actual cost of any modifications necessary because of contract requirements.

31.205-27 Organization costs

(a) Except as provided in paragraph (b) of this subsection, expenditures in connection with (1) planning or executing the organization or reorganization of the corporate structure of a business, including mergers and acquisitions, (2) resisting or planning to resist the reorganization of the corporate structure of a business or a change in the controlling interest in the ownership of a business, and (3) raising capital (net worth plus long-term liabilities), are unallowable. Such expenditures include but are not limited to incorporation fees and costs of attorneys, accountants, brokers, promoters and organizers, management consultants and investment counselors, whether or not employees of the contractor. Unallowable "reorganization" costs include the cost of any change in the contractor's financial structure, excluding administrative costs of short-term borrowings for working capital, resulting in alterations in the rights and interests of security holders, whether or not additional capital is raised.

(b) The cost of activities primarily intended to provide compensation will not be considered organizational costs subject to this subsection, but will be governed by 31.205-6. These activities include acquiring stock for—

(1) Executive bonuses,

(2) Employee savings plans, and

(3) Employee stock ownership plans.

31.205-28 Other business expenses

The following types of recurring costs are allowable:

(a) Registry and transfer charges resulting from changes in ownership of securities issued by the contractor.

(b) Cost of shareholders' meetings.

(c) Normal proxy solicitations.

(d) Preparing and publishing reports to shareholders.

(e) Preparing and submitting required reports and forms to taxing and other regulatory bodies.

(f) Incidental costs of directors' and committee meetings.

(g) Other similar costs.

31.205-29 Plant protection costs

Costs of items such as—

(a) Wages, uniforms, and equipment of personnel engaged in plant protection,

(b) Depreciation on plant protection capital assets, and

(c) Necessary expenses to comply with military requirements, are allowable.

31.205-30 Patent costs

(a) The following patent costs are allowable to the extent that they are incurred as requirements of a Government contract (but see 31.205-33):

(1) Costs of preparing invention disclosures, reports, and other documents.

(2) Costs for searching the art to the extent necessary to make the invention disclosures.

(3) Other costs in connection with the filing and prosecution of a United States patent application where title or royalty-free license is to be conveyed to the Government.

(b) General counseling services relating to patent matters, such as advice on patent laws, regulations, clauses, and employee agreements, are allowable (but see 31.205-33).

(c) Other than those for general counseling services, patent costs not required by the contract are unallowable. (See also 31.205-37.)

31.205-31 Plant reconversion costs

Plant reconversion costs are those incurred in restoring or rehabilitating the contractor's facilities to approximately the same condition existing immediately before the start of the Government contract, fair wear and tear excepted. Reconversion costs are unallowable except for the cost of removing Government property and the restoration or rehabilitation costs caused by such removal. However, in special circumstances where equity so dictates, additional costs may be allowed to the extent agreed upon before costs are incurred. Care should be exercised to avoid duplication through allowance as contingencies, additional profit or fee, or in other contracts.

31.205-32 Precontract costs

Precontract costs means costs incurred before the effective date of the contract directly pursuant to the negotiation and in anticipation of the contract award when such incurrence is necessary to comply with the proposed contract delivery schedule. These costs are allowable to the extent that they would have been allowable if incurred after the date of the contract (see 31.109).

31.205-33 Professional and consultant service costs

(a) *Definition.* "Professional and consultant services," as used in this subsection, means those services rendered by persons who are members of a particular profession or possess a special skill and who are not officers or employees of the contractor. Examples include those services acquired by contractors or subcontractors in order to enhance their legal, economic, financial, or technical positions. Professional and consultant services are generally acquired to obtain information, advice, opinions, alternatives, conclusions, recommendations, training, or direct assistance, such as studies, analyses, evaluations, liaison with Government officials, or other forms of representation.

(b) Costs of professional and consultant services are allowable subject to this paragraph and paragraphs (c) through (f) of this subsection when reasonable in relation to the services rendered and when not contingent upon recovery of the costs from the Government (but see 31.205-30 and 31.205-47).

(c) Costs of professional and consultant services performed under any of the following circumstances are unallowable:

(1) Services to improperly obtain, distribute, or use information or data protected by law or regulation (*e.g.*, 52.215-1(e), Restriction on Disclosure and Use of Data).

(2) Services that are intended to improperly influence the contents of solicitations, the evaluation of proposals or quotations, or the selection of sources for contract award, whether award is by the Government, or by a prime contractor or subcontractor.

(3) Any other services obtained, performed, or otherwise resulting in violation of any statute or regulation prohibiting improper business practices or conflicts of interest.

(4) Services performed which are not consistent with the purpose and scope of the services contracted for or otherwise agreed to.

(d) In determining the allowability of costs (including retainer fees) in a particular case, no single factor or any special combination of factors is necessarily determinative. However, the contracting officer shall consider the following factors, among others:

(1) The nature and scope of the service rendered in relation to the service required.

(2) The necessity of contracting for the service, considering the contractor's capability in the particular area.

(3) The past pattern of acquiring such services and their costs, particularly in the years prior to the award of Government contracts.

(4) The impact of Government contracts on the contractor's business.

(5) Whether the proportion of Government work to the contractor's total business is such as to influence the contractor in favor of incurring the cost, particularly when the services rendered are not of a continuing nature and have little relationship to work under Government contracts.

(6) Whether the service can be performed more economically by employment rather than by contracting.

(7) The qualifications of the individual or concern rendering the service and the customary fee charged, especially on non-Government contracts.

(8) Adequacy of the contractual agreement for the service (*e.g.*, description of the service, estimate of time required, rate of compensation, termination provisions).

(e) Retainer fees, to be allowable, must be supported by evidence that—

(1) The services covered by the retainer agreement are necessary and customary;

(2) The level of past services justifies the amount of the retainer fees (if no services were rendered, fees are not automatically unallowable);

(3) The retainer fee is reasonable in comparison with maintaining an in-house capability to perform the covered services, when factors such as cost and level of expertise are considered; and

(4) The actual services performed are documented in accordance with paragraph (f) of this subsection.

(f) Fees for services rendered are allowable only when supported by evidence of the nature and scope of the service furnished (see also 31.205-38(c)). However, retainer agreements generally are not based on specific statements of work. Evidence necessary to determine that work performed is proper and does not violate law or regulation shall include—

(1) Details of all agreements (*e.g.*, work requirements, rate of compensation, and nature and amount of other expenses, if any) with the individuals or organizations providing the services and details of actual services performed;

(2) Invoices or billings submitted by consultants, including sufficient detail as to the time expended and nature of the actual services provided; and

(3) Consultants' work products and related documents, such as trip reports indicating persons visited and subjects discussed, minutes of meetings, and collateral memoranda and reports.

31.205-34 Recruitment costs

(a) Subject to paragraph (b) of this subsection, the following costs are allowable:

(1) Costs of help-wanted advertising.

(2) Costs of operating an employment office needed to secure and maintain an adequate labor force.

(3) Costs of operating an aptitude and educational testing program.

(4) Travel costs of employees engaged in recruiting personnel.

(5) Travel costs of applicants for interviews.

(6) Costs for employment agencies, not in excess of standard commercial rates.

(b) Help-wanted advertising costs are unallowable if the advertising—

(1) Does not describe specific positions or classes of positions; or

(2) Includes material that is not relevant for recruitment purposes, such as extensive illustrations or descriptions of the company's products or capabilities.

31.205-35 Relocation costs

(a) Relocation costs are costs incident to the permanent change of assigned work location (for a period of 12 months or more) of an existing employee or upon recruitment of a new employee. The following types of relocation costs are allowable as noted, subject to the limitations in paragraphs (b) and (f) of this subsection:

(1) Costs of travel of the employee and members of the employee's immediate family (see 31.205-46) and transportation of the household and personal effects to the new location.

(2) Costs of finding a new home, such as advance trips by the employee or the spouse, or both, to locate living quarters, and temporary lodging during the transition period for the employee and members of the employee's immediate family.

(3) Closing costs incident to the disposition of the actual residence owned by the employee when notified of the transfer (*e.g.*, brokerage fees, legal fees, appraisal fees, points, and finance charges), except that these costs, when added to the costs described in paragraph (a)(4) of this subsection, shall not exceed 14 percent of the sales price of the property sold.

(4) Continuing costs of ownership of the vacant former actual residence being sold, such as maintenance of building and grounds (exclusive of fixing up expenses), utilities, taxes, property insurance, and mortgage interest, after the settlement date or lease date of a new permanent residence, except that these costs, when added to the costs described in paragraph (a)(3) of this subsection, shall not exceed 14 percent of the sales price of the property sold.

(5) Other necessary and reasonable expenses normally incident to relocation, such as disconnecting and connecting household appliances; automobile registration; driver's license and use taxes; cutting and fitting rugs, draperies, and curtains; forfeited utility fees and deposits; and purchase of insurance against damage to or loss of personal property while in transit.

(6) Costs incident to acquiring a home in the new work location, except that—

(i) These costs are not allowable for existing employees or newly recruited employees who were not homeowners before the relocation; and

(ii) The total costs shall not exceed 5 percent of the purchase price of the new home.

(7) Mortgage interest differential payments, except that these costs are not allowable for existing or newly recruited employees who, before the relocation, were not homeowners and the total payments are limited to an amount determined as follows:

(i) The difference between the mortgage interest rates of the old and new residences times the current balance of the old mortgage times 3 years.

(ii) When mortgage differential payments are made on a lump-sum basis and the employee leaves or is transferred again in less than 3 years, the amount initially recognized shall be proportionately adjusted to reflect payments only for the actual time of the relocation.

(8) Rental differential payments covering situations where relocated employees retain ownership of a vacated home in the old location and rent at the new location. The rented quarters at the new location must be comparable to those vacated, and the allowable differential payments may not exceed the actual rental costs for the new home, less the fair market rent for the vacated home times 3 years.

(9) Costs of canceling an unexpired lease.

(10) Payments for increased employee income or Federal Insurance Contributions Act (26 U.S.C. Chapter 21) taxes incident to allowable reimbursed relocation costs.

(11) Payments for spouse employment assistance.

(b) The costs described in paragraph (a) of this subsection must also meet the following criteria to be considered allowable:

(1) The move must be for the benefit of the employer.

(2) Reimbursement must be in accordance with an established policy or practice that is consistently followed by the employer and is designed to motivate employees to relocate promptly and economically.

(3) The costs must not be otherwise unallowable under Subpart 31.2.

(4) Amounts to be reimbursed shall not exceed the employee's actual expenses, except as provided for in paragraphs (b)(5) and (b)(6) of this subsection.

(5) For miscellaneous costs of the type discussed in paragraph (a)(5) of this subsection, a lump-sum amount, not to exceed $5,000, may be allowed in lieu of actual costs.

(6)(i) Reimbursement on a lump-sum basis may be allowed for any of the following relocation costs when adequately supported by data on the individual elements (*e.g.*, transportation, lodging, and meals) comprising the build-up of the lump-sum amount to be paid based on the circumstances of the particular employee's relocation:

(A) Costs of finding a new home, as discussed in paragraph (a)(2) of this subsection.

(B) Costs of travel to the new location, as discussed in paragraph (a)(1) of this subsection (but not costs for the transportation of household goods).

(C) Costs of temporary lodging, as discussed in paragraph (a)(2) of this subsection.

(ii) When reimbursement on a lump-sum basis is used, any adjustments to reflect actual costs are unallowable.

(c) The following types of costs are unallowable:

(1) Loss on the sale of a home.

(2) Costs incident to acquiring a home in the new location as follows:

(i) Real estate brokers' fees and commissions.

(ii) Costs of litigation.

(iii) Real and personal property insurance against damage or loss of property.

(iv) Mortgage life insurance.

(v) Owner's title policy insurance when such insurance was not previously carried by the employee on the old residence. (However, the cost of a mortgage title policy is allowable.)

(vi) Property taxes and operating or maintenance costs.

(3) Continuing mortgage principal payments on a residence being sold.

(4) Costs incident to furnishing equity or nonequity loans to employees or making arrangements with lenders for employees to obtain lower-than-market rate mortgage loans.

(d) If relocation costs for an employee have been allowed either as an allocable indirect or direct cost, and the employee resigns within 12 months for reasons within the employee's control, the contractor shall refund or credit the relocation costs to the Government.

(e) Subject to the requirements of paragraphs (a) through (d) of this section, the costs of family movements and of personnel movements of a special or mass nature are allowable. The cost, however, should be assigned on the basis of work (contracts) or time period benefited.

(f) Relocation costs (both outgoing and return) of employees who are hired for performance on specific contracts or long-term field projects are allowable if—

(1) The term of employment is 12 months or more;

(2) The employment agreement specifically limits the duration of employment to the time spent on the contract or field project for which the employee is hired;

(3) The employment agreement provides for return relocation to the employee's permanent and principal home immediately prior to the outgoing relocation, or other location of equal or lesser cost; and

(4) The relocation costs are determined under the rules of paragraphs (a) through (d) of this section. However, the costs to return employees, who are released from employment

upon completion of field assignments pursuant to their employment agreements, are not subject to the refund or credit requirement of paragraph (d).

31.205-36 Rental costs

(a) This subsection is applicable to the cost of renting or leasing real or personal property acquired under "operating leases" as defined in Statement of Financial Accounting Standards No. 13 (FAS-13), Accounting for Leases. (See 31.205-11 for Capital Leases.)

(b) The following costs are allowable:

(1) Rental costs under operating leases, to the extent that the rates are reasonable at the time of the lease decision, after consideration of—

(i) Rental costs of comparable property, if any;

(ii) Market conditions in the area;

(iii) The type, life expectancy, condition, and value of the property leased;

(iv) Alternatives available; and

(v) Other provisions of the agreement.

(2) Rental costs under a sale and leaseback arrangement only up to the amount the contractor would be allowed if the contractor retained title, computed based on the net book value of the asset on the date the contractor becomes a lessee of the property adjusted for any gain or loss recognized in accordance with 31.205-16(b).

(3) Charges in the nature of rent for property between any divisions, subsidiaries, or organizations under common control, to the extent that they do not exceed the normal costs of ownership, such as depreciation, taxes, insurance, facilities capital cost of money, and maintenance (excluding interest or other unallowable costs pursuant to Part 31), provided that no part of such costs shall duplicate any other allowed cost. Rental cost of personal property leased from any division, subsidiary, or affiliate of the contractor under common control, that has an established practice of leasing the same or similar property to unaffiliated lessees shall be allowed in accordance with paragraph (b)(1) of this subsection.

(c) The allowability of rental costs under unexpired leases in connection with terminations is treated in 31.205-42(e).

31.205-37 Royalties and other costs for use of patents

(a) Royalties on a patent or amortization of the cost of purchasing a patent or patent rights necessary for the proper performance of the contract and applicable to contract products or processes are allowable unless—

(1) The Government has a license or the right to a free use of the patent;

(2) The patent has been adjudicated to be invalid, or has been administratively determined to be invalid;

(3) The patent is considered to be unenforceable; or

(4) The patent is expired.

(b) Care should be exercised in determining reasonableness when the royalties may have been arrived at as a result of less-than-arm's-length bargaining; *e.g.*, royalties—

(1) Paid to persons, including corporations, affiliated with the contractor;

(2) Paid to unaffiliated parties, including corporations, under an agreement entered into in contemplation that a Government contract would be awarded; or

(3) Paid under an agreement entered into after the contract award.

(c) In any case involving a patent formerly owned by the contractor, the royalty amount allowed should not exceed the cost which would have been allowed had the contractor retained title.

(d) See 31.109 regarding advance agreements.

31.205-38 Selling costs

(a) "Selling" is a generic term encompassing all efforts to market the contractor's products or services, some of which are covered specifically in other subsections of 31.205. The costs of any selling efforts other than those addressed in this cost principle are unallowable.

(b) Selling activity includes the following broad categories:

(1) *Advertising*. Advertising is defined at 31.205-1(b), and advertising costs are subject to the allowability provisions of 31.205-1(d) and (f).

(2) *Corporate image enhancement*. Corporate image enhancement activities, including broadly targeted sales efforts, other than advertising, are included within the definition of public relations at 31.205-1(a), and the costs of such efforts are subject to the allowability provisions at 31.205-1(e) and (f).

(3) *Bid and proposal costs*. Bid and proposal costs are defined at 31.205-18 and are subject to the allowability provisions of that subsection.

(4) *Market planning*. Market planning involves market research and analysis and general management planning concerned with development of the contractor's business. Long-range market planning costs are subject to the allowability provisions of 31.205-12. Other market planning costs are allowable.

(5) *Direct selling*. Direct selling efforts are those acts or actions to induce particular customers to purchase particular products or services of the contractor. Direct selling is characterized by person-to-person contact and includes such efforts as familiarizing a potential customer with the contractor's products or services, conditions of sale, service capabilities, etc. It also includes negotiation, liaison between customer and contractor personnel, technical and consulting efforts, individual demonstrations, and any other efforts having as their purpose the application or adaptation of the contractor's products or services for a particular customer's use. The cost of direct selling efforts is allowable.

(c) Notwithstanding any other provision of this subsection, sellers' or agents' compensation, fees, commissions, percentages, retainer or brokerage fees, whether or not contingent upon the award of contracts, are allowable only when paid to bona fide employees or established commercial or selling agencies maintained by the contractor for the purpose of securing business.

31.205-39 Service and warranty costs

Service and warranty costs include those arising from fulfillment of any contractual obligation of a contractor to provide services such as installation, training, correcting defects in the products, replacing defective parts, and making refunds in the case of inadequate performance. When not inconsistent with the terms of the contract, service and warranty costs are allowable. However, care should be exercised to avoid duplication of the allowance as an element of both estimated product cost and risk.

31.205-40 Special tooling and special test equipment costs

(a) The terms "special tooling" and "special test equipment" are defined in 2.101(b).

(b) The cost of special tooling and special test equipment used in performing one or more Government contracts is allowable and shall be allocated to the specific Government contract or contracts for which acquired, except that the cost of—

(1) Items acquired by the contractor before the effective date of the contract (or replacement of such items), whether or not altered or adapted for use in performing the contract, and

(2) Items which the contract schedule specifically excludes, shall be allowable only as depreciation or amortization.

(c) When items are disqualified as special tooling or special test equipment because with relatively minor expense they can be made suitable for general purpose use and have

a value as such commensurate with their value as special tooling or special test equipment, the cost of adapting the items for use under the contract and the cost of returning them to their prior configuration are allowable.

31.205-41 Taxes

(a) The following types of costs are allowable:

(1) Federal, State, and local taxes (see Part 29), except as otherwise provided in paragraph (b) of this section that are required to be and are paid or accrued in accordance with generally accepted accounting principles. Fines and penalties are not considered taxes.

(2) Taxes otherwise allowable under paragraph (a)(1) of this section, but upon which a claim of illegality or erroneous assessment exists; provided the contractor, before paying such taxes—

(i) Promptly requests instructions from the contracting officer concerning such taxes; and

(ii) Takes all action directed by the contracting officer arising out of paragraph (2)(i) of this section or an independent decision of the Government as to the existence of a claim of illegality or erroneous assessment, to—

(A) Determine the legality of the assessment or

(B) Secure a refund of such taxes.

(3) Pursuant to paragraph (a)(2) of this section, the reasonable costs of any action taken by the contractor at the direction or with the concurrence of the contracting officer. Interest or penalties incurred by the contractor for non-payment of any tax at the direction of the contracting officer or by reason of the failure of the contracting officer to ensure timely direction after a prompt request.

(4) The Environmental Tax found at section 59A of the Internal Revenue Code, also called the "Superfund Tax."

(b) The following types of costs are not allowable:

(1) Federal income and excess profits taxes.

(2) Taxes in connection with financing, refinancing, refunding operations, or reorganizations (see 31.205-20 and 31.205-27).

(3) Taxes from which exemptions are available to the contractor directly, or available to the contractor based on an exemption afforded the Government, except when the contracting officer determines that the administrative burden incident to obtaining the exemption outweighs the corresponding benefits accruing to the Government. When partial exemption from a tax is attributable to Government contract activity, taxes charged to such work in excess of that amount resulting from application of the preferential treatment are unallowable. These provisions intend that tax preference attributable to Government contract activity be realized by the Government. The term "exemption" means freedom from taxation in whole or in part and includes a tax abatement or reduction resulting from mode of assessment, method of calculation, or otherwise.

(4) Special assessments on land that represent capital improvements.

(5) Taxes (including excises) on real or personal property, or on the value, use, possession or sale thereof, which is used solely in connection with work other than on Government contracts (see paragraph (c) of this section).

(6) Any excise tax in subtitle D, Chapter 43 of the Internal Revenue Code of 1986, as amended. That chapter includes excise taxes imposed in connection with qualified pension plans, welfare plans, deferred compensation plans, or other similar types of plans.

(7) Income tax accruals designed to account for the tax effects of differences between taxable income and pretax income as reflected by the books of account and financial statements.

(c) Taxes on property (see paragraph (b)(5) of this section) used solely in connection with either non-Government or Government work should be considered directly applicable to the respective category of work unless the amounts involved are insignificant or

comparable results would otherwise be obtained; *e.g.*, taxes on contractor-owned work-in-process which is used solely in connection with non-Government work should be allocated to such work; taxes on contractor-owned work-in-process inventory (and Government-owned work-in-process inventory when taxed) used solely in connection with Government work should be charged to such work. The cost of taxes incurred on property used in both Government and non-Government work shall be apportioned to all such work based upon the use of such property on the respective final cost objectives.

(d) Any taxes, interest, or penalties that were allowed as contract costs and are refunded to the contractor shall be credited or paid to the Government in the manner it directs. If a contractor or subcontractor obtains a foreign tax credit that reduces its U.S. Federal income tax because of the payment of any tax or duty allowed as contract costs, and if those costs were reimbursed by a foreign government, the amount of the reduction shall be paid to the Treasurer of the United States at the time the Federal income tax return is filed. However, any interest actually paid or credited to a contractor incident to a refund of tax, interest, or penalty shall be paid or credited to the Government only to the extent that such interest accrued over the period during which the contractor had been reimbursed by the Government for the taxes, interest, or penalties.

31.205-42 Termination costs

Contract terminations generally give rise to the incurrence of costs or the need for special treatment of costs that would not have arisen had the contract not been terminated. The following cost principles peculiar to termination situations are to be used in conjunction with the other cost principles in Subpart 31.2:

(a) *Common items.* The costs of items reasonably usable on the contractor's other work shall not be allowable unless the contractor submits evidence that the items could not be retained at cost without sustaining a loss. The contracting officer should consider the contractor's plans and orders for current and planned production when determining if items can reasonably be used on other work of the contractor. Contemporaneous purchases of common items by the contractor shall be regarded as evidence that such items are reasonably usable on the contractor's other work. Any acceptance of common items as allocable to the terminated portion of the contract should be limited to the extent that the quantities of such items on hand, in transit, and on order are in excess of the reasonable quantitative requirements of other work.

(b) *Costs continuing after termination.* Despite all reasonable efforts by the contractor, costs which cannot be discontinued immediately after the effective date of termination are generally allowable. However, any costs continuing after the effective date of the termination due to the negligent or willful failure of the contractor to discontinue the costs shall be unallowable.

(c) *Initial costs.* Initial costs, including starting load and preparatory costs, are allowable as follows:

(1) Starting load costs not fully absorbed because of termination are nonrecurring labor, material, and related overhead costs incurred in the early part of production and result from factors such as—

(i) Excessive spoilage due to inexperienced labor;

(ii) Idle time and subnormal production due to testing and changing production methods;

(iii) Training; and

(iv) Lack of familiarity or experience with the product, materials, or manufacturing processes.

(2) Preparatory costs incurred in preparing to perform the terminated contract include such costs as those incurred for initial plant rearrangement and alterations, management and personnel organization, and production planning. They do not include special machinery and equipment and starting load costs.

(3) When initial costs are included in the settlement proposal as a direct charge, such costs shall not also be included in overhead. Initial costs attributable to only one contract shall not be allocated to other contracts.

(4) If initial costs are claimed and have not been segregated on the contractor's books, they shall be segregated for settlement purposes from cost reports and schedules reflecting that high unit cost incurred during the early stages of the contract.

(5) If the settlement proposal is on the inventory basis, initial costs should normally be allocated on the basis of total end items called for by the contract immediately before termination; however, if the contract includes end items of a diverse nature, some other equitable basis may be used, such as machine or labor hours.

(d) *Loss of useful value.* Loss of useful value of special tooling, and special machinery and equipment is generally allowable, provided—

(1) The special tooling, or special machinery and equipment is not reasonably capable of use in the other work of the contractor;

(2) The Government's interest is protected by transfer of title or by other means deemed appropriate by the contracting officer; and

(3) The loss of useful value for any one terminated contract is limited to that portion of the acquisition cost which bears the same ratio to the total acquisition cost as the terminated portion of the contract bears to the entire terminated contract and other Government contracts for which the special tooling, or special machinery and equipment was acquired.

(e) *Rental under unexpired leases.* Rental costs under unexpired leases, less the residual value of such leases, are generally allowable when shown to have been reasonably necessary for the performance of the terminated contract, if—

(1) The amount of rental claimed does not exceed the reasonable use value of the property leased for the period of the contract and such further period as may be reasonable; and

(2) The contractor makes all reasonable efforts to terminate, assign, settle, or otherwise reduce the cost of such lease.

(f) *Alterations of leased property.* The cost of alterations and reasonable restorations required by the lease may be allowed when the alterations were necessary for performing the contract.

(g) Settlement expenses.

(1) Settlement expenses, including the following, are generally allowable:

(i) Accounting, legal, clerical, and similar costs reasonably necessary for—

(A) The preparation and presentation, including supporting data, of settlement claims to the contracting officer; and

(B) The termination and settlement of subcontracts.

(ii) Reasonable costs for the storage, transportation, protection, and disposition of property acquired or produced for the contract.

(iii) Indirect costs related to salary and wages incurred as settlement expenses in (i) and (ii); normally, such indirect costs shall be limited to payroll taxes, fringe benefits, occupancy costs, and immediate supervision costs.

(2) If settlement expenses are significant, a cost account or work order shall be established to separately identify and accumulate them.

(h) *Subcontractor claims.* Subcontractor claims, including the allocable portion of the claims common to the contract and to other work of the contractor, are generally allowable. An appropriate share of the contractor's indirect expense may be allocated to the amount of settlements with subcontractors; provided, that the amount allocated is reasonably proportionate to the relative benefits received and is otherwise consistent with 31.201-4 and 31.203(d). The indirect expense so allocated shall exclude the same and similar costs claimed directly or indirectly as settlement expenses.

31.205-43 Trade, business, technical and professional activity costs

The following types of costs are allowable:

(a) Memberships in trade, business, technical, and professional organizations.

(b) Subscriptions to trade, business, professional, or other technical periodicals.

(c) When the principal purpose of a meeting, convention, conference, symposium, or seminar is the dissemination of trade, business, technical or professional information or the stimulation of production or improved productivity—

(1) Costs of organizing, setting up, and sponsoring the meetings, conventions, symposia, etc., including rental of meeting facilities, transportation, subsistence, and incidental costs;

(2) Costs of attendance by contractor employees, including travel costs (see 31.205-46); and

(3) Costs of attendance by individuals who are not employees of the contractor, provided—

(i) Such costs are not also reimbursed to the individual by the employing company or organization, and

(ii) The individuals attendance is essential to achieve the purpose of the conference, meeting, convention, symposium, etc.

31.205-44 Training and education costs

Costs of training and education that are related to the field in which the employee is working or may reasonably be expected to work are allowable, except as follows:

(a) Overtime compensation for training and education is unallowable.

(b) The cost of salaries for attending undergraduate level classes or part-time graduate level classes during working hours is unallowable, except when unusual circumstances do not permit attendance at such classes outside of regular working hours.

(c) Costs of tuition, fees, training materials and textbooks, subsistence, salary, and any other payments in connection with full-time graduate level education are unallowable for any portion of the program that exceeds two school years or the length of the degree program, whichever is less.

(d) Grants to educational or training institutions, including the donation of facilities or other properties, scholarships, and fellowships are considered contributions and are unallowable.

(e) Training or education costs for other than bona fide employees are unallowable, except that the costs incurred for educating employee dependents (primary and secondary level studies) when the employee is working in a foreign country where suitable public education is not available may be included in overseas differential pay.

(f) Contractor contributions to college savings plans for employee dependents are unallowable.

31.205-45 [Reserved]

31.205-46 Travel costs

(a) Costs for transportation, lodging, meals, and incidental expenses.

(1) Costs incurred by contractor personnel on official company business are allowable, subject to the limitations contained in this subsection. Costs for transportation may be based on mileage rates, actual costs incurred, or on a combination thereof, provided the method used results in a reasonable charge. Costs for lodging, meals, and incidental expenses may be based on per diem, actual expenses, or a combination thereof, provided the method used results in a reasonable charge.

(2) Except as provided in paragraph (a)(3) of this subsection, costs incurred for lodging, meals, and incidental expenses (as defined in the regulations cited in (a)(2)(i)

through (iii) of this paragraph) shall be considered to be reasonable and allowable only to the extent that they do not exceed on a daily basis the maximum per diem rates in effect at the time of travel as set forth in the—

(i) Federal Travel Regulations, prescribed by the General Services Administration, for travel in the contiguous United States, available on a subscription basis from the—Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402; Stock No. 922-002-00000-2;

(ii) Joint Travel Regulation, Volume 2, DoD Civilian Personnel, Appendix A, prescribed by the Department of Defense, for travel in Alaska, Hawaii, and outlying areas of the United States, available on a subscription basis from the—Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402; Stock No. 908-010-00000-1; or

(iii) Standardized Regulations (Government Civilians, Foreign Areas), Section 925, "Maximum Travel Per Diem Allowances for Foreign Areas," prescribed by the Department of State, for travel in areas not covered in (a)(2)(i) and (ii) of this paragraph, available on a subscription basis from the—Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; Stock No. 744-008-00000-0.

(3) In special or unusual situations, actual costs in excess of the above-referenced maximum per diem rates are allowable provided that such amounts do not exceed the higher amounts authorized for Federal civilian employees as permitted in the regulations referenced in (a)(2)(i), (ii), or (iii) of this subsection. For such higher amounts to be allowable, all of the following conditions must be met:

(i) One of the conditions warranting approval of the actual expense method, as set forth in the regulations referenced in paragraphs (a)(2)(i), (ii), or (iii) of this subsection, must exist.

(ii) A written justification for use of the higher amounts must be approved by an officer of the contractor's organization or designee to ensure that the authority is properly administered and controlled to prevent abuse.

(iii) If it becomes necessary to exercise the authority to use the higher actual expense method repetitively or on a continuing basis in a particular area, the contractor must obtain advance approval from the contracting officer.

(iv) Documentation to support actual costs incurred shall be in accordance with the contractor's established practices, subject to paragraph (a)(7) of this subsection, and provided that a receipt is required for each expenditure of $75.00 or more. The approved justification required by paragraph (a)(3)(ii) and, if applicable, paragraph (a)(3)(iii) of this subsection must be retained.

(4) Paragraphs (a)(2) and (a)(3) of this subsection do not incorporate the regulations cited in subdivisions (a)(2)(i), (ii), and (iii) of this subsection in their entirety. Only the maximum per diem rates, the definitions of lodging, meals, and incidental expenses, and the regulatory coverage dealing with special or unusual situations are incorporated herein.

(5) An advance agreement (see 31.109) with respect to compliance with paragraphs (a)(2) and (a)(3) of this subsection may be useful and desirable.

(6) The maximum per diem rates referenced in paragraph (a)(2) of this subsection generally would not constitute a reasonable daily charge—

(i) When no lodging costs are incurred; and/or

(ii) On partial travel days (*e.g.*, day of departure and return).

Appropriate downward adjustments from the maximum per diem rates would normally be required under these circumstances. While these adjustments need not be calculated in accordance with the Federal Travel Regulation or Joint Travel Regulations, they must result in a reasonable charge.

(7) Costs shall be allowable only if the following information is documented—

(i) Date and place (city, town, or other similar designation) of the expenses;

(ii) Purpose of the trip; and

(iii) Name of person on trip and that person's title or relationship to the contractor.

(b) Airfare costs in excess of the lowest priced airfare available to the contractor during normal business hours are unallowable except when such accommodations require circuitous routing, require travel during unreasonable hours, excessively prolong travel, result in increased cost that would offset transportation savings, are not reasonably adequate for the physical or medical needs of the traveler, or are not reasonably available to meet mission requirements. However, in order for airfare costs in excess of the above airfare to be allowable, the applicable condition(s) set forth above must be documented and justified.

(c)(1) "Cost of travel by contractor-owned, -leased, or -chartered aircraft," as used in this paragraph, includes the cost of lease, charter, operation (including personnel), maintenance, depreciation, insurance, and other related costs.

(2) The costs of travel by contractor-owned, -leased, or -chartered aircraft are limited to the allowable airfare described in paragraph (b) of this subsection for the flight destination unless travel by such aircraft is specifically required by contract specification, term, or condition, or a higher amount is approved by the contracting officer. A higher amount may be agreed to when one or more of the circumstances for justifying higher than allowable airfare listed in paragraph (b) of this subsection are applicable, or when an advance agreement under paragraph (c)(3) of this subsection has been executed. In all cases, travel by contractor-owned, -leased, or -chartered aircraft must be fully documented and justified. For each contractor-owned, -leased, or -chartered aircraft used for any business purpose which is charged or allocated, directly or indirectly, to a Government contract, the contractor must maintain and make available manifest/logs for all flights on such company aircraft. As a minimum, the manifest/log shall indicate—

(i) Date, time, and points of departure;

(ii) Destination, date, and time of arrival;

(iii) Name of each passenger and relationship to the contractor;

(iv) Authorization for trip; and

(v) Purpose of trip.

(3) Where an advance agreement is proposed (see 31.109), consideration may be given to the following:

(i) Whether scheduled commercial airlines or other suitable, less costly, travel facilities are available at reasonable times, with reasonable frequency, and serve the required destinations conveniently.

(ii) Whether increased flexibility in scheduling results in time savings and more effective use of personnel that would outweigh additional travel costs.

(d) Costs of contractor-owned or -leased automobiles, as used in this paragraph, include the costs of lease, operation (including personnel), maintenance, depreciation, insurance, etc. These costs are allowable, if reasonable, to the extent that the automobiles are used for company business. That portion of the cost of company-furnished automobiles that relates to personal use by employees (including transportation to and from work) is compensation for personal services and is unallowable as stated in 31.205-6(m)(2).

31.205-47 Costs related to legal and other proceedings

(a) *Definitions.* As used in this subpart—

"Costs" include, but are not limited to, administrative and clerical expenses; the costs of legal services, whether performed by in-house or private counsel; the costs of the services of accountants, consultants, or others retained by the contractor to assist it; costs of employees, officers, and directors; and any similar costs incurred before, during, and after commencement of a judicial or administrative proceeding which bears a direct relationship to the proceeding.

"Fraud," as used in this subsection, means—

(1) Acts of fraud or corruption or attempts to defraud the Government or to corrupt its agents;

(2) Acts which constitute a cause for debarment or suspension under 9.406-2(a) and 9.407-2(a); and

(3) Acts which violate the False Claims Act, 31 U.S.C., sections 3729-3731, or the Anti-Kickback Act, 41 U.S.C., sections 51 and 54.

"Penalty," does not include restitution, reimbursement, or compensatory damages.

"Proceeding," includes an investigation.

(b) Costs incurred in connection with any proceeding brought by a Federal, State, local, or foreign government for violation of, or a failure to comply with, law or regulation by the contractor (including its agents or employees), or costs incurred in connection with any proceeding brought by a third party in the name of the United States under the False Claims Act, 31 U.S.C. 3730, are unallowable if the result is—

(1) In a criminal proceeding, a conviction;

(2) In a civil or administrative proceeding, either a finding of contractor liability where the proceeding involves an allegation of fraud or similar misconduct or imposition of a monetary penalty where the proceeding does not involve an allegation of fraud or similar misconduct;

(3) A final decision by an appropriate official of an executive agency to—

(i) Debar or suspend the contractor;

(ii) Rescind or void a contract; or

(iii) Terminate a contract for default by reason of a violation or failure to comply with a law or regulation.

(4) Disposition of the matter by consent or compromise if the proceeding could have led to any of the outcomes listed in paragraphs (b)(1) through (3) of this subsection (but see paragraphs (c) and (d) of this subsection); or

(5) Not covered by paragraphs (b)(1) through (4) of this subsection, but where the underlying alleged contractor misconduct was the same as that which led to a different proceeding whose costs are unallowable by reason of paragraphs (b)(1) through (4) of this subsection.

(c)(1) To the extent they are not otherwise unallowable, costs incurred in connection with any proceeding under paragraph (b) of this subsection commenced by the United States that is resolved by consent or compromise pursuant to an agreement entered into between the contractor and the United States, and which are unallowable solely because of paragraph (b) of this subsection, may be allowed to the extent specifically provided in such agreement

(2) In the event of a settlement of any proceeding brought by a third party under the False Claims Act in which the United States did not intervene, reasonable costs incurred by the contractor in connection with such a proceeding, that are not otherwise unallowable by regulation or by separate agreement with the United States, may be allowed if the contracting officer, in consultation with his or her legal advisor, determines that there was very little likelihood that the third party would have been successful on the merits.

(d) To the extent that they are not otherwise unallowable, costs incurred in connection with any proceeding under paragraph (b) of this subsection commenced by a State, local, or foreign government may be allowable when the contracting officer (or other official specified in agency procedures) determines, that the costs were incurred either:

(1) As a direct result of a specific term or condition of a Federal contract; or

(2) As a result of compliance with specific written direction of the cognizant contracting officer.

(e) Costs incurred in connection with proceedings described in paragraph (b) of this subsection, but which are not made unallowable by that paragraph, may be allowable to the extent that:

(1) The costs are reasonable in relation to the activities required to deal with the proceeding and the underlying cause of action;

(2) The costs are not otherwise recovered from the Federal Government or a third party, either directly as a result of the proceeding or otherwise; and

(3) The percentage of costs allowed does not exceed the percentage determined to be appropriate considering the complexity of procurement litigation, generally accepted principles governing the award of legal fees in civil actions involving the United States as a party, and such other factors as may be appropriate. Such percentage shall not exceed 80 percent. Agreements reached under paragraph (c) of this subsection shall be subject to this limitation. If, however, an agreement described in paragraph (c)(1) of this subsection explicitly states the amount of otherwise allowable incurred legal fees and limits the allowable recovery to 80 percent or less of the stated legal fees, no additional limitation need be applied. The amount of reimbursement allowed for legal costs in connection with any proceeding described in paragraph (c)(2) of this subsection shall be determined by the cognizant contracting officer, but shall not exceed 80 percent of otherwise allowable legal costs incurred.

(f) Costs not covered elsewhere in this subsection are unallowable if incurred in connection with:

(1) Defense against Federal Government claims or appeals or the prosecution of claims or appeals against the Federal Government (see 2.101).

(2) Organization, reorganization, (including mergers and acquisitions) or resisting mergers and acquisitions (see also 31.205-27).

(3) Defense of antitrust suits.

(4) Defense of suits brought by employees or ex-employees of the contractor under section 2 of the Major Fraud Act of 1988 where the contractor was found liable or settled.

(5) Costs of legal, accounting, and consultant services and directly associated costs incurred in connection with the defense or prosecution of lawsuits or appeals between contractors arising from either—

(i) An agreement or contract concerning a teaming arrangement, a joint venture, or similar arrangement of shared interest; or

(ii) Dual sourcing, coproduction, or similar programs, are unallowable, except when—

(A) Incurred as a result of compliance with specific terms and conditions of the contract or written instructions from the contracting officer, or

(B) When agreed to in writing by the contracting officer.

(6) Patent infringement litigation, unless otherwise provided for in the contract.

(7) Representation of, or assistance to, individuals, groups, or legal entities which the contractor is not legally bound to provide, arising from an action where the participant was convicted of violation of a law or regulation or was found liable in a civil or administrative proceeding.

(8) Protests of Federal Government solicitations or contract awards, or the defense against protests of such solicitations or contract awards, unless the costs of defending against a protest are incurred pursuant to a written request from the cognizant contracting officer.

(g) Costs which may be unallowable under 31.205-47, including directly associated costs, shall be segregated and accounted for by the contractor separately. During the pendency of any proceeding covered by paragraph (b) and paragraphs (f)(4) and (f)(7) of this subsection, the contracting officer shall generally withhold payment of such costs. However, if in the best interests of the Government, the contracting officer may provide for conditional payment upon provision of adequate security, or other adequate assurance, and agreement by the contractor to repay all unallowable costs, plus interest, if the costs are subsequently determined to be unallowable.

31.205-48 Research and development costs

"Research and development," as used in this subsection, means the type of technical effort described in 31.205-18 but sponsored by a grant or required in the performance of a contract. When costs are incurred in excess of either the price of a contract or amount of a grant for research and development effort, the excess is unallowable under any other Government contract.

31.205-49 Goodwill

Goodwill, an unidentifiable intangible asset, originates under the purchase method of accounting for a business combination when the price paid by the acquiring company exceeds the sum of the identifiable individual assets acquired less liabilities assumed, based upon their fair values. The excess is commonly referred to as goodwill. Goodwill may arise from the acquisition of a company as a whole or a portion thereof. Any costs for amortization, expensing, write-off, or write-down of goodwill (however represented) are unallowable.

31.205-50 [Reserved]

31.205-51 Costs of alcoholic beverages

Costs of alcoholic beverages are unallowable.

31.205-52 Asset valuations resulting from business combinations

(a) For tangible capital assets, when the purchase method of accounting for a business combination is used, whether or not the contract or subcontract is subject to CAS, the allowable depreciation and cost of money shall be based on the capitalized asset values measured and assigned in accordance with 48 CFR 9904.404-50(d), if allocable, reasonable, and not otherwise unallowable.

(b) For intangible capital assets, when the purchase method of accounting for a business combination is used, allowable amortization and cost of money shall be limited to the total of the amounts that would have been allowed had the combination not taken place.

A-300 Subpart 31.3 --- Contracts with Educational Institutions

31.301 Purpose

This subpart provides the principles for determining the cost of research and development, training, and other work performed by educational institutions under contracts with the Government.

31.302 General

Office of Management and Budget (OMB) Circular No. A-21, Cost Principles for Educational Institutions, revised, provides principles for determining the costs applicable to research and development, training, and other work performed by educational institutions under contracts with the Government.

31.303 Requirements

(a) Contracts that refer to this Subpart 31.3 for determining allowable costs under contracts with educational institutions shall be deemed to refer to, and shall have the allowability of costs determined by the contracting officer in accordance with, the revision of OMB Circular A-21 in effect on the date of the contract.

(b) Agencies are not expected to place additional restrictions on individual items of cost.

A-300 Subpart 31.4 --- Reserved

A-300 Subpart 31.5 --- Reserved

A-300 Subpart 31.6 --- Contracts with State, Local, and Federally Recognized Indian Tribal Governments

31.601 Purpose

This subpart provides the principles for determining allowable cost of contracts and subcontracts with State, local, and federally recognized Indian tribal governments.

31.602 General

Office of Management and Budget (OMB) Circular No. A-87, Cost Principles for State and Local Governments, Revised, sets forth the principles for determining the allowable costs of contracts and subcontracts with State, local, and federally recognized Indian tribal governments. These principles are for cost determination and are not intended to identify the circumstances or dictate the extent of Federal and State or local participation in financing a particular contract.

31.603 Requirements

(a) Contracts that refer to this Subpart 31.6 for determining allowable costs under contracts with State, local and Indian tribal governments shall be deemed to refer to, and shall have the allowability of costs determined by the contracting officer in accordance with, the revision of OMB Circular A-87 which is in effect on the date of the contract.

(b) Agencies are not expected to place additional restrictions on individual items of cost. However, under 10 U.S.C. 2324(e) and 41 U.S.C. 256(e), the following costs are unallowable:

(1) Costs of entertainment, including amusement, diversion, and social activities, and any costs directly associated with such costs (such as tickets to shows or sports events, meals, lodging, rentals, transportation, and gratuities).

(2) Costs incurred to influence (directly or indirectly) legislative action on any matter pending before Congress, a State legislature, or a legislative body of a political subdivision of a State.

(3) Costs incurred in defense of any civil or criminal fraud proceeding or similar proceeding (including filing of any false certification) brought by the United States where the contractor is found liable or has pleaded nolo contendere to a charge of fraud or similar proceeding (including filing of a false certification).

(4) Payments of fines and penalties resulting from violations of, or failure to comply with, Federal, state, local, or foreign laws and regulations, except when incurred as a result of compliance with specific terms and conditions of the contract or specific written instructions from the contracting officer authorizing in advance such payments in accordance with applicable regulations in the FAR or an executive agency supplement to the FAR.

(5) Costs of any membership in any social, dining, or country club or organization.

(6) Costs of alcoholic beverages.

(7) Contributions or donations, regardless of the recipient.

(8) Costs of advertising designed to promote the contractor or its products.

(9) Costs of promotional items and memorabilia, including models, gifts, and souvenirs.

(10) Costs for travel by commercial aircraft which exceed the amount of the standard commercial fare.

(11) Costs incurred in making any payment (commonly known as a “golden parachute payment”) which is—

(i) In an amount in excess of the normal severance pay paid by the contractor to an employee upon termination of employment; and

(ii) Is paid to the employee contingent upon, and following, a change in management control over, or ownership of, the contractor or a substantial portion of the contractor's assets.

(12) Costs of commercial insurance that protects against the costs of the contractor for correction of the contractor's own defects in materials or workmanship.

(13) Costs of severance pay paid by the contractor to foreign nationals employed by the contractor under a service contract performed outside the United States, to the extent that the amount of the severance pay paid in any case exceeds the amount paid in the industry involved under the customary or prevailing practice for firms in that industry providing similar services in the United States, as determined by regulations in the FAR or in an executive agency supplement to the FAR.

(14) Costs of severance pay paid by the contractor to a foreign national employed by the contractor under a service contract performed in a foreign country if the termination of the employment of the foreign national is the result of the closing of, or curtailment of activities at, a United States facility in that country at the request of the government of that country.

(15) Costs incurred by a contractor in connection with any criminal, civil, or administrative proceedings commenced by the United States or a State, to the extent provided in 10 U.S.C. 2324(k) or 41 U.S.C. 256(k).

A-300 Subpart 31.7 --- Contracts with Nonprofit Organizations

31.701 Purpose

This subpart provides the principles for determining the cost applicable to work performed by nonprofit organizations under contracts with the Government. A nonprofit organization, for purpose of identification, is defined as a business entity organized and operated exclusively for charitable, scientific, or educational purposes, of which no part of the net earnings inure to the benefit of any private shareholder or individual, of which no substantial part of the activities is carrying on propaganda or otherwise attempting to influence legislation or participating in any political campaign on behalf of any candidate for public office, and which are exempt from Federal income taxation under section 501 of the Internal Revenue Code.

31.702 General

Office of Management and Budget (OMB) Circular No. A-122, Cost Principles for Nonprofit Organizations, sets forth principles for determining the costs applicable to work performed by nonprofit organizations under contracts (also applies to grants and other agreements) with the Government.

31.703 Requirements

(a) Contracts which refer to this Subpart 31.7 for determining allowable costs shall be deemed to refer to, and shall have the allowability of costs determined by the contracting officer in accordance with, the revision of OMB Circular A-122 in effect on the date of the contract.

(b) Agencies are not expected to place additional restrictions on individual items of cost. However, under 10 U.S.C. 2324(e) and 41 U.S.C. 256(e), the costs cited in 31.603(b) are unallowable.

A-400 Section 4 --- Defense Federal Acquisition Regulation Supplement (DFARS) Part 231 - Contract Cost Principles and Procedures

A-401 Scope of Section

The Defense Federal Acquisition Regulation Supplement Part 231, Contract Cost Principles and Procedures, is transcribed on the subsequent pages. The transcript reproduces DFARS Part 231 updated through July 15, 2009. The full text of the DFARS is available on the AT&L Knowledge Sharing System (AKSS).

A-400 Subpart 231.1 --- Applicability

231.100 Scope of Subpart

231.100-70 Contract clause

Use the clause at 252.231-7000, Supplemental Cost Principles, in all solicitations and contracts, which are subject to the principles and procedures described in FAR Subparts 31.1, 31.2, 31.6, and 31.7.

A-400 Subpart 231.2 --- Contracts With Commercial Organizations

231.201-2 Determining allowability.

(a) In addition to the requirements at FAR 31.201-2(a), a cost is allowable only when it complies with the clause at 252.215-7004, Excessive Pass-Through Charges.

231.203 Indirect costs.

(d) Indirect costs related to excessive pass-through charges, as defined in the clause at 252.215-7004, are unallowable.

231.205 Selected costs

231.205-1 Public relations and advertising costs.

(e) See 225.7303-2(e) for allowability provisions affecting foreign military sales contracts.

(f) Unallowable public relations and advertising costs include the following:

(1) Monies paid to the Government associated with the leasing of Government equipment, including lease payments and reimbursements for support services, except for foreign military sales contracts as provided for at 225.7303-2.

231.205-6 Compensation for Personal Services

(f)(1) In accordance with Section 8122 of Pub.L.104-61, and similar sections in subsequent Defense appropriations acts, costs for bonuses or other payments in excess of the normal salary paid by the contractor to an employee, that are part of restructuring costs associated with a business combination, are unallowable under DoD contracts funded by fiscal year 1996 or subsequent appropriations. This limitation does not apply to severance payments or early retirement incentive payments. (See 231.205-70(b) for the definitions of “business combination” and “restructuring costs.”)

231.205-18 Independent Research and Development and Bid and Proposal Costs

(a) ***Definitions.*** As used in this subsection –

(i) "Covered contract" means a DoD prime contract for an amount exceeding the simplified acquisition threshold, except for a fixed-price contract without cost incentives. The term also includes a subcontract for an amount exceeding the simplified acquisition threshold, except for a fixed-price subcontract without cost incentives under such a prime contract.

(ii) "Covered segment" means a product division of the contractor that allocated more than $1,100,000 in independent research and development and bid and proposal (IR&D/B&P) costs to covered contracts during the preceding fiscal year. In the case of a contractor that has no product divisions, the term means that contractor as a whole. A product division of the contractor that allocated less than $1,100,000 in IR&D/B&P costs to covered contracts during the preceding fiscal year is not subject to the limitations in paragraph (c) of this subsection.

(iii) "Major contractor" means any contractor whose covered segments allocated a total of more than $11,000,000 in IR&D/B&P costs to covered contracts during the preceding fiscal year. For purposes of calculating the dollar threshold amounts to determine whether a contractor meets the definition of "major contractor," do not include contractor segments allocating less than $1,100,000 of IR&D/B&P costs to covered contracts during the preceding fiscal year.

(c) ***Allowability.***

(i) Departments/agencies shall not supplement this regulation in any way that limits IR&D/B&P cost allowability.

(ii) See 225.7303-2(c) for allowability provisions affecting foreign military sale contracts.

(iii) For major contractors, the following limitations apply:

(A) The amount of IR&D/B&P costs allowable under DoD contracts shall not exceed the lesser of --

(1) Such contracts' allocable share of total incurred IR&D/B&P costs; or

(2) The amount of incurred IR&D/B&P costs for projects having potential interest to DoD.

(B) Allowable IR&D/B&P costs are limited to those for projects that are of potential interest to DoD, including activities intended to accomplish any of the following:

(1) Enable superior performance of future U.S. weapon systems and components.

(2) Reduce acquisition costs and life-cycle costs of military systems.

(3) Strengthen the defense industrial and technology base of the United States.

(4) Enhance the industrial competitiveness of the United States.

(5) Promote the development of technologies identified as critical under 10 U.S.C.2522.

(6) Increase the development and promotion of efficient and effective applications of dual-use technologies.

(7) Provide efficient and effective technologies for achieving such environmental benefits as: improved environmental data gathering, environmental cleanup and restoration, pollution reduction in manufacturing, environmental conservation, and environmentally safe management of facilities.

(iv) For major contractors, the cognizant administrative contracting officer (ACO) or corporate ACO shall --

(A) Determine whether IR&D/B&P projects are of potential interest to DoD; and

(B) Provide the results of the determination to the contractor.

(v) The cognizant contract administration office shall furnish contractors with guidance on financial information needed to support IR&D/B&P costs and on technical information needed from major contractors to support the potential interest to DoD determination (also see 242.771-3(a)).

231.205-22 Legislative Lobbying Costs

(a) Costs associated with preparing any material, report, list, or analysis on the actual or projected economic or employment impact in a particular State or congressional district of an acquisition program for which all research, development, testing, and evaluation has not been completed also are unallowable (10 U.S.C. 2249).

231.205-70 External Restructuring Costs.

(a) ***Scope***. This subsection—

(1) Prescribes policies and procedures for allowing contractor external restructuring costs when savings would result for DoD; and

(2) Implements 10 U.S.C. 2325.

(b) ***Definitions***. As used in this subsection:

(1) "Business combination" means a transaction whereby assets or operations of two or more companies not previously under common ownership or control are combined, whether by merger, acquisition, or sale/purchase of assets.

(2) "External restructuring activities" means restructuring activities occurring after a business combination that affect the operations of companies not previously under common ownership or control. They do not include restructuring activities occurring after a business combination that affect the operations of only one of the companies not previously under common ownership or control, or, when there has been no business combination, restructuring activities undertaken within one company. External restructuring activities are a direct outgrowth of a business combination. They normally will be initiated within 3 years of the business combination.

(3) "Restructuring activities" means nonroutine, nonrecurring, or extraordinary activities to combine facilities, operations, or workforce, in order to eliminate redundant capabilities, improve future operations, and reduce overall costs. Restructuring activities do not include routine or ongoing repositionings and redeployments of a contractor's productive facilities or workforce (e.g., normal plant rearrangement or employee relocation), nor do they include other routine or ordinary activities charged as indirect costs that would otherwise have been incurred (e.g., planning and analysis, contract administration and oversight, or recurring financial and administrative support).

(4) "Restructuring costs" means the costs, including both direct and indirect, of restructuring activities. Restructuring costs that may be allowed include, but are not limited to, severance pay for employees, early retirement incentive payments for employees, employee retraining costs, relocation expense for retained employees, and relocation and rearrangement of plant and equipment. For purposes of this definition, if restructuring costs associated with external restructuring activities allocated to DoD contracts are less than $2.5 million, the costs shall not be subject to the audit, review, and determination requirements of paragraph (c)(4) of this subsection; instead, the normal rules for determining cost allowability in accordance with FAR Part 31 shall apply.

(5) "Restructuring savings" means cost reductions, including both direct and indirect cost reductions, that result from restructuring activities. Reassignments of cost to future periods are not restructuring savings.

(c) ***Limitations on cost allowability***.

Restructuring costs associated with external restructuring activities shall not be allowed unless --

(1) Such costs are allowable in accordance with FAR Part 31 and DFARS Part 231;

(2) An audit of projected restructuring costs and restructuring savings is performed;

(3) The cognizant administrative contracting officer (ACO) reviews the audit report and the projected costs and projected savings, and negotiates an advance agreement in accordance with paragraph (d) of this subsection; and

(4) (i) The official designated in paragraph (c)(4)(ii) of this subsection determines in writing that the audited projected savings, on a present value basis, for DoD resulting from the restructuring will exceed either —

(A) The costs allowed by a factor of at least two to one; or

(B) The costs allowed, and the business combination will result in the preservation of a critical capability that might otherwise be lost to DoD.

(ii) (A) If the amount of restructuring costs is expected to exceed $25 million over a 5-year period, the designated official is the Under Secretary of Defense (Acquisition, Technology, and Logistics) or the Principle Deputy. This authority may not be delegated below the level of an Assistant Secretary of Defense.

(B) For all other cases, the designated official is the Director of the Defense Contract Management Agency. The Director may not delegate this authority..

(d) ***Procedures and ACO responsibilities***. As soon as it is known that the contractor will incur restructuring costs for external restructuring activities, the cognizant ACO shall follow the procedures at PGI 231.205-70(d).

(e) ***Information needed to obtain a determination***.

(1) The novation agreement (if one is required).

(2) The contractor's restructuring proposal.

(3) The proposed advance agreement.

(4) The audit report.

(5) Any other pertinent information.

(6)The cognizant ACO's recommendation for a determination. This recommendation must clearly indicate one of the following, consistent with paragraph (c)(4)(i) of this subsection:

(i) The audited projected savings for DoD will exceed the costs allowed by a factor of at least two to one on a present value basis.

(ii) The business combination will result in the preservation of a critical capability that might otherwise be lost to DoD, and the audited projected savings for DoD will exceed the costs allowed on a present value basis.

(f) ***Contracting officer responsibilities.***

(1) The contracting officer, in consultation with the cognizant ACO, should consider including a repricing clause in noncompetitive fixed-price contracts that are negotiated during the period between –

(i) The time a business combination is announced; and

(ii) The time the contractor’s forward pricing rates are adjusted to reflect the impact of restructuring.

(2) The decision to use a repricing clause will depend upon the particular circumstances involved, including –

(i) When the restructuring will take place;

(ii) When restructuring savings will begin to be realized;

(iii) The contract performance period;

(iv) Whether the contracting parties are able to make a reasonable estimate of the impact of restructuring on the contract; and

(v) The size of the potential dollar impact of restructuring on the contract.

(3) If the contracting officer decides to use a repricing clause, the clause must provide for a downward-only price adjustment to ensure that DoD receives its appropriate share of restructuring net savings.

A-400 Subpart 231.3 --- Contracts With Educational Institutions

231.303 Requirements

(1) Pursuant to section 841 of the National Defense Authorization Act for Fiscal Year 1994 (Pub. L. 103-160), no limitation may be placed on the reimbursement of otherwise allowable indirect costs incurred by an institution of higher education under a DoD contract awarded on or after November 30, 1993, unless that same limitation is applied uniformly to all other organizations performing similar work under DoD contracts. The 26 percent limitation imposed on administrative indirect costs by OMB Circular No. A-21 shall not be applied to DoD contracts awarded on or after November 30, 1993, to institutions of higher education because the same limitation is not applied to other organizations performing similar work.

(2) The cognizant administrative contracting officer may waive the prohibition in 231.303(1) if the governing body of the institution of higher education requests the waiver to simplify the institution's overall management of DoD cost reimbursements under DoD contracts.

(3) Under 10 U.S.C.2249, the costs cited in 231.205-22(a) are unallowable.

A-400 Subpart 231.6 --- Contracts With State, Local, and Federally Recognized Indian Tribal Governments

231.603 Requirements

Under 10 U.S.C.2249, the costs cited in 231.205-22(a) are unallowable.

A-400 Subpart 231.7 --- Contracts With Nonprofit Organizations

231.703 Requirements

Under 10 U.S.C.2249, the costs cited in 231.205-22(a) are unallowable.

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APPENDIX B

B-000 Statistical Sampling Techniques

B-001 Scope of Appendix

This appendix presents essential principles and methods of statistical (probability) sampling applicable to contract auditing. In statistical sampling, each sample item in the universe has a determinable probability of being selected thus providing a basis for estimating the reliability of results. This appendix provides guidance for auditors in the design of a sampling plan and the selection and use of appropriate sampling methods for achieving audit objectives. The guidance applies to both estimation and acceptance sampling. It is not, however, a detailed course in statistical sampling. General audit sampling guidance, including the Agency's sampling policy, is discussed in 4-600, Audit Sampling.

B-100 Section 1 --- Impact of Other Sources of Reliance on Amount of Statistical Sampling

B-101 Introduction

This section discusses the interrelationship and interdependence of statistical sampling and the other contract audit techniques that serve as sources of reliance for audit conclusions and recommendations. In the examination of contract costs, the auditor's objective is to report an informed opinion on the propriety of the contractor's cost representations. In expressing an opinion, the auditor does not require certainty (which may not be practical to obtain) regarding the contractor's representations. The auditor only needs reasonable assurance that the audit conclusions are substantially correct. An understanding of these relationships is essential to the effective application of statistical sampling to contract auditing.

B-102 The Contract Auditor's Sources of Reliance

a. The fact that the audit report expresses an opinion and not a statement of absolute fact is of primary importance to the selection and application of appropriate audit procedures and techniques. The contract auditor may use any analytical or summary methods that will yield a sufficiently accurate determination or opinion. In forming this opinion the auditor is often able to rely on a number of sources of information. It is important to understand these sources in order to weigh properly their influence on the sampling plan. The contract auditor's principal sources of reliance include the following:

(1) Review and Analysis of Procedures and Controls. Procedures which are well designed, effectively operating, and combined with strong controls produce consistent results on which the auditor can rely with a minimum of testing. Conversely, weak or poor operating procedures or controls frequently produce inconsistent results or consistently wrong results. The latter conditions will require a more thorough examination. The auditor can gain knowledge of the contractor's system from formal or informal survey procedures.

(2) Comparison with Historical Cost Patterns. In many cases, the results of prior audits in a given area will have disclosed no significant discrepancies. If costs currently being audited follow a similar pattern, the amount of testing required will be reduced. Techniques for evaluating the consistency of current costs with previous experience include the traditional auditing tools of comparative, ratio, and trend analysis, as well as graphic and regression analysis.

(3) The Test Audit or Test-Check Procedure. This audit procedure may be used to highlight undesirable practices or conditions; or it may be used to secure a cross-section of an audit area so that the auditor may draw conclusions about the entire area by examining the sample. It is in the application of the test audit or test-check procedure that statistical sampling is most useful to the contract auditor.

b. By considering all of the sources of reliance available, the auditor is able to make an informed decision as to the level of transaction testing that is required to be completed for a given audit circumstance. If all sources of reliance indicate favorable conditions, the auditor should limit tests of transactions to the minimum number that will support an informed opinion assuming a reasonable degree of risk. For example, when a survey indicates that the controls are strong and operating effectively and an adequate sampling of the records discloses no exceptions, the auditor has greater confidence in the reliability of the records than he/she would have from the sample alone. Correspondingly, the amount of sampling required to confirm other system or data analyses is less than when dependence is placed solely on the results of the sample.

c. Although the extent of the auditor's examination of records can be minimized by other sources of reliance, it seldom can be eliminated when substantial dollar values or sensitive issues are involved. In all audits, a certain amount of record examination is required to ascertain that controls are actually effective and that procedures and practices, which were satisfactory in the past, have not changed. Furthermore, the auditor must consider the objectives as well as the effectiveness of internal controls. For example, controls designed to assure that costs are properly recorded from purchase orders and vouchers to appropriate accounts would influence a sample selection that is designed to determine if those costs were assigned to appropriate contracts.

d. One of the principal advantages of statistical sampling is the measurement of the reliability of the results that it provides. Published tables indicate the sample size required to achieve given reliability objectives. EZ-Quant includes a sample sizing procedure for the same purpose. Procedures for considering other sources of reliance in determining optimum sample sizes are discussed in B-400 and B-500. Stratification is discussed in B-600.

B-200 Section 2 --- Design of the Nonstatistical or Statistical Sampling Plan

B-201 Introduction

This section discusses the design of the sampling plan and the elements that should be documented in the plan. Detailed sampling plans are developed for the sampling categories of:

(1) sampling for attributes and

(2) sampling for variables.

Sampling plan elements, common to both attribute and variable sampling, are discussed in B-300. Elements specific to sampling for attributes or variables are discussed in B-400 or B-500, respectively.

B-202 Statistical Sampling Methods

a. Auditors do not usually perform a 100 percent review of universe data. Therefore, auditors will normally use either statistical or nonstatistical sampling in their audits. The method selected depends on which is the most cost-effective means of satisfying the audit objective and supporting favorable resolution of any reported conditions.

b. Statistical sampling is preferred because of its advantages, which include objectivity, overall defensibility, and measurability of the risk of substantial (or material) sampling error.

B-203 Sampling Plan Design and Documentation

a. The successful audit application of statistical sampling begins with the design of the sampling plan. Sampling plans are required for audit applications of both attribute sampling and variable sampling.

b. The general sampling plan elements are listed below. Detailed sampling plans for attributes and variables are discussed in B-204 and B-205, respectively.

(1) Briefly state the objective of the sample, specifying what the auditor is looking for in the universe.

(2) Describe the universe and state its size (see B-304). That is:

(a) describe the sampling unit (i.e., the basic auditable item to be examined),

(b) specify the scope of the audit so that all sampling units pertinent to the sampling objective can be identified and

(c) state the size of the universe (i.e., the total number and amount of all sampling units.)

(3) Describe the sampling frame, that is, the physical or electronic representation of the universe to which the mechanics of sampling will be applied.

(4) Determine if the universe reconciles with the sampling frame. The sampling frame may include items not intended to be in the audit universe and it may exclude part of the universe. The auditor must develop remedies as required by the type of mismatch and as permitted by available information.

(5) Select a suitable sampling approach. For a variable sampling application, the auditor can choose physical unit sampling or dollar unit sampling (DUS). In sampling for attributes, the alternatives are acceptance or estimation sampling.

(6) Develop the sampling reliability parameters. The reliability parameters, to be specified for either attribute sampling or variable sampling, are listed in B-204f or B-205f, respectively.

(7) When sampling for variables, establish a sample size using either auditor judgment or sample sizing utilities in EZ-Quant. In sampling for attributes, determine a sample size for each attribute using EZ-Quant .

(8) Describe the sample selection method.

(9) Identify the specific software to be used for the sample evaluation.

c. To maintain audit consistency, auditors should use the sampling plan formats described in B-204 and B-205 for all audit applications of statistical sampling. Audit working papers should include a complete sampling plan clearly cross-referenced to where the sample selection and evaluation are located.

B-204 Detailed Sampling Plan for Attributes

Detailed elements (with examples) for an attribute sampling plan are:

a. State the objective for the sample.

(1) Briefly state the general objective. Attribute sampling deals with the frequency, not the dollar impact, of a specified type of error (or other characteristic of audit concern) in the universe. Concerning that error type or characteristic, the objective is either to:

(a) accept or reject the universe, or

(b) to estimate its frequency in the universe.

Examples of attribute acceptance sampling objectives include:

(c) determining whether compliance with timekeeping controls is adequate, and

(d) determining whether the accuracy of an inventory accounting system is acceptable.

An example of an attribute estimation sampling objective is to estimate the percent of invoices that were paid within 30 days of receipt.

(2) Identify the critical (significant) system features (attributes) to be tested. Some attribute examples are "Did the employee endorse the time sheet (or card)?" or "Does the actual part count agree with the inventory system count?"

(3) Define the error condition for each attribute. For example, the inventory system is in error if the actual count differs from the inventory count by more than 5 percent.

b. Describe the universe.

(1) Identify the sampling unit. Some examples are an employee (for the time-keeping test) or a part number (for the inventory system test).

(2) Specify the audit scope to include all sampling units pertinent to the sampling objective. For example, the scope may include all first-shift, hourly employees for Departments A, B, and C (for a time-keeping test).

(3) State the universe size - the number of all sampling units. An example is the 2,000 first-shift, hourly employees for Departments A, B, and C.

c. Describe the sampling frame - the physical or electronic representation of the universe. An example is a computer listing of social security numbers for all hourly employees for all departments.

d. Determine if the universe reconciles with the sampling frame.

(1) Determine if the sampling frame includes units not intended to be in the universe. For example, a listing of social security numbers includes those for employees outside Departments A, B, and C.

(2) Determine if the sampling frame excludes part of the universe. For example, a listing of part numbers may exclude items stored in remote locations.

(3) Develop remedies as required by the type of mismatch and as permitted by available information.

e. Select a suitable sampling approach. An example for the inventory accounting system test is to use acceptance sampling if incorrect rejection (of an acceptable system) would call for a costly remedy; otherwise, use discovery acceptance sampling.

f. Develop desired values of sampling reliability parameters.

(1) For acceptance sampling, the reliability parameters (B-404.1) are:

Critical Error Rate - the maximum error rate in the universe that is considered acceptable,

Desired Government's Risk - the tolerable level of risk of accepting a faulty universe (i.e., universe error rate is greater than the specified critical error rate),

False Alarm Error Rate - an acceptable universe error rate (less than critical error rate) used to control the risk of incorrect rejection (false alarm) of an acceptable universe, and

False Alarm Risk - the tolerable level of risk of rejecting an acceptable universe (i.e., universe error rate is less than the false alarm error rate).

(2) For estimation sampling, the sampling reliability parameters (B-404.2) are:

Precision Range - the width of the desired confidence interval for the universe error rate, and

Confidence Level - the likelihood (or probability) that the universe error rate, being estimated by the sample, will be within a specified range about the (point) estimate itself.

g. Determine a sample size for each attribute. Give the name of the specific software and inputs used to determine the sample size. For example: "The EZ-Quant discovery sample size estimation option will be used to determine the sample size for a discovery sample."

h. Describe the sample selection method. That is, briefly describe the way sample items are randomly selected.

i. Identify, by name, the specific software to be used for sample evaluation. For example: "The EZ-Quant discovery/one-step evaluation option will be used to evaluate the attribute discovery (acceptance) sample."

B-205 Detailed Sampling Plan for Variables

Detailed elements (with examples) for a variable sampling plan are:

a. State the objective for the sample.

(1) Briefly state the general objective. For example, the objective is to estimate the misstatement of proposed material costs.

(2) State the specific characteristics (potential sources of error) to be tested. Examples of potential sources of error are the differences between proposed prices and vendor quotes or between proposed prices and purchase history.

b. Describe the universe.

(1) Identify the sampling unit. Some examples of sampling units are a line item on a bill of materials or a transaction in an overhead account.

(2) Specify the scope to include all sampling units pertinent to the sampling objective. For example, all travel accounts 100 and 101 for FY 99 for Departments A, B, and C.

(3) State the universe size - the number and value (if applicable) of all sampling units. An example is the universe of 250 transactions, totaling $1,000,000, charged to the travel account during FY 99.

c. Describe the sampling frame - the physical or electronic representation of the universe. Some examples of sampling frames are a computer listing of a consolidated bill of material, a data file (specifically named) of journal voucher entries, or a file drawer of vouchers.

d. Determine if the universe reconciles with the sampling frame.

(1) Determine if the sampling frame includes units not intended to be in the universe. An example would be a listing of travel vouchers that includes certain departments outside the scope of the audit.

(2) Determine if the sampling frame excludes part of the universe. For example, the same listing of travel vouchers excludes those units intended to be in the universe, such as travel vouchers recently incurred by off-site personnel.

(3) Develop remedies as required by the type of mismatch and as permitted by available information.

e. Select a suitable sampling approach. For example, physical unit sampling should be used when the sampling frame is a file drawer of vouchers; dollar unit sampling should be used when the sampling frame includes items that are actually clusters of sampling units (such as multiple-invoice vouchers or BOM line items consisting of several part numbers).

f. Develop desired values for sampling reliability parameters. For variable sampling, the reliability parameters (B-504) are:

Confidence Level - the likelihood (or probability) that the universe amount, being estimated by the sample, will fall within a specified range about the point estimate itself.

Desired Precision Amount - the amount of sampling error, stated as a dollar amount that is considered acceptable by the auditor.

g. Establish the sample size consistent with the audit objective (B-505).

h. Describe the sample selection method.

(1) If automated, give the name of the sampling software procedure. For example: "The EZ-Quant physical unit sample selection option will be used to select a physical unit sample" or, "The EZ-Quant dollar unit sample selection option will be used to select a dollar unit sample."

(2) If manual, briefly describe the universe stratification process (if done) and the way sample items are randomly selected.

i. Identify, by name, the specific software to be used for sample evaluation. For example: "The EZ-Quant physical unit sample evaluation option will be used to evaluate the physical unit sample" or, "The EZ-Quant dollar unit sample evaluation option will be used to evaluate the dollar unit sample."

B-300 Section 3 --- Statistical Sampling Plan Elements Common To Attribute and Variable Sampling

B-301 Introduction

This section provides guidance on sampling plan elements that are common to both attribute and variable sampling.

B-302 Identifying the Sampling Objective

a. A prerequisite to the application of any sampling process is the need to identify the specific audit objectives to be attained by examination of the area under evaluation. Prior to initiation of the sampling process, the auditor should definitively set forth in the sampling plan the characteristics and values to be examined during the audit. The auditor's sampling objective should satisfy the audit objectives of the area being audited.

b. The purpose of sampling is to infer something about a "characteristic" of the universe items under consideration. One typical universe characteristic is the total audited dollar amount. To permit inferences about this universe characteristic, it must be possible to determine an audited amount for each sample item examined by the auditor.

c. In the examination of sample items, the auditor is usually concerned with determining the existence of "errors." These errors are not limited to oversights on the part of contractor personnel. They may reflect differences of opinion between the auditor and the contractor as to the proper distribution of a cost or the appropriate documentation of transactions. A generalized objective statement (e.g., "to see if any errors exist" or "to determine if anything is wrong") should be avoided. The precise type of errors, occurrences, or values being audited must be defined in order to design an economical or efficient sampling plan.

d. Frequently, the objectives of the audit may require the examination of all items for several characteristics. The sampling plan should take into consideration that findings from the sample of each characteristic should be kept separate for individual analysis and not combined, since each characteristic may be of different audit significance. For example, suppose a floor check of a random sample of employees disclosed that:

(1) some employees who were late or absent were being checked in by other employees and

(2) some job tickets, which were otherwise correct, were not being countersigned by the supervisor.

An analysis based on the combined number of errors would be less informative than separate analyses of the errors in each category.

e. When different categories of errors disclosed by a sample can be evaluated monetarily, the findings can be combined if they are recurring in nature and not peculiar to only certain characteristics or accounts. For example, suppose a sample of travel vouchers disclosed unallowable costs for:

(1) entertainment of customers and

(2) the excess cost of first-class over other available air accommodations.

Separate estimates of the amount of unallowable expenses in each category would not be necessary since the auditor's objective is to obtain a reliable estimate of the total amount of unallowable expenses.

f. If monetary errors are evidently peculiar to certain characteristics or subareas, or are apparently nonrecurring, they should not be combined. A judgment is required as to whether or not a particular type of unallowable cost should be projected across-the-board. There is occasionally an advantage to separate treatment, such as a reduction in an unreasonable confidence interval (or precision, as discussed in B-504). Suppose, for example, relocation costs were included in travel expense and no costs were questioned in this category, the confidence interval could be narrowed by stratifying out relocation costs.

g. When the auditor has reason to believe that a cost category includes a significant amount of unallowable expenses, the purpose in taking a sample will generally be to estimate the total amount of unallowable expenses. On the other hand, if the auditor has no reason to believe the costs being audited include unallowable amounts, the purpose will generally be to obtain additional assurance that the costs do not, in fact, include a significant amount of unallowable expenses. In either case, the auditor should seek to develop a sampling plan that will provide maximum support for conclusions in return for the time spent in the selection, examination, and evaluation of the sample. In addition, the sample size should provide a reasonable balance between:

(1) the amount of support the sample will provide for audit conclusions and
(2) the expenditure of auditor resources the sample will require.

B-303 Sampling for Attributes or Variables

a. The sampling of characteristics may be divided into two broad categories of sampling for attributes and sampling for variables. When sampling to determine the rate or proportion of errors in the records or to obtain assurance that an error rate is not excessive, the auditor is sampling for attributes. Sampling for variables is performed when a sample is selected in order to estimate an amount such as the dollar value of unallowable costs contained in the total dollar value of material invoices charged to a Government contract. The distinction is important because the methods used to evaluate sample results differ.

b. The same sample may be used for attributes and variables. For example, in evaluating direct material costs, the auditor may want to estimate both the percentage of purchases made without competition and the dollar amounts improperly charged to a Government contract.

B-304 Describing the Universe

a. A universe is a group of items or transactions from which information is desired. Some statistical texts refer to the universe as the group of items before segregation and audit stratification of items for detailed examination. However, in this appendix the term “universe” will refer to the “sampling universe”, the group of items which remains after the large dollar or sensitive transactions have been stratified (or segregated) for complete (as opposed to partial) audit examination.

b. The sampling unit is the basic unit that will be examined. A sampling unit may be a document or record, such as a purchase order or travel voucher, or may be an item reflected on the document or record. As an example, an objective may be to determine how many, if any, purchase orders lack adequate supporting documentation, or the objective may be to verify certain characteristics of the items on the purchase orders, such as whether each item's cost is correct. If the examinations were to be made on a sampling basis, the sampling unit in the first instance would be a purchase order. In the second instance, the sampling unit would be a line item on a purchase order. If there were several line items on each of the purchase orders, it can be readily seen that the sizes of the two groups would differ substantially.

c. With dollar unit sampling (DUS), it is often implied that “dollar units” or “dollar hits” as opposed to physical units are being sampled. Physical units are the sampling unit, with sample items being identified by the dollar hits. In order to evaluate a dollar hit the item (e.g., the cost of a physical unit) containing the dollar hit must be analyzed. In the event that DUS selects units that are clusters (e.g., subassemblies) which can be broken down into smaller auditable units (e.g., subassembly parts), the smaller units containing the hits can become the sampling units. If this is done for one cluster, it must be done for all clusters in the sample.

d. The universe is the aggregate of all sampling units. Therefore, the auditor must specify the scope of the sample to ensure that all sampling units pertinent to the sampling ob-

jective will be included in the universe. Examples of criteria that specify scope include accounts, time period, dollar range, bill of material, and organizational units.

B-305 Describing the Sampling Frame

a. The sampling frame is the physical (or electronic) representation of the sampling units from which the sample is actually selected. In sampling for attributes, an example of a sampling frame could be a computer listing of social security numbers for all hourly employees for all departments. The sampling unit would be the employee, each represented by a social security number on the listing. In sampling for variables, examples of sampling frames include a computer listing of a consolidated bill of material, a data file of journal voucher entries, and a file drawer of vouchers. For these sampling frames, possible sampling units are a part number, item number, or physical voucher, respectively.

b. One sampling frame requirement is that it be a complete representation of all sampling units constituting the universe. Since auditor conclusions derived from a sample pertain to those sampling units actually represented in the sampling frame, the auditor must determine if the sampling frame excludes part of the previously defined universe. It may be necessary to make the sampling universe smaller by redefining it to exclude from it those items not included in the sampling frame. In any case, the auditor should reconcile the universe with the sampling frame and document any required adjustments in the audit working papers.

c. When the sampling frame contains items not intended to be in the universe (for example, if a listing of travel vouchers included vouchers from departments outside the scope of the audit), there are two ways to proceed depending on whether the number and amount of out-of-scope items are known. The auditor may either (i) exclude out-of-scope totals from the universe totals and replace out-of-scope items in the sample (if the totals are known), or (ii) leave out-of-scope items in the sample but question no costs in them (if the totals are unknown). Either remedy should be documented.

B-400 Section 4 --- Statistical Sampling for Attributes

B-401 Introduction

This section provides detailed guidance for developing sampling plans that are specifically related to sampling for attributes.

B-402 Use of Sampling for Attributes

a. Attribute sampling can be classified into two approaches of acceptance and estimation sampling. Their use depends on audit objectives. With acceptance sampling, the goal is to either accept or reject the universe. With estimation sampling, the goal is to estimate the actual error rate in the universe.

b. Attribute sampling is performed when there are only two possible outcomes from the evaluation of a sample item: the sampled item either is or is not in compliance with the control being tested. An audit can be built around questions answerable by either "yes" or "no", a feature that distinguishes sampling for attributes from sampling for variables.

B-402.1 Attribute Acceptance Sampling

Attribute acceptance sampling is typically used for evaluating a contractor's internal controls. This includes the evaluation of policies, procedures, and practices to determine the adequacy of internal controls or operational efficiency. Since perfection is seldom expected, there is some level of noncompliance that can be tolerated. Attribute acceptance sampling is designed to discern whether noncompliance is within tolerable limits. In acceptance sampling, the minimum sample size can be determined to distinguish between tolerable and intolerable conditions. The tolerable level of noncompliance or critical error rate (defined in B-404.1b) is specified in advance. Acceptance sampling is not designed to estimate questioned costs. Instead, poor compliance revealed by an acceptance sample would normally prompt recommendations for system changes.

B-402.2 Attribute Estimation Sampling

a. In contrast to acceptance sampling, estimation sampling is designed to estimate the noncompliance rate with a level of precision (confidence interval for the universe error rate) specified by the auditor. Of course, the results of an estimation sample could be used to reach an accept-or-reject decision. However, the sample results would have to be compared with the same tolerable level of noncompliance (critical error rate) that would be used in developing an acceptance sampling plan.

b. Attribute estimation sampling is generally applicable to audits where compliance of the universe is being estimated as opposed to being subject to a pass/fail test. Estimation sampling is appropriate when the audit objective is to estimate an adjustment (impact) to a statement of error conditions. In other cases, such as the sampling of individuals in work sampling, it can be used to estimate the error (or idleness) rate.

B-403 Selecting the Sampling Approach

B-403.1 Acceptance Sampling Approach

For acceptance sampling, three sampling procedures are available for compliance testing:

(1) discovery sampling,

(2) one-step acceptance sampling, and

(3) two-step acceptance sampling.
Acceptance sampling procedures are designed to test whether the rate of a particular type of error exceeds a specified acceptable or tolerable level. The procedures are pass/fail tests that place limits on the risks that the results will be misleading. An acceptance sampling plan consists of a sample size and acceptance number of errors. If the number of errors found in the sample exceeds the acceptance number, the universe is deemed unacceptable

a. Discovery sampling is a special case of one-step attribute acceptance sampling. In attribute discovery sampling, the acceptance number of errors is zero. This feature provides a minimum sample size, achieved by considering only the risk of accepting a faulty universe (i.e., universe error rate greater than –a specified critical error rate, as defined in B-404.1b).

b. A one-step acceptance sampling procedure determines both the sample size and an acceptance number of errors using a single sampling step.

(1) In addition to considering the risk of accepting a faulty universe, one-step acceptance sampling considers the risk of rejecting an acceptable universe (i.e., a universe with an error rate less than a specified false alarm error rate, defined in B-404.1c). If the risk of wrongful rejection of an acceptable universe is not an audit concern, discovery sampling (with its minimum sample size) is the preferred sampling option.

(2) This sampling procedure or the related two-step procedure should be used when the auditor needs to control the risk of rejecting an acceptable universe, such as when remedial measures prompted by rejection are unusually costly. The one-step procedure is preferable to the two-step procedure when there is reason to believe that the actual error rate falls in the interval between two specified error rates (i.e., critical error rate and false alarm error rate).

c. The two-step acceptance procedure is similar to its one-step counterpart except that it breaks the sample into two individual steps, making it possible that the second step will be unnecessary, but giving the universe a second chance for a favorable finding. The first step is essentially an attribute discovery step since its acceptance number of errors is set to zero. This sampling procedure should be used when:

(1) There is reason to believe that the actual error rate is minimal (less than the specified false alarm rate) and no errors are likely to occur in the sample. With no first-step errors, the auditor would accept the universe at that point and would not perform the second step.

(2) There is reason to believe that the actual error rate is substantial (greater than critical rate) and numerous errors are likely to occur in the sample. If errors found in the first step exceed the combined acceptance number for both steps, the auditor would reject the universe at that point and would not perform the second step.

B-403.2 Estimation Sampling Approach

An attribute estimation sample is designed to estimate the frequency of a specific type of error in a universe. A sample size is determined that provides a desired level of assurance (or confidence) that the error rate is estimated with a desired degree of precision (i.e., distance between the confidence limits).

B-404 Developing Sampling Reliability Parameters – Attributes

B-404.1 Acceptance-Sampling Reliability Parameters

a. In acceptance sampling, attributes should be evaluated individually so that an auditor can make a pass/fail decision relative to each tested feature of the system or universe being audited. The auditor should prioritize the attributes because some attributes are normally more critical than others. Ordinarily, separate sample size queries would be performed for each attribute. Therefore, the auditor should establish a set of sampling reliability parameters for each attribute under consideration.

b. All three acceptance sampling procedures described in B-403.1 consider the risk of accepting a faulty universe. A universe is faulty when its actual error rate is greater than a maximum acceptable error rate (critical error rate, discussed below) specified by the auditor. Also, a desired level of assurance (or its corresponding acceptable level of risk, discussed below) must be specified in acceptance/discovery sampling.

(1) The critical error rate (CER) is the maximum error rate in the universe that is considered "acceptable" by the auditor. For example, there may be only one error in 5,000 transactions, indicating an error rate of only 0.02 percent, but the specific type of error may indicate serious problems (such as fraud). On the other hand, a higher rate could reflect errors of less significance which are of a random nature and show no trend or pattern. Accordingly, the significance of an error rate must be evaluated in terms of its potential effect on Government contract costs. For example, a one percent error rate in direct labor or material costs charged to Government contracts by a large contractor could result in overcharges totaling hundreds of thousands of dollars over the course of a year. A five percent error rate in a $100,000 overhead account which is allocated in large part to commercial work would be less significant. As with all reliability goals, the value assigned to the critical error rate will affect the required sample size.

(2) The desired assurance, or confidence level (CL), is the reliability (in this case, the likelihood of reaching the right conclusion) that an auditor wishes to place on the sample results. Since it is often easier to think in terms of risk, the complement of the confidence level (100 - CL, when both are stated as a percentage) can also be used in acceptance sampling. This risk term is defined as the “Government's Risk” (GR) in the EZ-Quant software “help” documentation.

(3) The reliance an auditor obtains from past experience in auditing such areas as the same cost element or similar internal controls has no effect on what constitutes an “unacceptable” error rate, but it does affect the confidence the auditor needs from the sample. For example, if the auditor is performing an audit of historical costs at a location where DCAA has not previously performed an audit, considerable reliance must be placed on the results of a sample. As an example, a 90 percent confidence level (i.e., 10 percent risk) could be used to estimate the sample size. On the other hand, if the auditor is at a contractor where experience has indicated good internal controls and prior years' tests have disclosed no significant errors, a confidence level of 70 percent or less (i.e., risk of 30 percent or more) could suffice.

c. Unlike discovery acceptance sampling, both one-step and two-step acceptance sampling procedures consider the risk of rejecting an acceptable universe. The possibility of rejecting an acceptable universe, sometimes referred to as a “false alarm,” is a possibility with discovery sampling in general. An acceptable universe is one with an actual universe error rate that is less than a minimum rate, the “false alarm error rate”, specified by the auditor. A corresponding criterion, “false alarm risk,” must also be specified in one-step or two-step acceptance sampling.

(1) The false alarm error rate (FAER) is a user-specified acceptable universe error rate used to control the risk of false alarm. A universe with an error rate less than the FAER is clearly acceptable, and in some audit situations it is prudent to limit the likelihood that the sample will prompt its rejection. The FAER must be less than the CER.

(2) The false alarm risk (FAR) is the tolerable level of risk of rejecting an acceptable universe, the latter being defined by the FAER. Typically, the contractor bears this risk of false indication of flawed conditions

(3) The FAER and the CER define a range of error rates that are cautiously acceptable. It makes sense to set the CER high enough so that, at best, it is only marginally acceptable, meaning that a slightly lower rate would be acceptable but would prompt substantial caution and a slightly higher rate would be unquestionably unacceptable. Similarly, it makes sense to set the FAER low enough so that a slightly higher rate would prompt mild caution but a slightly lower rate would be unquestionably acceptable. An error rate in between would be acceptable but would still prompt varying levels of caution. This is summarized below:

Set the critical error rate and false alarm error rate so that . . .	
If the actual error rate were . . .	Then the universe is . . .
Above the critical error rate	Clearly unacceptable.
Between the false alarm error rate and the critical error rate	Cautiously acceptable, ranging from marginally to clearly acceptable.
Below the false alarm error rate	Clearly acceptable.

B-404.2 Estimation-Sampling Reliability Parameters

For attribute estimation sampling, the sampling reliability parameters are the desired precision range, the desired confidence level, and the anticipated error rate. Specification of the values for these parameters for the attribute estimation sampling procedure described in B-403.2 are discussed below.

a. The anticipated error rate is a judgmental assessment of the actual universe error conditions and is used to determine a sample size that meets precision and confidence criteria. It is not the anticipated sample error rate and there is no useful audit interpretation of any difference between the anticipated rate and the sample rate computed after sampling. Normally, the auditor will refer to past experience with the same or similar systems (or universes) to specify the anticipated error rate. It is useful to specify a conservatively high (yet still reasonable) anticipated error rate because the slightly higher sample sizes thereby derived will provide somewhat better sampling precision.

b. The precision range is the desired width of the confidence interval that will be computed from sample results.

c. The confidence level is the desired assurance that the actual error rate will be within the upper and lower confidence limits that will be determined from the sample results.

B-405 Determining Sample Sizes

a. Although sample sizes can be determined manually from published sampling tables, auditors should use the EZ-Quant software to compute sample sizes for acceptance and estimation sampling procedures.

b. The auditor should rank the attributes according to their relative importance. Normally, the most critical attribute will require the largest sample. For each attribute, the required sample size should be determined using the appropriate EZ-Quant acceptance or estimation sampling size option. The maximum number of items to be selected will be the largest of all the sample sizes determined for individual attributes.

B-406 Describing the Sample Selection Method

Proper implementation of the auditor's sampling plan requires:

(1) that the required number of items be drawn randomly from the universe and

(2) that each item be evaluated for compliance in the aspects of audit concern.

In a randomly selected sample, each item has a known chance (or probability) of being selected. The results of a randomly selected sample can be objectively applied to the universe (or system) to assist the auditor in deciding whether the universe is in compliance with the system control being tested. Section B-700 discusses the various random selection methods.

B-407 Identifying the Attribute Sample Evaluation Method/Software

In sampling for attributes, aside from the pass/fail conclusion of an acceptance sample, the results of the examination are expressed as an estimate of the actual error rate. The estimated error rate is the ratio of the error occurrences to the sample size. For each attrib-

ute, sample findings should be tabulated separately as if each constituted an independent and separate sample. This is necessary to isolate critical problem areas for further audit effort and to possibly terminate testing in other areas.

B-407.1 Acceptance-Sample Evaluation Method/Software

a. In acceptance sampling, the pass/fail purpose of the sample is accomplished when the acceptance number of errors is exceeded or when the sample is completed, whichever comes first. Ordinarily, the auditor will want to proceed beyond a pass/fail conclusion in the event of a failure. That is, the auditor will normally use the sample results to estimate the universe error rate in order to gauge the potential severity of error conditions. In this manner, the sample assumes the role of an attribute estimation sample.

b. For proper evaluation of the confidence interval, the auditor must complete the sample even if the acceptable number of errors is exceeded. When using EZ-Quant, the auditor's selection of the appropriate sample evaluation procedure depends on which attribute sampling procedure was previously selected (i.e., discovery, one-step or two-step acceptance).

c. The one-step acceptance sample evaluation option of EZ-Quant should be used to evaluate sample results from either discovery or one-step acceptance sampling procedures. The one-step sample evaluation procedure permits the auditor to focus on a pass/fail decision derived from an acceptance sample. It duplicates what is apparent from comparing the number of errors in the sample to the acceptance number of errors specified in the sampling plan. Failure of the universe presents a more compelling reason to focus on the pass/fail decision. An analysis of the sampling error is possible by using sample evaluation options to:

(1) specify a confidence level and obtain an upper precision limit (to compare with CER specified in sampling plan) or

(2) specify an upper precision limit and obtain a confidence level (to compare with the sampling plan specification).

d. The two-step acceptance sample evaluation option of EZ-Quant should be used to evaluate the results of a fully implemented two-step acceptance sample. This analysis is similar to the one-step sample evaluation described above.

B-407.2 Estimation-Sample Evaluation Method/Software

In estimation sampling, the sample results are evaluated to determine whether the desired levels of assurance and precision, as specified in the sampling plan, were obtained. The one-step acceptance sample evaluation option of EZ-Quant should be used to evaluate the results of an attribute estimation sample.

B-500 Section 5 --- Statistical Sampling for Variables

B-501 Introduction

This section provides detailed guidance for developing sampling plans that are specifically related to sampling for variables.

B-502 Use of Sampling for Variables

a. Variable sampling is generally used to verify account balances or cost elements and note any differences. This type of sampling is substantive testing (as opposed to compliance testing) whereby sample items are evaluated for error amounts or variables (as opposed to attributes). The audit sampling universe (e.g., accounts, vouchers, or bill of material) is the entire grouping of items from which a sample will be drawn. Variable sampling can be applied to proposals, incurred costs, progress payments, forward pricing rates, and defective pricing.

b. An important objective of variable sampling is to estimate a particular universe characteristic such as total unallowable costs (or questioned cost). The estimated questioned cost is commonly known as the "point estimate." A point estimate strikes a balance between potential understatement (considering both likelihood and amount) and potential overstatement of the true universe amount. In statistical sampling, "confidence level" and "precision" are used to measure the reliability of the point estimate. The confidence level deals with "sureness" (or assurance) while precision deals with "closeness" (or accuracy). Auditors must establish desired levels of reliability (discussed in B-504) in order to properly evaluate the sample results.

B-503 Selecting the Sampling Approach

In the application of variable sampling, the auditor can choose either physical unit sampling or dollar unit sampling (DUS). The important difference between these sampling approaches is the way sample items are selected and thus the chance each item has of being selected. In either case, the unit to be selected and examined will be a "physical unit", typically a document or record (such as a purchase order, travel voucher, or bill of material) or perhaps, in the case of DUS, an auditable item within the document or record. With physical unit sampling, each physical item within a stratum has an equal chance of selection. With DUS, an item's chance of selection is directly proportional to its size (usually expressed in dollars). This feature gives each dollar an equal chance of appearing in the sample and provides the useful image (for teaching and explanatory purposes) that it is dollars, not physical items that are the sampling unit.

B-503.1 Physical Unit Sampling

a. Most audit universes are widely dispersed. Usually, there is a wide variation between the smallest and largest individual dollar amounts, with most of the amounts being relatively small and only a few amounts being very large. Since a random sample from the entire universe would probably include only a few large (high dollar) items, the reliability of the results would be correspondingly low. This is possible because wide variations are likely between questionable amounts for individual large items and the average of questionable amounts from the universe.

b. Stratification of the universe into several dollar ranges or strata can be used to improve audit reliability and reduce the overall number of items evaluated. Normally, the universe is stratified into a high-dollar stratum (for 100 percent evaluation) and several other strata from which samples are selected for evaluation. Audit effort is concentrated on the high-dollar items where the risk is greater. Samples are statistically se-

lected from each of the other strata, which are used as the basis for projecting individual stratum sample results to the corresponding universe.

c. In physical unit sampling, sample items can be randomly selected either manually or by using an appropriate software package. The auditor then evaluates the sample items and determines any cost that should be questioned. Sample results can be manually projected to the universe by the auditor; however, use of the physical unit sample evaluation option of EZ-Quant is preferred. Sample evaluation software will determine both the point estimate (projection of sample results to universe) and the associated confidence interval.

B-503.2 Dollar Unit Sampling (DUS)

a. Dollar unit sampling is a substitute for stratification by dollar amount. Its selection probability proportional to size (PPS) feature concentrates the sampling evaluation toward larger items much the same as stratification does for physical unit sampling. In general, the two approaches are roughly similar in what they can accomplish. DUS does have an advantage in dealing with selected items that prove to be clusters of smaller physical units.

b. Dollar interval selection is used to select DUS samples. An interval is determined, and items with an absolute value exceeding the interval are automatically selected for evaluation and removed from the universe. The remaining items comprise a single sampling stratum. A starting value less than the interval is randomly determined. It becomes the first “dollar hit”. Subsequent hits are determined by adding the value of the sampling interval to the prior dollar hit until the process has stepped through the entire sampling stratum. The sample items are those containing the dollar hits.

c. In dollar unit sampling, sample items can be randomly selected either manually or by using appropriate DUS software such as the EZ-Quant dollar unit sample selection option or the Electronic Selection Program (ESP). After evaluating the sample items associated with the dollar hits, the auditor determines any costs that should be questioned. As with physical unit sampling, the auditor can manually project DUS results to the universe. However, it is preferable to use DUS evaluation software (i.e., the EZ-Quant dollar unit sample evaluation option or ESP) to determine the point estimate (projection of sample results to universe) and the associated confidence interval.

B-504 Developing Sampling Reliability Parameters – Variables

a. The statistical reliability of sample findings is measured by two interrelated parameters, precision and confidence level. The auditor must establish desired values of these parameters for either approach (physical unit or dollar unit) to variable sampling.

b. The term “precision” pertains to the amount or degree of probable error associated with an estimate (or the extent to which the sample findings may differ from the actual universe values or conditions). It measures the accuracy of a point estimate by showing, for a specified confidence level, how much the point estimate may vary from the true universe amount.

c. In sampling for variables, precision can be expressed as either:

(1) an interval about the point estimate obtained from the sample or

(2) a maximum or upper limit such as “less than $50” or “less than 6 percent error.”

In most cases, the primary consideration influencing the auditor's selection of a desired level of precision will be the potential effect of the error on Government contract costs.

d. In establishing the desired precision amount in terms of dollars, the auditor should estimate what dollar amount will be considered as tolerable or immaterial. It makes sense to equate the precision amount to a materiality threshold because the precision amount is a measure of how much the point estimate derived from the sample might understate or overstate the actual universe amount.

e. Confidence level is the assurance (or probability) that the amount being estimated by the sample will fall within a specified range (or interval) determined from sample results. A confidence interval is commonly (but not always) defined as the point estimate plus or minus the precision amount. In formal terms, a 95 percent confidence level, for example, indicates that with repeated sampling under the same sampling plan, 95 times out of 100 the actual universe amount is expected to be within the interval computed from the sample results. In practical terms, this means that any single sample has a 95 percent chance of producing an interval that includes the actual universe amount.

f. For a given sample size, the more confident an auditor wants to be that the confidence interval contains the true amount, the wider that interval must be. When establishing the desired confidence level, the auditor should consider the impact of other sources of reliance as discussed in B-100. The existence and significance of other sources of reliance can reduce the necessary level of confidence (at a specified level of precision).

B-505 Establishing the Sample Size

a. In sampling for variables, there is no single "best sample size." Sample size is a compromise between the inversely related considerations of precision and audit time. Desired levels of reliability and audit time constraints vary from one audit to the next.

b. Evaluating too many sample items can result in achieving greater precision than necessary. That is, more resources will have been devoted to sample analysis than necessary. As the sample size is increased, the confidence interval can be expected to become smaller; however, the improvement in the expected reliability will be less for each additional item added to the sample. With diminishing benefits, a point occurs where the improvement in the reliability from increasing the sample size is not worth the audit time required to examine the additional items.

c. It is also important to consider the absolute size of the sample itself. A larger sample increases the likelihood of non-sampling errors (e.g., transposing numbers). In summary, the precision should be reasonable:

(1) as an absolute amount,

(2) in relation to the total amounts questioned and accepted, and

(3) in relation to the cost in audit time of improving the precision through examination of additional items.

d. The EZ-Quant sample size estimation option allows the auditor to determine the optimum sample size for variables sampling based on three factors:

(1) presumed error rate or the results of a sample from a similar audit universe,

(2) precision amount, and

(3) confidence level.

It is best to invoke the sample sizing option after the audit universe has been read into EZ-Quant so that the precision-enhancing feature of a high dollar stratum, if there is to be one, can be accounted for in the prescribed sample size. The benefit of using the sample sizer rather than arbitrarily setting the sample size is that the user can immediately see the impact on the calculated sample size of increasing or decreasing one or all of the reliability parameters. The auditor has a better chance of achieving the desired level of sampling reliability when the parameters are directly factored into sample size determination.

B-506 Describing the Sample Selection Method – Variables

Proper implementation of the auditor's sampling plan requires:

(1) that the required number of items be drawn randomly from the universe and

(2) that each item be evaluated for acceptability of the recorded cost.

In a randomly selected sample, each item has a known chance (or probability) of being selected. A random sample can be selected either manually by the auditor or automatically using statistical sampling software. The results of a randomly selected sample can be ob-

jectively applied to the universe from which it was drawn to assist the auditor in determining the projected cost questioned.

B-506.1 Physical Unit-Sample Selection

a. When manually selecting a physical unit sample, the auditor should briefly describe the stratification process (if used) and the sample selection method. A detailed discussion of various random selection methods is included in B-700.

b. The physical unit stratified sample selection option of EZ-Quant can be used to stratify a universe and select a sample. This EZ-Quant option will divide the universe into strata, determine the number of sample items for each stratum, and randomly select the sample items for each stratum. The auditor must specify both the number of strata and the total number of items. After evaluating the sample items, the auditor will enter the questioned amounts into a data file so that the point estimate (for projection to the universe) and sampling precision can be determined by the physical unit sample evaluation option of EZ-Quant.

c. Data retrieval software packages are available for installation and use on contractor computer systems for data retrieval and statistical sampling. For example, Datatrak, described in DCAAP 7641.89, can be used to retrieve data, stratify the data, and select a sample. B-706 contains a complete discussion of the auditor's use of information technology (IT) in sample selection.

B-506.2 Dollar Unit-Sample Selection

a. When manually selecting a sample, the auditor should document the details of the sample selection method. A detailed discussion of the systematic selection method, normally used in DUS applications, is included in B-705.

b. The dollar unit sample selection procedure in EZ-Quant divides the universe into two strata (high dollar and sampling), determines the number of items to be evaluated from each stratum, and randomly selects the sample from the sampling stratum. Either a sampling interval or a sample size must be specified. If the sample size is specified, its corresponding implied interval is computed. The high-dollar stratum consists of items having absolute amounts that are equal to or greater than the interval amount. All other items make up the sampling stratum. The automated sampling process does not differ from the manual procedures discussed in B-503.2b. After evaluating the sample items, the auditor will enter the questioned amounts into a data file so that the point estimate (for projection to the universe) and sampling precision can be determined by the dollar unit sample evaluation option of EZ-Quant.

c. The Electronic Selection Program (ESP) is also available for performing DUS. This microcomputer software package has other capabilities related to contractor data files and working paper preparation.

B-507 Identifying the Variables Sample Evaluation Method/Software

In sampling for variables, the sample evaluation results are usually expressed in terms of a point estimate of unacceptable (or questioned) costs in the sampled universe. The auditor should evaluate sample reliability (in terms of the precision at a given confidence level) so that the materiality of potential understatement or overstatement of questioned costs can be determined

B-507.1 Physical Unit-Sample Evaluation Method/Software

a. The point estimate may be manually computed by the auditor using either the "ratio" or the "difference" method.

(1) The ratio method computes the ratio of unallowable costs in the sample to total costs examined in the sample and applies this ratio to the total costs in the universe. For example, an examination of a sample of 125 items with a recorded value of $160,000 from a universe of 1200 items with a recorded value of $1,500,000 disclosed unallowable costs totaling $16,000. The calculated ratio would be 0.10 (i.e., $16,000 divided by $160,000). Also, the point estimate of total unallowable costs would be $150,000 (i.e., 0.10 times $1,500,000).

(2) The difference method is also known as the "mean" or "average" method. This method computes the average dollar amount of the errors in the sample and multiplies this average by the number of items in the universe. For example, if a random sample of 125 items from a universe of 1200 disclosed unallowable costs totaling $16,000, the average would be $128 (i.e., $16,000 divided by 125 items). The point estimate of total unallowable costs would be $153,600 (i.e., $128 times 1200 items). In the case of a stratified sample, the point estimates obtained for each stratum are simply added together to obtain the point estimate for the total unallowable costs.

(3) If the number of items in the universe is unknown, the ratio method should be used. (It will still be necessary to estimate this number in order to obtain a confidence interval, but the estimate will not affect the calculation of unallowable costs.) If the total dollar value of the items is unknown, the difference method should be used. (The total dollar value will not affect either the point estimate or related confidence interval under the difference method.) When both the total number and dollar value of the items in each stratum are known, it is not necessary for the auditor to choose between the two methods in advance. When the sample results are evaluated, the method that produces the smaller confidence interval at a given confidence level should be used.

(4) When the unallowable costs for individual items tend to be in proportion to the recorded costs, the ratio method will usually produce the smaller confidence interval. When this relationship is weak or insignificant, the difference or mean method will usually produce the smaller confidence interval.

b. The physical unit sample evaluation option of EZ-Quant projects sample results to the unevaluated portion of each stratum for the ratio and difference methods. Projections are performed for each method because one method is normally more precise than the other. After the auditor specifies a confidence level, the point estimate, precision, and confidence interval (for each stratum and overall) are determined. The auditor will use the overall point estimate which has the lowest precision amount and produces the smallest confidence interval.

B-507.2 Dollar Unit-Sample Evaluation Method/Software

a. When manually projecting questioned costs in DUS, the ratio of cost questioned to cost examined is determined for each item evaluated. These ratios are added together and divided by the number of sample units evaluated. The resulting average ratio is then multiplied by the universe dollar to yield the point estimate. Assume a sample of 30 items from a universe of $500,000 resulted in three items questioned, as shown below. Computation of the point estimate would be as follows:

	Examined	Questioned	Ratio
	$100	$30	.3
	50	50	1.0
	5	1	.2
Total of questioned ratios			1.5
Average of questioned ratios (1.5/30)			0.05
Total cost questioned ($500,000 X .05)			$25,000

In this example, we evaluated 30 items and derived an average of the questioned ratios of $.05 per dollar. This average ratio is applied to the total absolute universe amount.

b. The dollar unit sample evaluation option of EZ-Quant computes a point estimate, precision, and upper and lower confidence limits from the results of the dollar unit sample. The point estimate is computed by multiplying the total dollars in the sampling stratum by the simple average of the each item's ratio of questioned amount to evaluated amount. This computation procedure is also used in the Electronic Selection Program (ESP).

B-600 - Data Stratification for Audit Purposes

B-601 Introduction

This section discusses the general stratification of contractor data for audit purposes.

B-602 Definition of Stratification

Stratification is the partitioning of the audit universe into smaller groups according to a scheme that suits audit purposes. The audit universe consists of all the transactions or other basic auditable items within the scope of the audit. Stratification does not change the audit universe. Stratification is primarily used in variable sampling, and rarely used in attribute sampling.

B-603 Auditing Large Data Bases

To obtain the required evidential matter on which to base an opinion, the auditor must often deal with large volumes of data, in a short period of time. The examination of properly selected statistical samples is usually the most practical method of achieving timely audit coverage of a large number of transactions from the contractor's data base. An often considered alternative, examination of only the high-value items in an audit universe, provides limited (though at times substantial) coverage. It yields no objective audit evidence concerning the rest of the audit universe, which often is a substantial omission. Another simple alternative is unrestricted (simple) random sampling of the entire audit universe. It provides complete coverage but is generally less precise, per audit hour, than stratified random sampling alternatives. Effective (full coverage) auditing of large audit universes and efficient sampling of them usually require that the audit universe be stratified into groups of items that are broadly similar in terms of potential individual audit findings.

B-604 Purpose of Stratification

a. The usual purpose of stratification in contract audit sampling is to enhance sampling precision and thereby decrease the amount of auditor time required to obtain adequate support for the auditor's conclusions. Stratification for this purpose is based on the assumption that a relationship exists between the variable or characteristic the auditor wishes to measure (the audit variable), usually unallowable or otherwise questioned costs, and one or more other variables or characteristics (stratification variables). Except for examined items, the audit variable values are unknown. Stratification variable values must be known for all items and it must be possible to classify (stratify) all items into groups based on them.

b. Stratification may be called for by audit goals not related to sampling precision. For instance, in a multi-year audit it may be necessary for audit purposes to ensure that each year be allocated at least a minimum level of analysis, in which case one would need to stratify the audit universe by year. In another instance, it may be desirable to deliberately focus on some subset of the audit universe, such as certain types of services, in which case all relevant audit universe items would be allocated to their own stratum. In both instances, it would still be possible to create secondary strata, based on other stratification criteria, within these primary strata.

c. Stratification may be done strictly for practical reasons related to the nature of the sampling frame. The sampling frame is the listing of universe items, electronic or otherwise, where the mechanics of sampling are applied. If the sampling frame consisted of dissimilar parts so that, for example, the frame for one part of the universe is electronic and the rest is a printed listing, the sampling mechanics for each would be different. In this case, it would make sense to create a stratum for each component of the sampling frame.

B-605 Types of Stratification

a. The most common single basis for stratification in contract audit sampling is the recorded dollar amount of the individual universe items. The typical audit variable is questioned amount, and some correlation between it and recorded amount is generally expected (that is, large questioned amounts are more likely to be found in larger items than in smaller ones and smaller questioned amounts are more likely to be found in smaller items). With dollar-based stratification, the largest items are often set aside in a full-analysis, non-sampling stratum, and the rest of the items either comprise a single sampling stratum or are divided into two or more sampling strata based on dollar ranges of the recorded values. Separate samples are taken from each group. Usually, the range of values for all non-zero audit findings will be relatively large, but the range of such values within each stratum will be smaller. This feature makes it possible to achieve a desired level of sampling precision with fewer sample items than would otherwise be the case.

b. Other bases for stratification are possible, either instead of or along with dollar-based stratification. In many situations, the auditor may believe that other characteristics of the universe items significantly affect the probability or amounts of errors. In such cases, the universe may be stratified on a basis other than dollar values. For example, unallowable costs may be more frequently encountered in vouchers that relate to certain types of transactions, departments, or payees. The transactions from a particular group of departments, for example, may be assembled in a single stratum and perhaps further subdivided into or two or more dollar-based strata.

B-606 Stratification in Concurrent Auditing

a. Ordinarily, contract audit sampling is used in situations where the size of the audit universe is known and will not change. If sampling is to be used in concurrent auditing however, at least some sampling must be performed before the universe itself is fully formed. A relatively simple way to adapt standard sampling methods to this situation is to stratify the audit universe by time period. Once a period has passed and the magnitude of its stratum is known, it can be sampled and evaluated while the next period's stratum is being formed. Upon completion of the final period's sample, the results for all strata can be brought together in a single stratified sample evaluation, just as for a typical stratified sample.

b. Period-based strata can themselves be stratified by dollar amount. It is typically reasonable to expect that the magnitude of any error in an item be at least loosely correlated with its size. Dollar-based subdivision of period-based strata into, say, two strata each would take advantage of most of the precision-enhancing potential of such stratification, particularly for period-based strata that have a relatively narrow range of dollar values. Alternatively, dollar unit sampling (a substitute for dollar-based stratification) can be used within the period-based strata.

c. A discussion of statistical sample implementation and evaluation in concurrent audits, including the practical aspects of a two-way stratification scheme, is given in the "Help" facilities in EZ-Quant (for Windows).

B-607 Stratification by Dollars

a. The number of dollar strata appropriate in an audit application will depend on (1) the dispersion of dollar values and (2) the audit time required to accomplish the stratification. If all items are of approximately the same amount, stratification by dollar value will serve no useful purpose. On the other hand, if items vary widely in amount, examination of all large amounts and stratification of the remaining items into several dollar ranges can substantially increase the effectiveness of audit time devoted to examining the sample items. However, consideration must be given to audit time required to accomplish the stratification. If automated (computerized) stratification is not available,

further manual stratification (after the identification of high-dollar items) may require more audit effort than is justified by the increased efficiency obtained from stratification.

b. To provide sufficient coverage of both high and low dollar transactions and to reduce the risk of missing significant monetary errors, dollar stratification may be necessary. The auditor may obtain satisfactory stratification by dividing the universe into approximately equal dollar strata. For example, assume the following:

Dollar Amount	No. of Items	Total Amount
0-9,999.99	1,400	$ 2,800,000
10,000-19,999.99	150	2,000,000
20,000-29,999.99	65	1,500,000
30,000-39,999.99	35	1,200,000
40,000-79,999.99	45	2,500,000
80,000 and over	60	20,800,000
	1,755	$30,800,000

If we decide to examine all 60 items over $80,000 and sample from three dollar-based strata, the following stratification plan would be reasonable:

Stratum	Dollar Range	Total Amount
1	0-9,999.99	$ 2,800,000
2	10,000-29,999.99	3,500,000
3	30,000-79,999.99	3,700,000
	80,000 and over	20,800,000
		$30,800,000

The initial sample may be distributed equally among the strata or approximately in proportion to the dollar value of items in each stratum. For example, an initial sample of 100 items could be distributed 28 to stratum 1, 35 to stratum 2, and 37 to stratum 3.

c. The stratified physical unit sample selection option of EZ-Quant can be used to stratify a universe and select a sample as described in B-506.1b. Contractor IT systems can be used to stratify the universe and select sample items as discussed in B-706.

d. Sample results may indicate a need for additional stratification. For example, the sample may identify additional accounts or types of transactions that contain unallowable costs or for some other reason are sensitive. Stratification of these accounts or transactions for more intensive sampling can be accomplished at this time.

e. Dollar unit sampling (DUS) eliminates problems associated with determining stratum boundaries, allocating sample sizes among the strata, and evaluating results when costs are questioned in some strata and not in others. DUS capabilities are available in:

(1) microcomputer software packages such as EZ-Quant or the Electronic Selection Program (ESP) (see B-506.2c) and

(2) mainframe installed IT software packages (such as Datatrak) as discussed in B-706.

B-608 Use of Information Technology Equipment for Stratification

a. The contractor's IT equipment can be used to stratify the universe and perform sample selection, provided that the procedures are deemed valid and reliable.

b. The contractor's IT equipment can be used to obtain listings (electronic or otherwise) which facilitate sample selection elsewhere. This can be best accomplished by using fourth-generation data retrieval software (e.g., SAS, Focus, and Decision Analyzer) to extract the desired types of data from one or more data files into a unique mainframe-based data file for downloading to a microcomputer. Alternatively, the items can be listed

in ascending or descending order, dollar value, or have all items within specified dollar limits listed on separate runs.

(1) For manual sampling the auditor can use one of the methods described in B-704 or B-705 to select sample items from listings. If the contractor has a listing of all transactions in a format suitable for sample selection, this listing can be used to select items in the bottom dollar stratum as described in B-704.3 or B-705.1b. However, removal of higher dollar value items to a separate stratum will simplify sample selection from the sampling stratum (or multiple strata).

(2) An example of using a computer listing of items in descending order of dollar value is described in the EZ-Quant software “help” documentation for the random number procedure. Such listings are particularly useful in audits of proposed material costs.

c. The auditor's examination of proposed bills of materials (BOMs) can present special problems if:

- items are listed by part number within assemblies and subassemblies and
- the same items are used in a number of different assemblies and subassemblies.

The audit will be greatly facilitated if the contractor's equipment is used to:

(1) sort BOM items by part number,

(2) compute total proposed costs for each part, and

(3) print (preferably to an electronic file) information on each part (description, quantity required, unit price, and total price) in descending order of proposed cost.

In addition to facilitating the selection of a statistical stratified sample, such listings may disclose inconsistencies in pricing the same item in different locations in the bill of materials. Information on the total quantity requirement for a part is also needed to evaluate the price where quantity discounts are available. When BOM data has been downloaded to a microcomputer, the Electronic Selection Program (ESP) is particularly helpful in evaluating the proposed BOM. ESP will perform all the functions listed above and, in addition, produce a consolidated BOM by part number, stratify the universe, evaluate sample results, and prepare audit report schedules.

d. Some contractors have programmed sample selections for DCAA auditors or use commercial data retrieval programs to obtain sample selections requested by DCAA.

(1) When using a sample selected by the contractor's software, additional information (e.g., possible risks, input/output files, program used, method of sample selection, etc.) should be documented, including any additional information or audit procedures required when using contractor supplied samples. The auditor should be present when the sample is generated or have access to all input/output relating to sample selection.

(2) While properly documented contractor selections are generally acceptable, the use of data retrieval programs developed or supported by DCAA is preferred because they provide greater control and versatility. B-706 discusses the use of available Agency software tools, such as EZ-Quant, Electronic Selection Program (ESP), and Datatrak, to assist the auditor in data retrieval and statistical sampling.

B-700 - Random Selection Methods

B-701 Introduction

This section discusses and illustrates the unrestricted and systematic random methods of selecting samples for physical and dollar unit sampling. The use of information technology (IT) to assist in sample selection is discussed in B-706.

B-702 Random Selection

a. Statistical sampling depends upon the principle of random selection. In sampling, the terms "random" and "haphazard" selection have completely different meanings. Haphazard selection is accidental selection. The laws of probability govern random selection. For example, in selecting one voucher at random from a group of 10, the likelihood or probability that any specific voucher is selected is one chance in 10. This probability is known and can be specified because the only factor involved in random selection is the element of chance.

b. To select randomly is to eliminate personal bias or subjective considerations (which cannot be expressed numerically) from the choice of a sample. Random sampling is a selection process in which each item in a stratum has a known probability (chance) of being selected. Although the results of repeated random samples from a given universe will not all be the same, the differences will be the result of chance and not personal bias. Subjective considerations (conscious or otherwise), such as selecting new-looking vouchers, choosing vouchers with few entries, or not taking the first voucher or the last voucher, must be avoided.

c. With DUS, each dollar individually has an equal chance of selection. Collectively, the dollars making up an item give that item a chance of selection proportionate to its size in the universe. Dollar unit sampling is sometimes referred to as "probability proportionate to size" (PPS) sampling. In order to evaluate the dollars selected, the items, documents, or records containing those dollars must be analyzed (See B-503.2).

d. The two basic random selection procedures are unrestricted random selection and systematic random selection. In unrestricted random selection, each item is drawn completely at random from the universe. The systematic random selection method selects sample items at a uniform interval after a random start. A wide variety of statistical sample designs might be used in contract auditing, but implementation of any of the designs involves the use of one of these two basic procedures or a modification or a combination of them. Methods of using random numbers to obtain unrestricted random selections under various circumstances are described in B-704. Systematic random selection is described in B-705.

B-703 How Randomness May Be Obtained

a. How can an audit sample be selected in a random manner? In the case of 10 items, this could be accomplished as follows: record the serial number (or other identification symbol) of each of the 10 items on a separate tag or slip of paper. Place the tags or papers in a container and mix them thoroughly. Then withdraw the required number for the sample. This procedure is feasible when the universe is very small, but difficulties become quite apparent when the universe contains thousands of items (such as vouchers, records, or units of equipment). Random numbers and computer selection routines provide the means for overcoming such difficulties.

b. The selection of random numbers is simplified by the use of quantitative software. Random numbers, which fall in auditor-specified range(s), can be produced in sequences of either single numbers or sets of numbers, depending on the option used. The random number feature of EZ-Quant produces a sequence of random numbers, singly or in sets, which contains no repeats of individual numbers or sets (for sampling without replace-

ment) or allows duplicate numbers or sets (for sampling with replacement). The sequences are available in both the order generated and ascending order.

c. The random number options are discussed in the EZ-Quant software “help” documentation. This documentation includes an explanation of the terms "sets" and "numbers" as used in the context of these procedures. For example, auditors frequently encounter the problem of obtaining samples of unnumbered vouchers, materials, employees, or other items from listings. Combinations (sets) of two numbers, the first corresponding to a page number and the second to the position of an item on the page, usually provide a convenient method for selecting samples of unnumbered items. Other cases of sample selection might involve other characteristics of the sample items, such as the month, week, and day the item was first recorded.

B-704 Unrestricted Random Selection Procedures

B-704.1 Items Identified by a Single Series of Consecutive Numbers

The simplest use of random numbers to select a sample occurs when the selection is made from a file of consecutively numbered documents or from a listing of consecutively numbered items. For example, suppose that:

(1) the universe contains 5,000 documents which are to be sampled,

(2) these documents are numbered in sequence from 1 through 5,000,

(3) stratification of the sample is unnecessary since it is known that no high dollar or sensitive items are included in the documents, and

(4) the desired sample size is 125.

A list of random numbers can be supplied by the random number option of EZ-Quant, or it can be derived from a table of random numbers.

B-704.2 Items Identified by Sets of Numbers

a. In many accounting situations, a document or transaction is more readily identified by a combination (or set) of numbers. A combination may consist of a page number plus a line number on that page. It could also consist of a time period plus a document number as illustrated in the following example.

b. Some accounting methods call for documents to be numbered in sequence, by month or other period, commencing with "1" at the beginning of each period. If the documents to be sampled cover several such periods, selection of an unrestricted random sample presents the problem of either sampling each period separately or sampling all periods collectively with random numbers that identify both a period and document number in the period. If it is decided to sample each period separately, the random number option of EZ-Quant can be used to select the sample from consecutively numbered documents within a given period. Suppose, however, that the audit objective is to determine, by test-checking, certain characteristics of 125 documents covering a period of 12 months. A single sample will be taken for all months combined. Assume that each month's documents are numbered in sequence commencing with 1 and the quantity issued in a month varies from 500 to 800. A list of random number pairs can be supplied by the random number sets option of EZ-Quant, the first number in a pair ranging from 1 to 12, the second number in a pair ranging from 1 to 800. Alternatively, a list of random numbers pairs can be developed manually from a table of random numbers.

B-704.3 Numbers Which Represent Items Not Included in the Universe

a. Often, numbers that fall within the range of document numbers cannot be used. For example, some numbers may:

(1) correspond to spoiled and voided documents,

(2) identify documents previously selected for examination because of their high dollar value or sensitivity, and

(3) relate to types of transactions which are not included in the universe.

It is possible to determine the usability of each random number as it is selected and discard those that cannot be used before proceeding to the next number. In many cases, however, it is easier to initially obtain more numbers than needed and later discard those which are not usable.

b. Suppose, for example, that a file of 7,000 vouchers contains approximately 5,000 vouchers of Type A and about 2,000 of Type B, and that both are intermingled and numbered in sequence from 1,427 to 8,426. Each voucher must be examined to determine whether it is Type A or Type B. A sample size of 125 Type B vouchers is desired. Since the two types are intermingled and the Type B vouchers comprise about 2/7ths of the total, our random numbers will probably identify only 2 of the Type B vouchers for every 7 selected. Therefore, to have a reasonable chance of identifying 125 Type B vouchers, at least 438 random numbers should be selected (the desired sample size, 125, times the ratio of total vouchers to Type B vouchers, 7/2).

c. In the above example, the first step is to select 438 random numbers in the range 1,427 to 8,426 using the random number option of EZ-Quant. As each voucher is drawn, determine if it is Type A or Type B. Return the Type A vouchers to the file and retain the Type B vouchers. Continue until 125 Type B vouchers are selected. If less than 125 Type B vouchers had been selected after evaluating all 438 vouchers, continue the selection process until 125 Type B vouchers are selected.

B-705 Systematic Random Selection

a. The systematic random selection procedure selects sample items on a fixed or uniform interval after a random start. The uniform interval between selected sample items is obtained by dividing the estimated number of universe items by the number of sample items to be selected. The random start is the first number, selected from a random digit table or generated by random number software, which falls within the uniform interval.

b. Systematic random selection is frequently used in manual selections and automated (computerized) selections because it is often easier to program and control than unrestricted random selection. Some conditions and circumstances under which the systematic method may be used for document selection are as follows:

(1) When items to be sampled are documents that are neither listed nor serially numbered or, if numbered, are not filed in numerical sequence.

(2) When items to be sampled are not suitably listed or numbered and are intermingled with other items which are not to be sampled.

(3) When items in the universe are numbered in blocks of numbers with some blocks not being used.

(4) When using DUS.

c. If there is a pattern or arrangement in the universe where items with special or significant characteristics occur at regular intervals, the auditor should ensure that items to be selected include, but not be limited to, these special or significant items. For instance, if every 24th payroll record is that of a supervisor and the auditor's sampling procedure calls for selection of every 24th item, the interval should be revised to ensure that the sample does not consist only of records covering supervisors. On the other hand, there should be a chance of including supervisors' records unless they comprise a separate stratum. The existence of a specified order of the sampling units does not mean that systematic random sampling cannot be used.

d. The usual method of obtaining a dollar unit sample is by systematic random selection. With this selection method, the universe does not have to be arranged in any particular order. If an auditor wants to preclude a potential universe arrangement problem, some DUS software will randomize (or have an option to randomize) the universe prior to sample selection (e.g., Electronic Selection Program (ESP) or the EZ-Quant dollar unit sample

selection option). Normally, all item values greater than the interval are selected for 100 percent evaluation; the remainder are sampled randomly.

B-705.1 Examples of Use

a. Example 1. - Audit application where universe items:
(1) are not listed or numbered sequentially or
(2) are numbered but not filed in numerical order:
(a) Assume that a sample size of 125 is desired from a universe of approximately 11,100 items. (When the universe size is not known, it should be estimated as closely as practicable.) The sampling interval of 88.8 is obtained by dividing 11,100 by 125.
(b) Select a random number contained in the interval. This example assumes this number to be 23.
(c) Starting with the 23rd item in the universe, select every 88th item until the universe has been covered. Note that the interval number 88.8 was reduced to 88 by dropping the fraction. When an interval number is not an integer, the fraction is dropped. In this case, dropping the fraction results in a sample size slightly larger than 125.
b. Example 2. - Audit application where the universe items:
(1) are intermingled with other items and
(2) are not suitably numbered:
(a) Assume approximately 11,100 items to be examined are intermingled with about 15,000 which are not to be examined. Assume a sample size of 125.
(b) Proceed by dividing 11,100 by 125, obtaining the interval number of 88.8, which is reduced to 88. Select a random start number from 1 to 88. Assume this to be 23.
(c) Starting with the 23rd item in the universe, select every 88th item. This procedure will result in the selection of approximately 297 items, of which about 126 should be of the type to be examined (i.e., multiply the sample size of 297 items times the ratio of desired type of items to total items (11,100 divided by 26,100) which equals 126 items).
c. Example 3. - Audit application where the universe items are numbered in broken sequences:
(1) Assume approximately 3,400 vouchers in the universe are numbered serially as follows:
First 342: Vol. Nos. 8,102 through 8,443, next 1,819: Vol. Nos. 11,651 through 13,469, next 1,154: Vol. Nos. 21,891 through 23,044, next 85: Vol. Nos. 25,000 through 25,084.
(2) Assume the sample size is 125. Divide 3,400 by 125, obtaining an interval number of 27.2. Reduce this to 27.
(3) Select at random a number from 1 to 27. Assume this number is 15.
(4) Determine and list the serial numbers of vouchers to be selected in the following manner:
(a) The first voucher number to be selected is No. 8,116 (No. 8,101 plus 15). Note that although voucher number 8,101 is not in the universe, it must be used as a base for adding the random number since adding the random number to the first voucher would prevent its selection. The next number is 8,143 (8,116 plus 27). The third is 8,170 (8,143 plus 27). Continue to list each 27th number. The last voucher to be listed in the first 342 is number 8,440.
(b) The next voucher number to be listed is 11,674, which is in the second group of 1,819, determined as follows: Since the last voucher in the first group of 342 to be listed was No. 8,440, there were three vouchers left in this group. Therefore, the first voucher to be listed in the next group of 1,819 is the 24th voucher, which is No. 11,674 (11,650 plus 24). The second voucher number to be selected in this group is 11,701 (11,674 plus 27).
(c) In this manner continue to determine and list each remaining 27th voucher, until the universe has been covered. In this case there will be a few more than 125 items since the interval was reduced to 27.
(5) A variation of the method described above is to use four random starts, one for each block of numbers, instead of 1 random start. Assume these to be 8, 11, 17, and 20. Starting with the 8th voucher in the first 342, (No. 8109) list each succeeding 27th voucher in this

group, making a total of 13. The numbers of these 13 vouchers are: 8109, 8136, 8163, 8190, 8217, 8244, 8271, 8298, 8325, 8352, 8379, 8406, and 8433. In a like manner, select each 27th voucher in the remaining three groups, commencing with the appropriate random start.

d. Example 4. - DUS audit application:

(1) Divide the population dollars by the sample size to determine the interval. Assume this to be 105,697 divided by 50 to obtain 21,139.

(2) Select a random start number contained in the interval. Assume 9,872.

(3) Beginning with dollar 9,872, every 21,139th dollar is selected for evaluation. Cumulative subtotals of the population values, excluding those greater than the interval, are necessary to identify the documents containing the dollars of interest. Both the dollar unit sample selection option of EZ-Quant and the Electronic Selection Program (ESP) perform all calculations required to select a sample and obtain control totals for later input to the appropriate DUS sample evaluation procedure (e.g., the EZ-Quant dollar unit sample evaluation option or ESP).

(4) Since the total population used to determine the interval might contain items that are later removed for 100 percent evaluation, the combined number of items selected probably will be less than that used to determine the interval. Normally, this will not degrade the results of the random sample. However, as with other methods of sampling, a sample size as large as could reasonably be foreseen should be obtained to provide for expansion. The preliminary sample will be a random selection from the total.

B-706 Use of Information Technology to Assist in Sample Selection

a. DCAA has available a number of automated tools to assist auditors in statistical sampling. These tools include EZ-Quant, the Electronic Selection Program (ESP), and Datatrak. As discussed in 4-605e, computer systems should be used to the maximum extent to improve auditor productivity, the stratification of contractor data, the accuracy of sample selection and evaluation, and the documentation of sampling plans and results of sampling. The reasons for not applying this technology should be documented in FAO working papers.

b. Use of these tools can be further enhanced through integration with various data retrieval techniques. Examples include (1) the use of fourth-generation data retrieval software (e.g., SAS, Focus, and Decision Analyzer) to extract mainframe-based data for downloading to microcomputers and (2) the application of Integrated Audit Workstation technology to automate recurring retrieval/sampling applications.

c. As is the case with any computer application, DCAA auditors should be sensitive to the need for strong internal controls as they relate to the integrity of data and its processing. Auditors applying this technology should review FAO risk assessments and internal control evaluations to establish a degree of confidence that data retrieval and sampling will not be compromised. Typically the aforementioned automated sampling tools will provide summary data on universe size as well as other statistics. The data can be compared to various contractor submissions to further improve auditor confidence in the contractor's system.

d. Documentation of the use of automated sampling tools and related techniques in audit working papers is extremely important. For Datatrak and ESP software applications, documentation should include:

(1) a narrative description and flowchart of the process in sufficient detail to enable an understanding of computer files used;

(2) record layouts and definitions of data fields used;

(3) merging, sorting, extraction operations;

(4) software employed; and

(5) computer files/outputs produced.

e. Operating instructions for the automated sampling tools and technical assistance in implementing data retrieval and sampling applications can be obtained through Regional Office AM/IT Divisions or the Technical Audit Services Division (Memphis, TN).

APPENDIX C --- Reserved

APPENDIX D

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APPENDIX D

D-000 Technical Specialist Assistance

D-001 Scope

This appendix presents guidance to assist in (1) deciding if technical specialist assistance is needed, (2) identifying the specific type of assistance needed, (3) requesting the assistance, (4) achieving good communications with technical specialists, (5) assessing the impact of technical specialist findings upon the audit opinion, and (6) reporting on the use of technical specialists or the impact of their non-availability.

D-100 Section 1 --- Deciding Whether Technical Specialist Assistance is Needed

D-101 General

a. Assistance from technical specialists may be required in a wide range of audit activities. This guidance focuses on one of the main areas, the evaluation of price proposals. Typically, contractor proposals are comprised of estimates for direct material, direct labor, other direct costs, and indirect costs. The auditor is responsible for evaluating all aspects of these cost estimates and advising the contracting officer on whether they are reasonable and in compliance with applicable cost principles and standards.

b. An important aspect of a proposal evaluation is determining the reasonableness of the quantities for material and labor. Audit tests of this aspect often require the assistance of technical specialists.

c. While the acquisition command or the contract administration office may initiate technical specialist reviews independent of the audit request, auditors cannot presume this review will anticipate and provide all the technical assistance needed to support the auditor's analysis. Statement on Auditing Standards (SAS) No. 73, "Using the Work of a Specialist," requires auditors to exercise professional judgment when the work of a specialist is required, including a determination of the type of technical expertise needed, and provides guidance on using the specialist's findings. It notes that while the appropriateness and reasonableness of methods or assumptions used and their application are the responsibility of the specialist, the auditor should obtain an understanding of these matters to determine whether the findings are suitable for corroborating the cost representations.

d. The auditor is also required to make appropriate tests of accounting data provided to and used by the specialist. Documentation requirements are in 4-1000. Ordinarily, the auditor would use the work of the specialist unless the procedures lead him/her to believe that the findings are unreasonable in the circumstances.

e. Successful implementation of this guidance requires establishing a close working relationship with the cognizant ACO and technical specialist. The FAO manager should discuss the basis for this guidance with these individuals to promote proper understanding of its objective of improving audit quality and to dispel concerns regarding duplication of efforts, roles, and missions.

D-102 Audit Steps

a. This section provides audit steps to help the auditor decide if technical specialist assistance is needed. Before applying these audit steps, consider materiality, for both the total amount involved and for the individual cost items, and the contemplated contract type.

b. The following audit steps are intended to provide sufficient information for making an informed decision, and to help formulate the questions to be addressed by the

technical specialist. They may best be performed as part of an estimating system survey or other separate assignment (such as, validation of labor standards, or examination of material requirement systems). Also, familiarity with the information contained in D-407 and D-408 may be necessary to properly understand some of these audit steps.

D-102.1 Labor Estimating Systems --- General

Section D-407 describes seven labor estimating methods that might be used by a contractor. The methods vary significantly in terms of the accuracy of the cost estimates they produce. Specific audit steps to help decide if assistance should be requested follow:

a. Gain some familiarity with the product or service. The best way to do this is by observing manufacturing processes or services for the product or a like product.

b. Identify the specific labor estimating method(s) used in preparing the proposal. This information should be contained in the proposal, but may have to be obtained from the contractor.

c. If the labor estimating technique used is based on historical data, determine if its use is appropriate or whether another technique (e.g., one based on industry production standards) should be used for greater estimating accuracy/reliability (see D-407 and 9-503). This is done by:

(1) Identifying the historical data used to develop the labor cost estimate.

(2) Ascertaining the reliability and accuracy of the data. Audits of timekeeping and labor charging practices performed previously may provide the needed level of understanding and confidence.

(3) Evaluating the content of the data to ensure that it is representative and contains all costs that are purported to be there. Compare supporting data to other sources of historical information such as operational staffing. Inconsistencies may indicate exclusions of pertinent historical data. Determine whether there are valid reasons for excluding data.

(4) Testing for the consistency of data accumulation over a given period. Look for accounting system changes and reclassification of costs from direct to indirect and vice versa, and consider the results of previous cost accounting standard (CAS) audits. If the data is inconsistent (either historically or prospectively), request the contractor make appropriate adjustments.

(5) Ensuring that nonrecurring costs are removed from historical data. Pay special attention to manufacturing set up costs which are lot quantity sensitive. Other nonrecurring costs may be in the historical period, but not expected to occur in the forecast period. These costs should not be used to estimate future costs.

(6) Ensuring that other non-representative data is excluded. For example, some historical inefficiencies may not be expected to recur. Likewise, some historical events are unique and should not be used as a basis for predicting future costs.

(7) Making sure the data is current. Data which is too old may not reflect expected conditions (e.g., facilities, equipment, management, organization, and staffing). Several years of historical data may be useful in identifying important trends.

(8) Ensuring that historical data is obtained from the same facility in which the proposed end item or product will be manufactured. If the data was obtained from a different facility, determine its acceptability for estimating purposes.

(9) Drawing a conclusion regarding the suitability of historical data for making estimates.

D-102.2 Labor Estimating --- Standard Time Method

The standard time method is the most accurate of the seven labor estimating methods described in D-407.2. Labor estimates computed using this method consists of labor standards adjusted by productivity factors. The following audit steps address labor standards and productivity factors separately. Before performing any of the recommended audit steps, contact the ACO/PCO to determine if any work in this area is being performed by

other Government representatives. Technical specialist assistance, if needed, should be obtained from the ACO/PCO (see D-203).

a. Labor Standards

(1) Determine if MILSTD 1567A (D-407.4) is applicable to the contractor's proposal. When applicable, determine if the Government has accepted, disapproved, or partially accepted the contractor's work measurement system.

(2) If MILSTD 1567A applies and the system has been accepted, the auditor can normally have confidence that engineered labor standards (ELSs) can be produced. If the system has been disapproved or partially accepted, determine the reasons for this condition. Depending upon the severity of the condition, the auditor may have to qualify the audit opinion.

(3) If MILSTD 1567A does not apply, determine the method used by the contractor to develop labor standards. If the contractor advises that ELSs were used, verify that one of the work measurement techniques described in D-407.3 (stopwatch time studies, predetermined time systems, work sampling, standard data systems) was employed. The recommended procedure is to obtain a sample of parts and verify the computation of labor standards. If the contractor indicates nonuse of ELSs, consider the results unreliable until tested. Evaluate the identified technique, determine its reasonableness, and establish the impact on proposed costs to the extent possible.

(4) When evaluating the use of labor standards, verify that standards developed for specific operations or manufacturing steps are appropriately applied. This can be accomplished by selecting a sample of part number routing sheets and verifying labor standards contained on the routing sheets to supplemental sources of information on labor standards maintained by the contractor. If routing sheets are not available, look for similar descriptions of manufacturing processes containing labor standards.

(5) Other possible problem areas are duplication of estimated labor, use of adjustment factors, and computational errors. The recommended method to test for the occurrence of these errors is to request routing sheets (see D-407.2h) and/or other documentation supporting the labor cost buildup for a high level component part. Verify that alternate routings were not inadvertently included in computations, adjustment factors were not used, and calculations are correct.

b. Productivity Factors

(1) Verify that productivity factors applied to labor standards were derived from historical data for the actual or like product. Productivity factors are most accurate when applied at a low organizational level (e.g., welding, numerical control machine operation, etc.). Inappropriately applied productivity factors will produce inaccurate labor cost estimates.

(2) Productivity factors are derived by dividing labor standards by actual labor. When a contractor changes its method of computing labor standards, the accuracy of productivity factors may be affected. Ascertain whether any changes in method have occurred. If so, work through several productivity factor calculations to determine the impact of the change.

D-102.3 Labor Estimating Methods --- Cost and Time Relationships (Parametric)

As explained in D-405, parametric cost estimating is a technique that estimates future costs by statistically analyzing and manipulating historical cost relationships (D-407.2g). The primary justification for using parametrics is reduced estimating and negotiation costs. When a contractor uses parametric cost estimating relationships, the contractor is expected to demonstrate that the relationships are logical, verifiable, statistically valid, and fairly accurate in predicting results. The relationships used should also be periodically monitored by the contractor to ensure appropriateness. Audit steps designed to evaluate parametric cost estimates will ensure that the contractor can indeed demonstrate its estimates meet the above criteria. In addition, the audit steps listed in D-102.4 apply to parametric cost estimates.

D-102.4 Labor Estimating --- Other Methods

The following audit steps should be performed for labor estimating methods other than the standard time method. These methods are:
(1) judgment and conference,
(2) comparison,
(3) unit method,
(4) factor method,
(5) probability approaches, and
(6) cost and time estimating relationships.
Judgment and conference is the least accurate of these methods. The others yield progressively more accurate labor cost estimates, but not as good as those produced by the standard time method. (See D-407.2 for further explanation of these labor estimating methods.) Contractors may combine two or more of these methods to produce labor cost estimates.

a. Review the information in D-407 relevant to the specific method employed by the contractor.

b. Scrutinize historical data used to develop the labor cost estimates. Pay special attention to the factors identified in D-102.1c.

c. Identify the method, including rationale supporting use of the technique, historical evidence of the accuracy of the method, assumptions, adjustments made, etc.

d. Validate some of the calculations by working through the estimate.

e. Note discrepancies. Try to establish the cost impact of these discrepancies.

D-102.5 Material Estimating

Section D-408 describes material estimating methods, of which the use of the "bill of material" or BOM to establish material cost estimates is the most common. Routing sheets and engineering drawings are also important to the auditor in verifying material quantities. Specific audit steps related to material estimates follow:

a. Become thoroughly familiar with the requirements of the RFP and the contents of the contractor's proposal.

b. Obtain the engineering BOM that supports the contractor's proposal. For audit purposes, engineering BOMs are normally preferable to "manufacturing" BOMs because of their correspondence to engineering drawings. BOMs are sorted different ways to accommodate different users and purposes. The two most common sorts are ascending part number and assembly/subassembly. Next assembly or "where used" information is usually also available and in most cases quite useful to the auditor.

c. If the auditor intends to select a manual sample of parts, obtain a priced ascending/descending order BOM as it is usually a necessity. To allow for a proper evaluation, next assembly information should be part of this BOM, or available in a supplemental document.

d. If BOM detail part records are computer-based, the BOM obtained may be either ascending/descending part number or assembly/subassembly as long as it is priced. For mechanized sample selection, the preferred method is to use an available software tool. DCAA sample selection software includes DATATRAK III and the Electronic Selection Programs (ESP).

e. Prepare a sampling plan. Select either a random stratified or dollar unit sample of parts for evaluation. Guidance on sampling methods is contained in Appendix B. Although the sample is intended for use in validating BOM quantities to engineering drawings, the sample should also be used to validate pricing. Validation of parts pricing should usually be accomplished as a separate phase of the audit.

f. Obtain detailed engineering drawings for selected sample BOM parts. Separate engineering drawings may not be available for purchased parts, but may be available as part of the next higher assembly drawing. Also, initial BOMs may be incomplete and contain

pseudo-parts which do not have engineering drawings. A large number of pseudo-parts is usually sufficient reason to obtain the assistance of a technical specialist.

g. Compare sample part quantities on engineering drawings to the BOM.

h. Identify how the contractor calculated part quantities and the number of parts to be produced from raw material. Pay special attention to the use of rounded factors for raw material. Verify the accuracy of the contractor's calculations by working through several part estimates.

i. Typically, engineering drawings are frequently changed. Depending upon the date of revision and other factors, there is danger that changes may not have been incorporated into the BOM. Audit tests should include an evaluation of engineering change notices (ECNs) to determine if any in-process ECNs have not been included in the BOM. The date of the last revision on the engineering drawing may be beneficial in identifying potential omissions.

j. Quantity and computational discrepancies identified during the material requirements evaluation of sample BOM parts should be projected to the entire BOM population to assess impact.

D-200 Section 2 --- Procedures for Requesting Technical Specialist Assistance

D-201 General

This section describes the procedures for requesting technical specialist assistance. Examples provided in this section are specific to price proposals; however, general guidance and procedures apply to all requests for technical specialist assistance. Requests for technical assistance should be very specific to avoid miscommunication and improve the probability of obtaining meaningful evaluations. Examples of questions that might be directed to a technical specialist are also contained in this section.

D-202 Timeliness

Auditors must concentrate on analyzing contractor support for labor hours and material quantities in the initial stages of the audit evaluation. This analysis should include an early identification of cost estimating techniques used by the contractor, and evaluation of supporting data.

D-203 Sources of Technical Assistance

Government engineers working directly for the acquisition command or administrative contracting officer have primary responsibility for performing technical analyses of contractor pricing submissions. Accordingly, this group of people should be contacted when the auditor requires technical assistance in a proposal evaluation.

D-204 Method of Requesting Assistance

a. If possible, requests for technical specialist assistance should initially be handled verbally (with appropriate written follow-up documentation). The auditor should attempt to make requests in person at FAOs having onsite engineers. For offices without onsite engineering support, telephone requests for assistance are usually appropriate. These procedures will promote a closer working relationship between the auditor and others responsible for proposal evaluation, and improve chances for a timely response. A written request should be transmitted to the acquisition command or contract administration office. A request must be made even when the auditor is satisfied with the scope of planned technical evaluation. If the request for audit specifically states that the auditor will not be furnished a copy of a scheduled technical report, the audit acknowledgment letter should state that the audit report will be qualified for the affected cost element(s) where a technical evaluation is necessary to complete the examination. If a pattern of untimely or unavailable Government technical support is encountered, the matter should be elevated to the regional office for discussion with the appropriate acquisition management officials. Headquarters (ATTN: P) should be notified of unsatisfactory conditions which cannot be resolved by the regional director.

b. Requests for technical evaluation reports should be made using the pro forma letters in Figures D-2-1 and D-2-2 which present examples of audit requests for Government technical specialist assistance. These examples should be used as guidelines and modified as necessary to reflect specific conditions identified by the auditor. Coordination and follow-up of requests are essential. Nonreceipt of a requested technical evaluation requires a qualification in the resulting audit report.

D-205 Formulating Questions

a. Once a decision has been made to request assistance from a technical specialist, focus on identifying exactly what information is needed. The third statement of Standards of Field Work requires that the auditor obtain sufficient, competent, and relevant evidence to

afford a reasonable basis for an opinion. This evidence may appropriately include the work of a technical specialist; however, the responsibility for meeting this requirement cannot be transferred.

b. SAS No. 73 provides guidance regarding the use of specialists in performing an examination of accounting records in accordance with GAGAS. It requires that the auditor be specific in identifying the nature of work to be performed by the technical specialist. Preferably, this statement of work should include (1) the scope and objectives of the work, (2) the methods and assumptions to be used by the specialist, (3) a description of how the auditor will use the specialist's work to support assertions made in the cost statements, and (4) the form and content the specialist's report should take.

c. Specific questions for technical specialists should correspond to individual audit steps expected to be performed, and address each element for which the auditor could not make an independent assessment. In formulating questions, describe in detail tests performed and/or reasons for questioning an aspect of the cost estimate. The remainder of this section contains examples of questions that might be directed to a technical specialist.

D-205.1 Example Questions --- Labor

a. Judgment and Conference

"Because of a lack of historical information, the contractor estimated direct labor hours for its automated assembly line using judgment only. An evaluation of the judgmental estimate revealed no auditable supporting data in which the auditor could place confidence. Accordingly, the assumptions used to develop the contractor's position need to be evaluated by an engineer knowledgeable in the area. Results of this technical analysis should be provided to the auditor for evaluation and determination of the impact upon audit scope and conclusions."

b. Comparison

"The contractor multiplied all historical data supporting proposed direct engineering labor hours by a factor of 2.0 because of the belief that the program being estimated will have twice as many configuration changes as previously experienced. Supporting data for this factor could not be obtained by the auditor. Both the magnitude of anticipated configuration changes and the manner in which the contractor estimated their influence on cost need to be assessed by an engineer. Results of this technical analysis should be provided to the auditor for evaluation and determination of the impact upon audit scope and conclusions."

c. Unit Method

"The contractor estimated maintenance/cleaning labor using a unit measure of `hours per square foot of floor area to be cleaned.' This unit measure was developed from the contractor's experience at five small office facilities. The building to be cleaned (under this contract) is a multistory office building seven times larger than any of the office facilities used to develop this rate. The auditor has verified the accuracy of composite rate development. However, we believe that the contractor should realize some gain in efficiency due to the large facility size. Accordingly, we request that an engineer develop an adjustment factor to compensate for efficiency gains. Results of this technical analysis should be provided to the auditor for evaluation and determination of the impact upon audit scope and conclusions."

d. Factor Method

"The contractor estimated electrical assembly final test labor as a percentage of basic factory labor using data from five previous contracts. The contractor requested and

received considerable funds to procure special test equipment to automate these operations for the contract being estimated. No similar automation effort was undertaken on the previous contracts. By using unadjusted history, the contractor has not given consideration to the impact of automation in estimating future assembly final test labor. The auditor was unable to locate information to develop an adjustment for this change in production methods. We request that an engineer estimate an appropriate adjustment for this labor category. Results of this technical analysis should be provided to the auditor for evaluation and determination of the impact upon audit scope and conclusions."

e. Probability Approaches

"The contractor used a computer program to derive its probability estimate that it is 75 percent certain that it will take 365 staff days to construct a test stand. Activity interrelationships and time estimates were computer program inputs. Audit substantiated the time estimates. We request that an engineer (1) determine if the contractor has properly represented interrelationships and (2) evaluate the computer algorithm used to produce the estimate. Results of this technical analysis should be provided to the auditor for evaluation and determination of its impact on audit scope and conclusion."

f. Cost and Time Estimating Relationships

"The contractor's cost estimating relationships (parameters) for wire harness assemblies were based on a regression analysis of past program experience to quantity of connectors per assembly. Audit of this regression application indicated a poor coefficient of determination (.51). However, the auditor could not identify possible alternative variables for consideration in refining the regression model. We request that an engineer assess the reasonableness of the cost estimating relationships for estimating future costs. Results of this technical analysis should be provided to the auditor for evaluation and determination of the impact upon audit scope and conclusions."

g. Standard Time Method

(1) Labor Standards

"Audit disclosed that the contractor's estimate of recurring manufacturing labor hours was based on "industry average" labor standards, not engineered labor standards (ELSs). Although the contractor has not been accumulating data to develop its own labor standards, we believe that it has the capability, and should be encouraged to develop ELSs for use in future proposal submissions. Regarding the current proposal, we request that an engineer evaluate the reasonableness of the individual labor standards identified below. Results of this technical analysis should be provided to the auditor for evaluation and determination of the impact upon audit scope and conclusions."

(2) Productivity Factors

"The contractor's proposed productivity factor of .25 is based on composite experience from six programs whose individual productivity factors range from .85 to .08. Audit substantiated the development of the individual factors (see the enclosed schedule). Since the six programs are similar, we believe that only current experience should be used in estimating future productivity. We request that an engineer determine the appropriateness of using a composite factor derived from multiple programs covering several years in lieu of current productivity experience. Results of this technical analysis should be provided to the auditor for evaluation and determination of the impact upon audit scope and conclusions."

D-205.2 Example Questions---Material

a. Bill of Material

"Proposed material quantities for raw material, hardware, and purchased parts were derived from a mechanized bill of material (BOM). We statistically sampled this BOM and traced proposed quantities back to engineering drawings. Since this proposal is for a new product, formal drawings were not available on several parts. Therefore, we were unable to validate the need for certain parts or the required quantities. The items in question, along with related engineering drawing references, are enclosed. We request that they be evaluated by an engineer, and the results provided to the auditor for incorporation into the audit report."

b. Material Scrap Factor

"The contractor's method for estimating material scrap does not provide for improvement resulting from learning. The scrap factor was derived from production history for similar products. We have verified the data used to compute the scrap factor. However, it is our opinion that scrap should decrease over time as manufacturing personnel become more familiar with the product and operations required to produce it. We request that an engineer review this factor to determine its reasonableness. Results of this technical analysis should be provided to the auditor for evaluate and determination of the impact upon audit scope and conclusions."

Figure D-2-1
Pro Forma Request for Technical Assistance
Labor Example

TO: Administrative Contracting Officer [or Other Audit Requestor]

SUBJECT: Request for Technical Specialist Assistance, Proposal _____

As part of our audit of the subject price proposal, we have examined the estimating rationale used in calculating proposed direct manufacturing labor hours. In estimating this cost element, the contractor used plant-wide labor standards adjusted by a productivity factor resulting from experience on the XYZ contract. The contractor then judgmentally applied a 20 percent complexity factor to reflect the impact of this newly proposed product. We request that an engineer review the reasonableness of the following items:

1. The proposed 20 percent complexity adjustment factor.
2. The benefit of past learning on the proposed labor estimates. The auditor plans to apply a learning curve technique.
3. The proposed in-house labor standards for recurring manufacturing labor for:
   a. Item 1 --- Set up 1.097; Run 453.301
   b. Item 2 --- Set up 212.5; Run 63.511
   c. Item 3 --- Set up 312.4; Run 75.551

We further request that the technical specialist's review results be furnished to us as soon as possible for incorporation into our audit. Our audit report is due by ____. If the technical specialist's review results cannot be provided by ___ , we request that the audit report due date be revised to permit consideration of the technical findings.

Should you have any questions regarding this request, please contact Mr. _____, Auditor, at telephone number (000) 000-0000 or e-mail address _____.

_____,
Branch Manager

Enclosure

Figure D-2-2
Pro Forma Request for Technical Assistance
Material Example

TO: Administrative Contracting Officer [or Other Audit Requestor]

SUBJECT: Request for Technical Specialist Assistance, Proposal _____

As part of our audit of the subject price proposal, we have sampled certain material costs for detailed analysis. During our evaluation of the sampled items, we attempted to validate proposed quantities and prices. As part of this validation process, we traced sample part quantities back to originating engineering drawings and related supporting documents. However, we were unable to validate whether the drawings reviewed accurately reflect the item(s) to be furnished, or that the parts are required. The items in question are summarized as Enclosure 1 to this memorandum. We request that an engineer review each of these items to determine (1) item necessity, (2) required quantity, and (3) the propriety of the contractor's proposed quality level. We request that the results of this technical review be furnished to us as soon as possible.

In addition, the contractor proposed use of a historical scrap factor. Since this proposal is for production of a product similar to those produced in the past, it is our opinion that the factor should be adjusted for the impact of learning. We further request that an engineer review this matter and provide an opinion on whether reductions from learning may be reasonably expected in the circumstances. If so, we will ask the contractor to revise the estimates.

Our audit report is due by ____. If the results of the technical specialist review cannot be provided by ____ , we request that the audit report due date be revised to permit consideration of the findings.

Should you have any questions regarding this request, please contact Mr. _____, Auditor, at telephone number (000) 000-0000 or e-mail address _____.

_____,
Branch Manager

Enclosure

D-300 Section 3 --- Evaluation, Use, and Impact of the Results of Government Technical Specialist Assistance

D-301 Introduction

The procedures discussed in this section regarding the evaluation, use, and impact of the results of Government technical specialist assistance apply to those reports received as a result of a DCAA request for assistance. Procedures associated with the evaluation of work of others, excluding Government technical specialists, are discussed in 4-1000.

D-302 General

a. An auditor requests a Government technical specialist's analysis when complex or subjective audit areas are encountered requiring special skills. Examples include, but are not limited to:

(1) valuation,
(2) determination of physical characteristics relating to quantity or condition,
(3) determination of amounts by using specialized techniques or methods, and
(4) interpretation of technical requirements, regulations, or agreements.

When Government technical specialist findings are used, the auditor should quantify the dollar effect of the technical findings in the audit report and to attach an electronic or scanned version of the technical analysis to the audit report.

b. When the auditor requests the services of a Government technical specialist, the auditor must identify the work to be performed (see D-205).

c. It is the auditor's responsibility to examine the technical evaluation report to ensure a reasonable understanding of the actual work performed. The auditor's working papers must document:

(1) the auditor's understanding of the actual work performed,
(2) the degree of reliance the auditor placed on the technical evaluation, including its impact on the results of audit and
(3) that the Government technical specialist is qualified in their area of specialization.

GAGAS 3.48 requires auditors who use the work of a Government technical specialist to document that such specialists are qualified in their area of expertise. Generally DCAA technical evaluations for Department of Defense (DoD) procurements are performed by the Defense Contract Management Agency (DCMA) or other Government specialists (i.e., military personnel). DCMA and other Government technical specialist qualifications and specialized skills are determined by DCAA to be technically competent; therefore, additional documentation is not required. Qualifications of all other external Non-Government technical specialists should be documented in the working papers. Auditors should use the work of the specialist(s) unless findings are obviously unrealistic, or procedures used appear inadequate. In these situations, try to reconcile differences with the specialist and, if necessary, his/her supervisor and the ACO. A discussion of procedures and technical aspects of the evaluation is usually sufficient to eliminate concerns. If the differences are not resolved, the auditor should not use results of the technical evaluation in the development of questioned costs. In such cases, the scope and opinion paragraph of the report should include an appropriate qualification. Whenever a technical evaluation is received, attach the report to the audit report as the final appendix.

d. Generally Accepted Government Auditing Standard (GAGAS) 6.22 requires that audit documentation should contain "sufficient information to enable an experienced auditor who has had no previous connection with the attestation engagement to ascertain from the documentation the evidence that supports the auditors' significant judgments and conclusions." When evaluations of labor hours and material quantities which materially impact the proposed costs have not been performed by either the auditor or a technical specialist, insufficient evidential matter has been obtained to support the audit opinion.

The inability to obtain essential information constitutes a scope limitation which necessitates an opinion qualification.

e. When necessary Government technical assistance has not been received, and the adverse impact on the audit results is material, the auditor should:

- Report the lack of technical assistance in the "Scope of Audit" section of the report under the subheading "Qualifications" (see examples in D-303).
- Qualify the audit opinion in the "Results of Audit" section of the report (see examples in D-303).
- Identify in the explanatory notes to the "Results of Audit" the specific cost elements or factors for which an opinion could not be rendered (see examples in D-304).
- Highlight the lack of technical assistance in the "Executive Summary" section of the report under the subheading "Significant Issues," if the impact is significant (see 10-304.2).

f. The qualification in the "Scope of Audit" section should:

(1) briefly describe the nature of the qualification,

(2) state the adverse impact on the scope and results of audit, and

(3) specifically refer to the report page number, exhibit, schedule or appendix paragraph which contains the detailed discussion of the circumstance.

Additionally, include a brief statement to:

(1) indicate the reason for nonreceipt of the technical evaluation,

(2) comment on the follow-up action taken to obtain the report from the organization involved, and

(3) recommend that the auditor be given an opportunity to:

(a) evaluate the technical results to determine the impact on the audit and

(b) provide a supplemental report (see 10-210.4).

g. Instances where audit scope has been substantially restricted due to lack of technical assistance may require an adverse report opinion or a disclaimer of opinion (see 9-211.3 and 9-211.4). Make this determination based on the auditor's best judgment.

h. Do not segregate questioned costs between audit and technical findings in the exhibits and schedules of the audit report. However, provide this information in the explanatory notes.

D-303 Scope of Audit and Results of Audit Examples

a. Example No. 1 - Labor. (Labor examples 1 and 2 assume no other cost or pricing data or CAS problems were noted during the audit.) In example 1, a recommendation is made that negotiations not be concluded until results of technical evaluation of a proposed 20 percent complexity factor have been considered. Refer to 10-210.4 and 10-304.4 (Qualifications) and 10-210.5 and 10-304.5 (Results of Audit) for further guidance on what to include in the following report sections.

(1) Qualifications

"We were unable to determine the reasonableness of the 20 percent complexity factor applied to the manufacturing direct labor hours. Refer to Results of Audit, page _, Note __ for a detailed discussion of these costs. On November 4, 20XX, we requested technical assistance from [name of organization]. We have not received the technical report. On December 1, 20XX, we contacted the [name of organization and title of representative] who informed us that the evaluation is in process. We anticipate receipt of the technical report on or about December 15, 20XX. An extension of our audit report due date was requested on December 1, 20XX, but was not granted due to [state reason]. The technical results are considered essential to the evaluation of proposed labor costs. Therefore, the results of audit are qualified to the extent that additional costs may be questioned based on technical evaluation. If the technical evaluation is received prior to contract negotiations, we recommend the auditor be given an opportunity to review the results of the technical evaluation to determine its impact on the audit conclusions. If the audi-

tor determines the technical report materially impacts the audit conclusions, we will issue a supplemental report incorporating the results of the technical evaluation."

(2) Results of Audit

"In our opinion, except as qualified above, the offeror has submitted adequate cost and pricing data. The proposal was prepared in accordance with applicable Cost Accounting Standards and appropriate provisions of FAR and the DoD FAR Supplement (DFARS) [for non-DoD agencies, identify the specific agency supplement, if any (see 15-102.3)]. Nevertheless, in our opinion, costs associated with the 20 percent complexity factor discussed in the Qualifications section of the report are significant enough to materially impact the results of the audit. Therefore, as discussed with [name and title of contracting officer or representative] by [auditor] of our office on [date], we recommend that contract price negotiations not be concluded until the results of the technical evaluation of the 20 percent factor are considered by the contracting officer."

b. Example No. 2 - Labor. (This differs from Example No. 1 in that no recommendation is made to delay negotiations until technical information has been considered.)

(1) Qualifications

"We were unable to determine the reasonableness of the 20 percent complexity factor applied to manufacturing direct labor hours. Refer to Results of Audit, page _, Note _, for a detailed discussion of these costs. On November 4, 20XX, we requested technical assistance from [name of organization] to evaluate these costs. We have not received the technical report. On December 1, 20XX, we contacted the [name of organization and title of representative] who informed us that the evaluation is in process. We anticipate receipt of the technical report on or about December 15, 20XX. The results of audit are qualified until we receive the technical report and determine its impact on this audit. If the technical evaluation is received prior to contract negotiations, we recommend the auditor be given an opportunity to review the results of the technical evaluation to determine its impact on the audit conclusions. If the auditor determines the technical report materially impacts the audit conclusions, we will issue a supplemental report incorporating the results of the technical evaluation."

(2) Results of Audit

"In our opinion, except as qualified above, the offeror has submitted adequate cost or pricing data. The proposal was prepared in accordance with applicable Cost Accounting Standards and appropriate provisions of FAR and the DoD FAR Supplement (DFARS) [for non-DoD agencies, identify the specific agency supplement, if any (see 15-102.2)]. Except for the judgmental 20 percent complexity factor applied to manufacturing direct labor, we believe that the proposal is an acceptable basis for negotiation of a fair and reasonable price. "

c. Example No. 3 - Material (Material examples 3 and 4 assume other insignificant cost or pricing or CAS problems were noted during the audit). In example 3, a recommendation is made that negotiations not be concluded until results of technical evaluation of material quantities and scrap factor have been considered. Refer to 10-210.4 and 10-304.4 (Qualifications) and 10-210.5 and 10-304.5 (Results of Audit) for further guidance on what to include in the following report sections.

(1) Qualifications

"We were unable to determine if (1) the engineering drawings are an accurate rendering of the items to be furnished, (2) the proposed parts are required, and (3) the scrap factor is reasonable. For a detailed discussion of these costs refer to Results of Audit, pages and, Notes and, respectively. [If the attempt to obtain a technical evaluation has not yet been reported, insert here the additional information required by D-302f, using the format appearing in alternative labor examples 1 and 2 above.] The technical results are considered essential to the evaluation of proposed material costs. Therefore, the results of audit are qualified to the extent that additional costs may be questioned based on technical evaluation. If the technical evaluation is received prior to contract negotiations, we recommend the auditor be given an opportunity to review the results of the technical evaluation to determine its impact on the audit conclusions. If the auditor determines the technical report materially impacts the audit conclusions, we will issue a supplemental report incorporating the results of the technical evaluation."

(2) Results of Audit

"In our opinion, except as qualified above, the cost or pricing data submitted by the offeror are inadequate in part (see comments on pages _ and _, Notes _ and _, respectively.) However, the inadequacies described are considered to have limited impact on the subject proposal. The proposal was not prepared in all respects in accordance with applicable Cost Accounting Standards and appropriate provisions of FAR and the DoD FAR Supplement (DFARS) [for non-DoD agencies, identify the specific agency supplement, if any (see 15-102.2)]. However, as discussed on page _, Note _, the impact of the noncompliances is considered to be relatively insignificant. Nevertheless, in our opinion the engineering drawings, material parts and scrap factor discussed in the Qualifications section of the report are significant enough to materially impact the results of the audit. Therefore, as discussed with [name and title of contracting officer or representative] by [auditor] of our office on [date], we recommend that contract price negotiations not be concluded until the results of the technical evaluation of the material quantities and scrap factor are considered by the contracting officer."

d. Example No. 4 - Material. (This differs from Example No. 3, in that no recommendation is made to delay negotiations until technical information has been considered.)

(1) Qualifications

"We were unable to determine if (1) the engineering drawings are an accurate rendering of the items to be furnished, (2) the proposed parts are required, and (3) the scrap factor is reasonable. On November 4, 20XX, we requested technical assistance from [name of organization]. For a detailed discussion of these costs refer to Results of Audit, pages _ and _, Notes _ and _, respectively. We have not received the technical evaluation. [If the attempt to obtain a technical evaluation has not yet been reported, insert here the additional information required by D-302f, using the format appearing in alternative labor examples 1 and 2 above.] The results of audit are qualified to the extent that additional costs may be questioned based on the technical evaluation. If the technical evaluation is received prior to contract negotiations, we recommend the auditor be given an opportunity to review the results of the technical evaluation to determine its impact on the audit conclusions. If the auditor determines the technical report materially impacts the audit conclusions, we will issue a supplemental report incorporating the results of the technical evaluation."

(2) Results of Audit

"In our opinion, except as qualified above, the cost or pricing data submitted by the offeror were inadequate in part (see comments on pages _ and _, Notes _ and _, respectively.) However, the inadequacies described are considered to have limited impact on the subject proposal. The proposal was not prepared in all respects in accordance with applicable Cost Accounting Standards and appropriate provisions of FAR and the DoD FAR Supplement (DFARS) [for non-DoD agencies, identify the specific agency supplement, if any (see 15-102.2)]. However, as discussed on pages and _, Notes _ and _, respectively, the impact of the noncompliances is considered relatively insignificant. Because noncompliances and inadequacies are considered insignificant, except for the material quantity and scrap factor qualifications, we believe the proposal is an acceptable basis for negotiation of a fair and reasonable price."

D-304 Reporting Technical Qualifications in Explanatory Notes

When a required technical evaluation is not received, its absence should be reported in the explanatory note for each affected element. A brief statement may be inserted in either the "Summary of Conclusions" or "Audit Evaluation" statement, or both, as appropriate. If this is not practical, a separate appendix may be used, but it should be written specifically for the subject audit.

A. Labor Example

Manufacturing Direct Labor

a. Summary of Conclusions:

The proposed standard manufacturing direct labor rate accurately reflects contractor history. The contractor used plant wide labor standards adjusted for a productivity factor based on experience on the XYZ contract. The contractor then applied a 20 percent complexity factor to represent the impact of this newly proposed product. However, the judgmentally applied 20 percent upward adjustment to reflect productivity failed to consider the benefits derived from past learning on similar productions. We are unable to express an opinion on the acceptability of proposed direct labor without a technical evaluation. The status of our request for technical assistance is set forth in the Qualifications paragraph of this report.

b. Basis of Contractor's Cost:

The proposed recurring direct manufacturing labor was developed using standard hours for set-up and run as detailed below:

	Standard	***Hours***
	Set up	Run
Item 1	1.097	453.301
Item 2	212.500	63.511
Item 3	312.400	5.551

c. Audit Evaluation:

We verified the standard manufacturing direct labor rates to the accounting records. We compared the hours proposed to the RFP required hours. We were unable to determine the reasonableness of the 20 percent complexity factor the contractor judgmentally applied as upward adjustment to the proposed recurring manufacturing direct labor productivity factor of 47 percent.

d. Contractor's Reaction: Omitted from this example.

e. Auditor's Response: Omitted from this example.

B. Material Examples - The material examples include only the "Summary of Conclusions" (a.) and "Audit Evaluation" (c.) portions of the explanatory notes.

(1) Bill of Material (BOM) Requirements

a. Summary of Conclusions:

The BOM accurately reflects the most recent purchase history and current vendor quotes. In the absence of a technical review, we are unable to validate the engineering drawings and the material quantities required. The status of our request for technical assistance is set forth in the Qualifications paragraph of this report.

c. Audit Evaluation:

We statistically sampled this BOM and traced proposed quantities back to originating engineering drawings. We compared the proposed material prices to recent purchase history and vendor quotes. However, in the absence of a technical opinion we were unable to verify that (1) the drawings reviewed accurately reflect the items to be furnished, and (2) the proposed material parts, including quantities, are required.

(2) Material Scrap Factor.

a. Summary of Conclusions:

The material scrap factor reflects contractor history for similar production contracts. We have requested technical assistance to determine if the scrap factor should decrease over time due to increased productivity. The status of our request for technical assistance is set forth in the Qualifications paragraph of this report.

c. Audit Evaluation:

We verified the development of this scrap factor to accounting records. However, without a technical evaluation we are unable to determine if scrap should decrease over time when dealing with similar production effort.

D-400 Section 4 --- Cost Estimating Methods

D-401 Introduction

a. Cost estimating encompasses planning, coordinating, compiling, and pricing of proposed material, labor, and other items. Depending upon the contractor's size and type of work, this function may be performed by a single department or several departments acting together.

b. The objective of this section is to provide a cost estimating overview of the labor and material areas, with the understanding that the estimating methods discussed may also be used on other cost elements. A basic understanding of these areas is essential when attempting to evaluate a proposal. While the following guidance does not address a specific contractor estimating system nor a particular estimating method, the described principles and techniques will be applicable to most estimating environments.

D-402 Overview of Cost Estimating

a. Cost estimating requires the application of skillful analysis and experienced judgment in projecting labor and material contract requirements. Timing constraints and the availability of historical data have an impact on the estimating process. Selections of appropriate estimating techniques require extensive analysis by contractors. Appropriateness of selected estimating techniques should be reviewed periodically. The same technique used when the program is at the engineering-concept stage, or when no bill of materials exists, is usually not appropriate for ongoing production. Because cost estimating integrates technical as well as financial information, the process requires input from many diverse organizational elements.

b. Although contractor estimating systems differ in approach and philosophy, their basic objectives are the same. Cost estimates are a series of informed projections and assumptions based on available information existing at the time of proposal preparation.

c. Cost estimating is comprised of logical steps. The level of detail required in these steps is often affected by the anticipated contract requirements expressed in the RFP. Typical steps in cost estimating follow:

(1) Ensuring that all relevant background documents such as historical costs, drawings, and specifications are available to assist in understanding job requirements.

(2) Determining which estimating techniques will be used, the level of detail required, and the amount of time available to generate and document a completed estimate.

(3) Determining if quotes and other information will be required from outside sources.

(4) Deciding if any elements require further clarification, redesign, or have potential manufacturing difficulties.

(5) Determining if the capability and capacity to manufacture required components exist in-house.

(6) Determining if further information is required to develop and complete estimates.

(7) Coordinating the activities of departments participating in the estimating exercise.

(8) Obtaining quotes, history, and other bases for material and subcontract items.

(9) Assembling direct costs by cost element, and computing indirect expenses using appropriate factors and rates.

(10) Consolidating proposal elements and documenting preparation rationale.

D-403 Estimating Process at a Typical Contractor

a. At large contractors, the estimating (or pricing) department usually has overall responsibility for coordinating and assembling estimates to be incorporated into proposals authorized by top management. Preparation of detailed estimates is accomplished by the departments which will actually perform or supervise the work if the contract is received.

b. The cost estimating project is usually initiated in response to an RFP. The RFP provides a statement of work, outlines Government requirements, and invites contractors to prepare a proposal. It is also a source of information in establishing a baseline for labor and material requirements. Contractor proposals should include tasks and materials consistent with the RFP. When top management authorizes a response to an RFP, the estimating department reviews the RFP and top-management guidance and issues a "cost estimate request" to other departments within the company that will be involved in putting the proposal together. The estimating department generally has primary responsibility for coordinating the overall effort and authorizing the finalized proposal.

c. Contractors may also submit unsolicited proposals for requirements not yet reflected in any outstanding RFPs. When such proposals are pursued by a Government acquisition organization, the PCO will normally request a more detailed cost proposal before requesting an audit. The estimating process should be the same as when there is an RFP.

d. When production is contemplated on items not previously produced, the estimating department (or the related project management department) solicits a preliminary conceptual design from the engineering department. The preliminary design should be detailed to the point that individual parts can be identified and numbered. After the preliminary design has been completed and reviewed, a work breakdown structure (WBS) is prepared. The WBS is a matrix that organizes and describes proposed tasks and identifies the performing departments. This is best done before the details of the "cost estimate request" are finalized. (If conceptual design and detailed estimating must proceed concurrently, the contractor will have much greater difficulty producing a sound cost estimate.)

e. The planning process entails the preparation of delivery schedules, staffing projections, span-time requirements, and funding estimates. Planning is a cooperative effort that involves the estimating, engineering administration, and production planning and control departments.

f. "Grass-roots estimates" are basic estimates of labor, material, and other direct costs developed by the departments that will actually perform the work. In some cases, departments are asked to generate price estimates. When this occurs, special care must be exercised to ensure that sound purchasing considerations such as competition and quantity discounts are applied to the estimates.

g. The engineering department usually develops staff-hour estimates for all potential make items. These estimates are normally prepared at a very low level, such as by individual part. The manufacturing department uses this information with historical data to project labor requirements. These projections may be broken down by functional area and/or cost center (e.g., system analysis, design, fabrication, assembly, test, inspection, packaging, and shipping). A variety of techniques including manloading, statistical relationships, past experience, and judgment are used to produce staff-hour estimates. Additional information such as program schedules and configuration/performance characteristics from preliminary and final engineering design drawings may be worked into the estimates. In all cases, the method used to produce direct-labor estimates should be discernible, and supporting documentation should be available for verification.

h. A make-or-buy committee, normally chaired by the program manager, reviews required materials and associated labor, and determines which items should be produced internally. In some instances, decisions will be deferred until a contract award is made and further design effort completed.

i. The estimating department requests the purchasing department to provide estimates for all potential buy items. The purchasing department is provided with the best available specification data from the engineering and quality assurance departments. Delivery requirements are provided by the manufacturing planning department. Material unit prices (including purchased parts, raw material, buy-to-drawing items, and subcontract items) are obtained by the purchasing department from vendor quotations, current purchase orders, catalogs, and in some cases statistical methods. Material costs are usually developed by applying these prices to unit quantities in a bill or list of material provided by the engineering or manufacturing department. The purchasing and estimating departments are

usually responsible for determining appropriate material escalation factors. Escalation is either quoted by major vendors or projected using specific price indices.

j. Each estimate is reviewed and approved at the functional level. These estimates are then submitted to the estimating department which assembles the total proposal estimate. Estimating personnel integrate, adjust, and analyze estimates for accuracy and completeness. The cost estimate is summarized further by functional organization, major tasks, and other breakdowns required by the RFP. When all direct-cost elements have been received and properly classified, applicable direct-labor rates and indirect-expense rates and factors (e.g., labor overhead, material burden, and G&A expense) are applied to complete the basic cost estimate. These rates and factors may be developed by the estimating or accounting departments. Fee calculations are usually applied in accordance with RFP guidance and company pricing policy. The completed cost package is then reviewed for accuracy and reasonableness by program management.

k. Subsequent to initial pricing and the determination of profit factors, the proposal is reviewed by a management committee usually consisting of representatives from marketing, accounting, plant management, estimating, and the program office. The committee scrutinizes the reasonableness of estimates, overall acceptability, and compatibility with the company's business strategy. This process culminates in the formal release of the pricing proposal and supporting rationale.

D-404 Government Regulations

Several Government regulations provide guidance relevant to cost estimating:

a. Standard forms are no longer available for the submission of cost or pricing data or information other than cost or pricing data. The contracting officer may require submission of cost or pricing data in the format indicated in Table 15-2 of FAR 15-408, specify an alternative format, or permit submission in the contractor’s format. Table 15-2 provides a vehicle for the contractor to submit to the Government a proposal of estimated and/or incurred costs by contract line item with supporting information, adequately cross referenced, and suitable for detailed analysis. It requires a breakdown of cost by line item so that pricing data is easily understood and tracked. Information other than cost or pricing data may be submitted in the offeror’s own format unless the contracting officer decides that use of a specific format is essential and the format has been described in the solicitation.

b. FAR 15.403-4 requires contractors to issue a certificate of current cost or pricing data attesting that the information furnished was accurate, current, and complete as of the date of final agreement on price.

c. FAR 3.501 deals with investment pricing and addresses contractor attempts at "marginal buying" or "buying in." The regulation instructs contracting officers to ensure that contract shortfalls are not recovered in subsequent pricing actions when it is believed the contractor is using artificially low prices to "buy in."

d. Earned Value Management System (EVMS) Guidelines, as described in DoDI 5000.2, define contractor management system requirements on significant flexibly-priced contracts for selected items identified as major defense systems.

D-405 Types of Cost Estimating

a. The basic elements of cost are direct material, direct engineering and manufacturing labor, other direct costs, indirect expenses, and cost of facilities capital. The cost estimating technique selected will be dictated by the availability of historical evidence and Government requirements, and rarely is one estimating technique used to the exclusion of all others. For example, contractors typically use synthetic estimating in conjunction with parametric and comparative techniques.

b. Cost estimating methods may be categorized into six main groups: subjective, parametric, comparative, synthetic, global, and research and development. Further comments related to each of these follow.

(1) Subjective. This estimating method develops costs using experience, judgment, memory, informal notes, and other readily available data. Typically, these kinds of estimates are used in proposals when drawings have not yet been developed or the contractor is faced with limited proposal preparation time.

(2) Parametric. This method creates labor and material estimates by statistically analyzing and manipulating historical data to reflect current quantity requirements (see 9-1000). For example, previous raw material requirements on a price-per-pound basis could be used to project current proposal amounts. Parametrics uses one or more cost estimating relationships (CERs) to estimate costs associated with the development, manufacture, or modification of an end item. Special cost comparisons are required to validate parametric estimating systems. Variables used in CERs must be logically related and statistically valid. The rationale for selecting the variables should be well documented. Parametrics are often used to cross-check estimates developed using other estimating techniques.

(3) Comparative. This method develops proposed costs using like items produced in the past as a surrogate. Allowances are made for product dissimilarities and changes in complexity, scale, design, and materials. The comparative method can be used in conjunction with parametric estimating and can be used to develop adjusted unit costs while parametrics are applied to project the newly proposed quantities. Improvement curve applications are an example of comparative estimating.

(4) Synthetic. This method divides proposals into their smallest component tasks. Estimates are developed for component tasks which make up the whole. Synthetic estimates are normally supported by detailed bills of material.

(5) Global. This is a quick and subjective technique used to determine the advisability of continuing with a project.

(6) Research and Development (R&D). There are two basic approaches available for this difficult type of estimating. The first is a simple form of targeting R&D objectives in the context of a fixed budget. As in the preparation of routine budgets, the breakdown should be compatible with the cost-accounting system and procedures established to monitor and control expenditures. A second method of estimating R&D is a trial-and-error procedure involving an interchange of ideas and information including all available records of past R&D effort and experience. Because there are so many unknown factors involved in R&D effort, the potential for error in this type of estimating is especially great.

D-406 Validation of the Cost Estimating Method

a. Normally, contractors settle on a cost estimating procedure and use it repetitively. Validation of estimating procedures entails a comparison of cost estimates to actual costs for completed projects. If the actual costs accurately reflect the work content and historically approximate the estimates, then the estimating procedure should be considered reliable. Parametric-technique documentation should show that work being estimated is comparable to the prior work from which the costs are developed. Data is verifiable if it is generated from an adequate estimating system as described in 5-1204.1. Attention to validation of a contractor's estimating procedure is critical, and will save audit effort in the long run.

b. Deviations between estimated and actual cost are usually a consequence of human error or changed circumstances. Some common causes of deviations in estimates follow:

(1) Careless accumulation of supporting data.
(2) Incorrect design information.
(3) Unexpected delays causing premiums to be paid for overtime or material.
(4) Unexpected processing problems requiring deviation from the manufacturing plan.
(5) Failure to identify unrealistic bids from subcontractors.

(6) Failure to rework preliminary estimates to produce an accurate finished estimate.
(7) Reliance upon estimators who are not familiar with job processes.
(8) Making a "guesstimate" and then "padding" it to protect against unanticipated costs.
(9) Failure to consider price breaks on quantity purchases.
(10) Inappropriate use of learning curves or other techniques.

c. Controlling Estimate Deviations

(1) Project Simplification. A successful approach has been to divide a project into component parts of roughly equal size and generate estimates for the component parts. The summation of the component estimates typically produces fewer errors than the high-level approach.

(2) Random Errors. Some cost estimating errors occur at random and their causes may be difficult to identify. A determination of the magnitude of these errors needs to be made so that allowances in cost estimates can be provided for. Statistical analysis may be used (by the contractor and the auditor) in making this determination.

(3) Biased Errors. Other cost estimating errors can be identified to causes. Trends can usually be developed for these type of errors. Examples of biased errors and their causes follow:

(a) Fluctuation in labor and material costs caused by economic conditions.

(b) Variation in the cost of a machine, tool, or piece of equipment attributable to its size or capacity.

(c) Decrease in the cost of performing an operation as the number of units produced increases.

d. Contractor estimators should periodically monitor the accuracy of their estimates. Cost-to-noncost CERs should be monitored in the same manner as cost-to-cost CERs. For change-order pricing or for repetitive use, CER monitoring is critical. Significant deviation from actuals should alert the estimators to the influence of random and biased errors.

e. Contractors may use estimating methods that will cut proposal preparation costs. Cost benefit analysis must be performed to assure that the costs of implementing and monitoring new methods do not outweigh the benefits of reduced estimating costs. If analysis suggests that they do, then the matter should be pursued for potential cost-avoidance recommendations as discussed in 9-308.

f. The Truth in Negotiations Act, 10 U.S.C. 2306a, requires the contractor provide the Government with all facts available at the time it certifies the cost or pricing data as current, complete, and accurate (see 14-100). All estimating techniques employed must meet the same basic disclosure requirements under the act as discrete estimates. If a contractor uses a cost-to-noncost CER in developing an estimate, the data for the CER should be current, accurate, and complete (see 9-1000). The certification is not to the judgments employed in preparing the estimates, but to the factual data underlying the contractor's judgment.

D-407 Labor Cost Estimating Methods

D-407.1 Overview

a. Labor is a major element of direct cost and overhead allocation. Total labor cost is described by the equation:

Total Labor Cost = Rates X Labor Hours

Evaluation of the accuracy of labor-hour quantities requires a thorough understanding of a contractor's estimating methods. Commonly used labor estimating methods will be described in following sections.

b. Different terminology is frequently used to classify labor. The accounting and non-accounting classifications are as follows:

(1) Accounting. Auditors use the terms "direct" and "indirect" to describe the manner in which labor costs are charged to end-items or products. Direct labor such as factory workers and design engineers is closely linked and identifiable to end items. Indirect labor such as general engineers and supervisors is accounted for in overhead pools and distributed to a base. In this guidance, attention is focused on verification of direct labor requirements.

See 9-300, 9-500, and Chapter 8 for guidance dealing with the potential that contractors may under or over recover costs as a result of inconsistency in the classification and treatment of labor costs, and deviation from applicable Cost Accounting Standards.

(2) Non-Accounting. Engineers and manufacturing personnel use the terms "touch labor" and "non-touch labor" to distinguish between individuals who have direct hands-on involvement in manufacturing and testing processes and those who do not. Examples of touch labor personnel are production workers, test technicians, numeric control operators, and electronic assemblers. Non-touch-labor employees include some engineers, production control personnel, administrators, and logistic personnel. Usually touch labor is direct; however, not all direct labor is touch labor.

c. There is little uniformity among contractors in the way they categorize labor when estimating costs. However, direct labor can generally be grouped into the following three major categories.

(1) Manufacturing Labor. This is touch labor on a product or a service which advances the product toward completion. Most weapon systems contain metal components. Organizations engaged in metal manufacturing normally employ numerical control (NC) machinists, sheet metal fabricators, and welders.

Another common component of weapon systems is electronics. Electronic manufacturing typically encompasses printed circuit board (PCB) manufacturing, PCB assembly, cable and harness assembly, and final box or cabinet assembly.

Some contractors use processes which necessitate specialized labor. For example, nonmetallic manufacturing deals with plastics, injection molding, composite technology, and transfer molding. Other specialties include foundry, forging, and chemical processing.

Many of the above operations produce components that feed a final assembly. Frequently, final assembly areas will be dedicated to just one product such as a missile or aircraft. If the effort is large, labor may be categorized by major aircraft structure or worker trades.

In the shipbuilding industry, manufacturing labor is generally organized by trade such as electricians, pipefitters, welders, machinists, riggers, loftsmen, painters, grinders, burners, and carpenters. Other trades may be present depending on the particular shipyard.

(2) Support Labor. Support workers are responsible for the smooth operation and coordination of production activities. Production planning and control, quality inspection, material transportation, and warehousing personnel are examples. Other support labor activities ensure that manufacturing labor personnel have all the proper capabilities to manufacture products efficiently. Examples are toolmakers and equipment maintenance personnel.

A distinction is usually made between recurring (sustaining) and non-recurring onetime support labor. Recurring effort is a function of the number of units produced. Recurring labor assists manufacturing personnel by incorporating design changes, productivity improvements, and process control monitoring. Non-recurring labor does not depend upon quantity of units produced. Examples include tool design, instruction writing, and factory rearrangement. These activities are onetime occurrences. The separation of non-recurring and recurring labor is important and must be performed to obtain accurate estimates.

(3) Engineering Labor. Engineers are primarily involved with product research, design, and production support. Engineering labor comprises a significant portion of labor costs for high-technology weapon systems. The major disciplines of engineering are industrial, mechanical, electrical, chemical, and civil. Some subspecialties are hydrau-

lic, tooling, manufacturing, test, quality, reliability, and facilities. Engineers working in these specialties usually have degrees in one of the major disciplines. Technical cost estimates are frequently prepared by engineers.

d. Cost estimating is not an exact science. Quality cost estimates are possible, however, if pertinent historical information is available and expert judgment and experience are applied. Information used in preparing cost estimates includes:

(1) actuals for the same item or activity,
(2) actuals for a similar item or activity,
(3) labor standards with adjusted historical efficiency factors,
(4) standard cost with forecast adjustment factors, and
(5) tentative, judgmental, rough estimated hours, or hours based on a similar item/activity.

One of the initial steps in evaluating a contractor's estimating procedure is to ensure that accurate and reliable information was used to make estimates. Examples of information that may produce unreliable estimates are:

(1) Factoring support labor based on judgment rather than using earlier production contract history.
(2) Using Lot 1 experience in lieu of improvement curve projections from Lot 1 experience for estimates of subsequent production lots.
(3) Using a cost estimating method based on experience at one facility although the item proposed will be manufactured at a different facility.
(4) Employing an estimating method based on a supposed "industry-wide-accepted-and-used" method rather than in-house experience.

D-407.2 Labor Estimating Methods

a. Available labor estimating methods have application across a wide range of business functions and product designs. Seven general estimating approaches are normally used. Selection of the most appropriate estimating technique and use of high-quality estimating data are necessary to produce reasonable and accurate labor estimates. These seven methods, listed in relative increasing degree of accuracy, are:

(1) judgment and conference;
(2) comparison;
(3) unit method;
(4) factor method;
(5) probability approaches;
(6) cost-and-time estimating relationships; and
(7) standard time method.

b. Judgment and Conference. Good judgment is essential when using any of the seven labor estimating methods. In the absence of historical data, estimators may have to rely solely on judgment. When the judgment method is used, labor cost estimators are selected for their experience, common sense, and knowledge. An estimator must be objective in attempting to measure all future factors that affect actual cost.

Various techniques are used to enhance judgment. Sometimes judgmental estimating is done collectively. The conference method is a group consensus-method of establishing a collective estimate. This method usually involves representatives from various organizations conferring with the estimators to jointly estimate cost. Major drawbacks to the conference technique are the lack of analysis and a verifiable trail of facts from the estimate back to the governing assumptions. In spite of these drawbacks, the conference technique is widely used.

The major problem with both the judgmental and conference techniques is the influence of personal bias. Forecasts can be influenced by a person's assigned role, position, and special interests. Depending upon the degree and direction of personal bias, estimates may be high or low.

Judgment must be applied in deciding which estimating relationships will be used. Secondly, judgment is important in determining the impact of technology and the type of adjustments that must be made. Judgment is also required to decide whether the results obtained from estimating relationships are reasonable in comparison to the past cost of similar items.

c. Comparison Method. This method compares items being estimated to items of similar configuration (and known cost) to produce labor estimates. The comparison method is similar to the judgment method, except that it attaches a formal logic. The comparison method is represented by the following algebraic equation:

Estimated Cost (New Design) = Historical
Cost (Similar Design) + Adjustments

An estimator confronted with the task of projecting labor costs for a new product design should investigate similar product designs for which historical cost data exists. To be of use, similar designs must closely approximate the technical characteristics of the new design. Allowances are made for product dissimilarities in complexity, scale, materials, function, and other parameters. A comparison estimator makes judgmental additions and subtractions to costs of a similar design to obtain new cost estimates. To produce accurate cost estimates, the estimator must understand the factors and relationships that have an impact on product costs. For example, when using the comparison method to estimate the cost of a new electronic assembly board design, it is important to understand that number and type of electronic components are the critical factors, not overall board size.

d. Unit Method. This method of labor estimating relies on an accumulation of past experience which is divided by a cost driver to produce a cost per unit. Other terms used to describe this method include order-of-magnitude, lump sum, module estimating, and flat rates. One typical example of unit estimating is "labor cost of fabricated components per pound of casting." Another example is "support labor hour per manufacturing labor hour."

e. Factor Method. A logical extension of the unit method of estimating is to improve accuracy by using more than one factor. Use of separate factors for different cost items should improve results. For example, building construction can be estimated by using a unit factor such as dollars per square feet. However, an improved method might be to use separate unit factors for heating, lighting, electrical, and other elements. The individual costs are summed to obtain total labor costs.

Comparison, unit, and factor methods typically use only selected historical data. The auditor should make sure that historical data is representative and complete. The contractor should be able to provide rationale for including or excluding historical data.

f. Probability Approaches. This estimating method makes provision for uncertainty in the estimating process. Other approaches typically produce discrete estimates. For example, a contractor may estimate that 365 staff-days are required to complete a test-stand. Using a probability technique, the same estimate would be expressed as follows:

"The contractor is 75 percent certain that it requires 365 staff-days to complete the test-stand."

Probability approaches attempt to compensate for random occurrences and dependency between events. A good example of dependency is wall construction. A normal sequence of events in wall construction is studding, plumbing, electrical, sheet rock, and painting. Each stage is dependent upon a prior stage being completed. Probability approaches make recognition of the fact that specific labor costs can be affected by other activities which must first occur.

Computer simulation, Monte Carlo techniques, and PERT are examples of probability approaches. Input estimates for these approaches are derived from the other estimating methods. Auditors must carefully review the base for the input estimates. Final estimates result from the probability approach's treatment of the input estimates. The mathematical and statistical characteristics of probability approaches can be complex and, consequently, subject to high risk of error.

g. Cost-and-Time Estimating Relationships. Statistical estimating methods can produce mathematically fitted functions called cost estimating relationships (CERs) and time estimating relationships (TERs). CERs and TERs are developed by mathematically relating cost or time estimates to a cost driving feature of the product or manufacturing environment. Examples of cost drivers include number of transformer wire leads, quantity of components mounted on a printed circuit board assembly, number of wires making up a cable assembly, end item weight, or cumulative production quantity of any product.

The estimating relationship is an equation with two kinds of variables. The equation provides the ability to predict a dependent variable on the basis of knowledge of one or more independent variables. The relationship between the variables must be a logical one. Whether the relationship is cost-to-cost or cost-to-noncost, the contractor should be expected to demonstrate that it is logical. A variable whose value is to be predicted is called the dependent variable. The cost or time driver is the independent variable. The estimator using experience and judgment identifies potential cost drivers and mathematical relationships. If they exist, mathematical relationships between the two kinds of variables can take on many forms including linear and exponential.

To develop CERs and TERs, historical data on both dependent (labor) and independent (cost drivers) variables must exist. Regression analysis is then performed to determine if a mathematical relationship exists between the variables. Mathematical relationships are evaluated by including and excluding various cost drivers until "best fit" relationships are identified. DCAA has issued extensive instructions in the use of regression analysis. Refer to Appendix E for more information.

Common CERs and TERs are described by improvement curves, linear relationships, and power law and sizing models.

(1) Improvement Curve. Improvement curve theory is based on the principle that the time required (labor) to produce successive quantities of a product decreases with (a) additional experience and (b) introduction of improved methods and tools. The theory supporting improvement curve modeling is well established. Workers accrue manipulative skills and familiarity with the details of the job. Improved plant layout and tooling impact productivity. Process planning refines the work into orderly and producible stages. Raw materials, parts, and subassemblies are purchased in more suitable designs, sizes, and shapes. Shop organization and control practices are revised to address production problems. The improvement curve theory holds that improvement will be a constant percentage over doubled quantities.

Mathematically, the improvement curve (unit theory) is expressed as:

$$y = ax^b$$

where

x = the unit (or lot) mid-point

y = the direct cost (or hours) for unit x or the average direct cost (or hours) for the lot whose mid-point is x.

a = a coefficient depicting the direct cost (or hours) for the first unit

b = the improvement coefficient

An improvement curve normally displays a negative slope which reflects a decrease in required time for successive product quantities. Since the reduction is primarily due to increased knowledge and skill, the curve is also referred to as the learning curve, experience curve, or progress curve. DCAA has issued extensive guidance on the use of improvement curves. Refer to the instructions to EZ-Quant for more information.

(2) Linear Relationships. The relationship between labor and the cost driver (dependent and independent variables) is frequently linear. A linear relationship can be described graphically by a straight line. The representation of a single independent linear equation is:

Labor Cost (or Time)
= Coefficient X Cost
Driver + Constant

where:

Coefficient = the ratio of the change in Y associated with a given change in X (referred to as the slope of the line)

Constant = the value of Y when X is zero (the Y intercept)

Cost or Time = the dependent variable (the variable to be predicted)

Cost Driver = the independent variable

As the quantity of the cost-driving variable changes, cost or time also changes proportionally.

Linear CERs and TERs are not just limited to a single independent variable. When developing the equation, the cost estimator may choose an infinite variety of variables until the best correlation is found.

(3) Power Law and Sizing Model (Cost Capacity Relationship). This theory models the relationship between similar products of different sizes, weights, and volumes, and takes into account "economy of scale." The following equation provides the mathematical relationship for comparison on this basis:

$Cb = Ca(Qb/Qa)^X$

where:

Ca = actual cost for reference size Qa

Cb = estimated cost for new design size Qb

Qa = size of reference design a

Qb = size of new design b

x = correlating exponent $O < X < 1$

For example, a contractor has determined from historical records that machine-component manufacturing-labor costs increase by half as the machine-component weight doubles. The correlating exponent (x) in the above equation is determined as follows:

Rearrange the equation to:

$Cb/Ca = (Qb/Qa)^x$

Based on data given, the following is obtained from the equation:

Cb/Ca = 1.5 and

Qb/Qa = 2

Substituting these values into the rearranged equation in (2) above, the equation is:

$1.5 = 2^x$

Using logarithms, the exponent (x) is found as follows:

x = log 1.5 / log 2

x = 0.585

The contractor's records indicate that a 1,000-pound component was completed in 1,000 hours. The new component to be estimated weighs 1,250 pounds. Substituting into the equation gives the following results:

$Cb = 1{,}000 \text{ hrs } (1{,}250 \text{ lbs}/1{,}000 \text{ lbs})^{.585}$

Cb = 1,139 hrs

Note that a 25 percent increase in weight results in only a 14 percent increase in manufacturing hours.

h. Standard Time Method. The standard time method is the most precise technique for estimating manufacturing labor. The basis for the manufacturing labor estimate is a "labor standard." Contractors do not bid standards but bid labor cost based on standards which

are adjusted to reflect production inefficiencies. Adjustments take the form of a productivity factor. The following algebraic equation represents this concept:

Estimate of Actual Labor =	Standard Productivity	/ Expected Factor

(1) Standard. As discussed above, a standard is a measure used for making judgments or as a basis for comparison. A labor standard is a unit of time required to accomplish a work task. Industrial engineering work measurement techniques (see D-407.3) are used to develop engineered labor standards (ELSs).

Engineered labor standards provide an unbiased assessment of a "fair day's work." The term "engineered standards" is frequently misapplied. True engineered standards are not based on history, judgment, guesses, comparison, or opinions.

Cost estimators will determine a product's total ELS content by summing all the ELS for assemblies, subassemblies, manufactured components, and other efforts required to build a product. The ELS content summation process is roughly analogous to adding up material costs in an exploded assembly/subassembly BOM. Total ELS content will not remain stable for a product over an extended period of time. ELS apply to specific methods, machinery, tools, and automation available at the time when the standards were established. If contractor management does not estimate any reduction in ELS, it is implied that no attempt will be made to improve operations.

Engineered standard time does not relate to any particular unit of production. An unhindered average skilled worker can achieve an ELS almost from the first try. Most cases of inefficiency in the factory are attributed to management deficiencies. Work measurement techniques do not recognize the concept of achieving standard at a specific cumulative production point (e.g., 1000th unit). The standard attainment method, discussed in D-407.3b, adjusts an efficiency factor to a production unit. The efficiency factor is applied to a standard to obtain estimated labor cost.

(2) Routings. Routing sheets provide a detailed breakdown of operations required to process raw material and/or produce parts and the time required to perform each of these operations. Each product part number manufactured internally by a contractor will have a routing sheet. If the contractor uses a work measurement system, each step will have a description and standard time. Contractor management can use this information to plan, schedule, and control the shop.

Proposed labor costs based on standards can be verified against information contained on routing sheets. Use of a statistical sample will expedite the verification process. Verification frequently reveals numerous problems, including addition errors, erroneous adjustment factors, and missing labor standards. Without verification, contractors may substitute poorly derived estimates in lieu of estimates based on valid labor standards.

(3) Audit. Duplication and inclusion of unnecessary standards are difficult to detect. Make/buy parts should be carefully scrutinized to verify that double counting has not occurred. Alternate routings which include extra operations may be listed on routing sheets. Their existence provides flexibility to handle unusual circumstances such as machine breakdown, critical machine overload, or product quantity variations which affect machine selection. Inclusion of labor standards for alternate routings can produce duplication and inflation of labor estimates.

D-407.3 Work Measurement Techniques

Work measurement is a generic term used to refer to the setting of a time standard by a recognized industrial engineering technique, such as time study, standard data, work sampling, or predetermined motion time systems.

a. Standard Time Method Work Measurement Techniques. Work measurement techniques determine the time required to do a task. To account for differences in factory condi-

tions and employees, a universal labor standard was defined as follows: the time for an average skilled worker to complete a task under average conditions, working at an average pace, and using a prescribed method. Average is not defined in a mathematical sense but has the meaning of typical or expected. There is a misconception that a standard reflects what a "perfect" worker can achieve under "ideal" conditions. By definition, ELSs relate to an "average" worker and "average" conditions.

Techniques for establishing labor standards are stopwatch time study, predetermined motion-time data, work sampling, and standard data.

(1) Stopwatch Time Study. The use of a stopwatch time study to establish ELSs requires:

(a) observing the task and subdividing it into motion elements;

(b) timing and statistically establishing an arithmetic average for the elements;

(c) normalizing, rating, or leveling the elemental times; and

(d) applying an allowance for PF&D.

Normalizing, rating, or leveling are used to adjust the observed time to a comparative standard. Operators will perform a task at a pace above normal if they have superior skills or are intentionally rushing. Conversely, operators will perform at a pace below normal if they are not totally familiar with the job or are purposely slow. To compensate for the difference in pace, the Industrial Engineer must rate the performance of his subject by established criteria.

(2) Predetermined Motion-Time Study. There are a number of predetermined motion-time systems available including Methods Time Measurement (MTM), Work Factor Systems (WOFAC), and Basic Motion-Time (BMT) Study which break manual tasks into basic motions. Predetermined time systems were established to avoid the difficulties of timing and normalizing. Observing the task and subdividing into elements are required to classify all motions into elemental components. Unit times have been tabulated for elemental components according to factors such as distance, degree of muscle control required, precision, and strength. The ELSs are completed by application of a PF&D factor to the elemental component unit time.

(3) Work Sampling. Work sampling is used to establish standards for:

(a) large work crews or

(b) long-duration job cycles with irregular patterns.

Continuous observation of the worker is not required with work sampling. A statistically significant quantity of worker observations is made so that proportions of time devoted to various activities can be determined at given confidence levels. This technique produces the least accurate ELSs.

(4) Standard Data Systems (also referred to as Standard Time Data System or STD). These systems provide labor standards prior to the actual performance of work. (Other methods of establishing standards require direct observation.) Because of this characteristic, standard data systems are important in the cost-estimating process.

There are two kinds of STDs:

(1) synthetic and

(2) analytical.

Synthetic STDs use a catalog of individual operation ELSs which are added to create a total labor standard for a manufactured part. An analytical STD uses a mathematical formula to establish the total labor standard for a manufactured part. Both require using ELSs previously developed via time study, predetermined motion time systems, and work sampling.

Synthetic STD combine separate ELS. Many tasks are repeated frequently, and are identical regardless of the product being manufactured. The time standards for these tasks, once established by a work measurement specialist, can be cataloged and referred to each time they are required. Examples are loading/unloading of a machine, driving a rivet, or removing a part from a fixture.

Establishing a synthetic data system ELS requires an industrial engineer to determine all the required manufacturing steps. In addition to establishing labor standards, this procedure is necessary to determine process routing. The engineer refers to the STD catalog

for the appropriate manufacturing step's standard time. The ELS for a manufactured part is a summary of all the standards for the separate manufacturing steps.

Analytical standard data systems are similar to CERs (D-407.2g). The difference is that labor standards are substituted for historical actual hours during the development process. Sets of previously established labor standards for a product and related possible cost driving characteristics (parameters) are gathered. Regression analysis is then performed to determine the mathematical relationship between the developed labor standard and the cost drivers. Numerous relationships (determined by including and excluding various cost drivers) may be tested until a best fit is established.

STDs are derived from ELSs previously developed by direct observation of manufacturing operations. A significant problem is that contractors frequently lose or misplace this data. STD systems require periodic maintenance and auditing to ensure accuracy. Retention of original data is extremely important to both the maintenance and audit functions.

Unmaintained, STD system accuracy will deteriorate because of changes in the work environment. An effective STD requires that adjustments be made for changes in machinery, tooling automation, and procedures. Since ELSs are specific to machines and tools, it is extremely important that all changes be reflected in the standards. Periodic audits are required to ensure that system accuracy and reliability are maintained.

STDs not based on engineered standards are suspect. Guesstimates, standards derived from technical literature, will likely produce unreliable results.

b. Standard Time Method Productivity Factor. The expected productivity factor is part of the Estimated Labor Time equation for the Standard Time Method. Standards assume a degree of efficiency for work accomplished by an average worker under average conditions. Products may be manufactured under conditions that make standards unachievable. Productivity factors adjust product standard times for varying work conditions and other influences.

Productivity factors are derived from contractor historical timekeeping data. Productivity factors are estimated by adjusting historical efficiency for various influences and special circumstances. Adjustment factors are developed using the unit method, and improvement curves. Expected productivity is described by the following equation:

Expected
Productivity Factor = Historical
Efficiency X
Adjustment

(1) Historical efficiency is normally developed for a specific period. The efficiency factor is the ratio of standard hours earned to actual hours spent on an increment of work. Earned hours is the time in standard hours credited to a worker (or group of workers) who completes a given task (or group of tasks). When earned hours equal actual hours, efficiency equals 100 percent. Efficiency is described by the following equation:

Efficiency Factor = Earned hours
(Standard/
Actual hours)
(elapsed time)

Efficiency factors can be developed for any level in a contractor's organization. Auditors should verify that an appropriate efficiency is used for the organizational level most closely identified with the actual work. For example, using a plant-wide efficiency for estimating labor for an individual department or vice versa will distort the labor estimate.

(2) Adjustments to historical efficiency are required to project expected from historical costs. Normally, contractors lower productivity factors based on the belief that the estimated product is unique and differs from the products which generated the historical basis for its estimate. These adjustments require special audit attention.

The impact of different production quantities on productivity is generally estimated by:
(a) the standard attainment and
(b) first unit estimating methods.
To develop an estimate using these methods, historical realization factors and their related cumulative production quantities are collected. An improvement curve is developed by means of regression analysis. The x-intercept is the standard attainment point (or the cumulative production quantity) when realization equals 1.0. The first unit estimate of realization is the y-intercept (or the point where the cumulative production quantity equals 1.0). Both approaches treat the curve slope similarly, but they differ in how they express efficiency in relation to the cumulative production unit.

(3) Standard Attainment Method. This method assumes that a cumulative production quantity exists where the standard will be achieved. Achieving standard means achieving an efficiency factor of 1.0. Contractors will speak of 100th, 250th, or 1,000th unit standard, which means they expect to eventually achieve efficient production after producing that quantity of a product. The productivity factor is developed from an estimate of the expected realization. The realization factor is developed by projecting backwards from the point where realization equals 1.0 (at the standard attainment point) to the lot mid-point of the product being estimated.

Auditors are cautioned to evaluate how the standard attainment technique is applied. Contractors may fail to substantiate method parameters such as slope and realizations with historical data. Frequently, contractors assert that there is a traditional standard attainment point, e.g. 1,000 units. There is usually no validity to this assertion since each company has a unique rate of improvement.

Another caveat has to do with the slope of the curve. In typical improvement curve applications, steep rates of improvement (100 percent being flat, 80 percent steep, and 60 percent very steep) are projected forward from actuals which reduces estimated cost. In the standard attainment estimating technique, because the estimator projects backward up the curve, steeper curves produce significantly greater estimated costs. Contractors may state they are being aggressive by projecting steeper curves than are historically supported. Such a statement is usually false.

(4) First Unit Estimating Method. This method is essentially the opposite of the standard attainment approach. As previously discussed, historical information is used to derive the typical realization factor for the initial production unit. The realization factor is developed by projecting forward from the first unit realization factor at the expected improvement curve slope to the product lot mid-point. Labor cost is estimated by multiplying the standard labor content by the lot mid-point realization factor.

D-407.4 Military Standard (MILSTD) 1567A

When made a contractual requirement, MILSTD 1567A requires contractors to implement a proper work measurement system. Contractors are required to meet predetermined minimum work measurement system requirements of accuracy, coverage, consistency, documentation, and audit. Any weaknesses inherent in the work measurement system which have an impact on the accuracy of labor estimates must be fully documented and provided to the Government. Additional information pertinent to MILSTD 1567A is as follows:

a. Applicability. MILSTD 1567A establishes a contractual requirement for an integrated and disciplined work measurement system on manufacturing operations. When applied with a positive management commitment, experience shows that MILSTD 1567A has achieved improved productivity and cost control. MILSTD 1567A became effective March 11, 1983.

It applies to prime production contracts exceeding $20 million annually or $100 million cumulatively. When the standard applies to a prime contract, subcontracts exceeding $5 million annually or $20 million cumulatively are also covered. Ship construction, R&D, and service-type contracts are exempt.

b. Requirements. Under the standard, contractors are required to:

(1) Establish and maintain a documented measurement system using recognized techniques such as time study or standard data to derive at least 90 percent confidence that the hours are accurate within 10 percent.

(2) Prepare a schedule to achieve the stated precision limits for at least 80 percent of all touch-labor categories.

(3) Include allowances in production standards for PF&D.

(4) Measure touch-labor efficiency as a ratio of production standards to actual hours.

(5) Establish periodic labor efficiency and variance reporting requirements for each work center to include causes of significant variances and corrective action taken.

(6) Identify major elements which comprise realization factors used to modify labor standards.

(7) Use engineered labor standards as an input for budgeting, estimating, planning, and performance evaluation.

(8) Conduct an internal audit of the work measurement system at least annually to ensure compliance with the requirements of the standard.

(9) Retain a copy of any audit findings for at least two years and make audit findings available to the designated Government representative for review upon request.

(10) Conduct operations analyses and methods improvement programs.

(11) Have a formal written policy covering the use of the work measurement system.

c. Definitions

(1) Engineered Labor Standards (ELSs). The time it should take, derived from an engineering method, for a trained worker or group of trained workers working at a normal pace to produce a described unit of work of an acceptable quality according to a specified method under specific working conditions. It is derived from a complete, objective analysis and measurement of the task. The generic methods which are used to develop ELSs are direct time study, predetermined time systems, work sampling, and standard time data. Note also that ELSs are not only attainable but also maintainable over a long period of time. ELSs include PF&D allowances which vary according to the task. (For example, a welder would have a different and higher fatigue allowance than one who monitors the operation of a machine.)

(2) Realization. The actual touch labor hours divided by the standard labor hours for the effort completed.

(3) Variance. Includes not only worker inactivity but also delays caused by material shortages, machine downtime, and improper scheduling.

(4) Type I Standard. A standard which is statistically valid. It may consist of actual time studies within the contractor's organization or buildup of published times for given operations.

(5) Type II Standard. Engineering estimates of the time required to perform a given task. The distinction between a Type I and Type II standard relates to the question of accuracy and verifiability. That is, a Type I standard for a given task is not necessarily lower than a Type II, even though the purpose of MILSTD 1567A is cost reduction, and the general direction is from Type II standards to Type I standards.

(6) Touch Labor. "Hands-on" effort actually involved in the manufacturing (e.g., fabrication and testing) process.

d. Significance to the Auditor. MILSTD 1567A should benefit the auditor in his/her evaluation of proposed labor costs and operations audits. Relative to improvement-curve applications, manufacturing improvement consists of two components. First, productivity increases as the contractor overcomes production difficulties in parts availability, scheduling, quality, and workmanship. Concurrently, product and methods improvement in tooling, portability, design, and factory layout further reduce labor hours.

MILSTD 1567A earned-hour standards must reflect what labor is required to build the current product design with the existing production methods, assuming no production difficulties. Detailed variance analyses must identify causes of existing inefficiencies and corrective action plans to overcome them must be prepared.

When the contractor uses actual history to project labor hours, proper use of the variance analyses could eliminate existing inefficiencies in forward pricing. For example, a contractor may attribute the difference between actual and standard hours to parts shortages. The plan to improve the warehouse integrity by incorporating a bar-code material tracking system or by improving other operating practices would relate to a specific time frame. Thereafter, the curve should project only standard hours to reflect additional learning caused by design and methods improvements.

If the contractor uses a theoretical unit standard to project labor hours, these same analyses will provide insight regarding the horizontal positioning of the theoretical unit. It is not logical that many contractors should be using the same unit standard. Each has different problems, methods of resolution, timetables, and rates of production. Whether new manufacturing processes or design changes are involved, the contractor is obliged to reconcile current conditions with those proposed. Differences, as explained in the contractor's rationale, should be evaluated for reasonableness.

D-408 Material Cost Estimating Methods

D-408.1 Overview

As noted in D-101b, two major components of contractor proposals are labor and material estimates. Material is the cost element that is usually the easiest to estimate and check. It can normally be seen and touched in the end product. The material component may vary anywhere from 30 to 70 percent of the total cost depending on the type of contract (e.g., production, development, or research).

a. Material costs are normally divided into three major categories: direct, indirect, and burden.

(1) Direct material consists primarily of raw material, purchased parts, subcontracted items, and interdivisional transfers. The term "direct" is applied to this material since it can be readily identified in the end product.

(2) Indirect materials are those items necessary to produce the product but do not become a physical part of the end item. Materials such as lubricants, welding rods, and shop supplies are good examples. Because their direct usage levels are difficult to determine, indirect materials are usually allocated through indirect expense pools.

(3) Material burden is a term used to describe the indirect activity associated with converting purchased material into an end product. Costs related to material procurement and handling are collected in material burden centers. At smaller contractors, material burden may be included in general overhead expense pools rather than in a separate material overhead account. At larger contractors, material burden centers may be organized along functional lines that will separate rates for procurement, handling, etc.

b. The major categories of direct material are:

(1) Raw Material. Bulk or unfinished materials that require processing or are involved in manufacturing processes. Examples include sheet stock, castings, forgings, bar stock, wire, printed circuit board materials, epoxies, resins, paints, and solvents.

(2) Purchased Parts. A component, or subassembly, purchased as an off-the-shelf item which becomes an integral part of the product.

(3) Subcontracted Material. Material manufactured to specifications, drawings, or standards outlined in a subcontract. Subcontracted material may be low or high cost. Subcontracted low-cost material typically results from a contractor's inability to produce the part due to capacity constraints, quality problems, special processes, unique assembly techniques, or other manufacturing limitations.

High-dollar subcontracted material items, by Government contract law, require special treatment. When purchases of specific items exceed certain dollar thresholds, contractors are required to perform price analyses or audits. In some circumstances, they may arrange for an assist audit by DCAA at a subcontractor location.

(4) Interdivisional or Interplant Transfers. Materials that are purchased from another business unit of the contractor.

(5) Vendor Charges/Tooling. Costs incurred by a supplier to set up or prepare for production. These charges usually consist of production line set up and the fabrication of unique tools needed in manufacturing processes. Examples include drill fixtures, cable jigs, cable potting molds, and printed circuit artwork.

(6) Packing Material. Material required to package the product for safe delivery. Special packaging requirements are normally dictated by contractual provision and classified as direct material.

(7) Minor Material. Low-value items such as nuts, bolts, fasteners, and wire that are not cost effective to estimate in discrete quantities. Also known as line stock items, they are usually proposed as a percentage of direct material, or as a rate per manufacturing hour. They may, however, appear in detailed bills of material as individual line items.

(8) Freight. Estimated contractor delivery costs that are proposed either as a direct item or as a percentage of direct material.

(9) Other Direct Costs. These items are not readily identifiable as part of the product and are not subject to labor or material indirect expense loadings. Examples include computer timesharing, technical publications, photographs, and blueprints.

c. Recurring and Nonrecurring Costs. Major material cost categories may also be described as recurring and nonrecurring costs:

(1) Recurring Costs. Those costs which are variable and are dependent upon the quantity produced. Examples of recurring costs are direct materials used in production, contractor set-up charges, and charges associated with tooling that must be accomplished with each production run. While not repeated on each unit manufactured, set-up charges are repetitive for each release and, as such, must be amortized into unit cost. Most vendors will amortize set-up charges before quoting unit prices; others itemize them separately.

(2) Nonrecurring Costs. Those costs which represent the fixed effort expended to produce an item regardless of quantity. Nonrecurring costs consist primarily of vendor tooling and engineering/testing charges.

(a) Vendor Tooling. Vendor or subcontractor costs to make tools needed to produce materials or fabricate parts. Vendor tooling can be categorized as either proprietary or accountable tooling. Proprietary tooling is the property of the vendor. Examples are forging dies, extrusion dies, patterns, and molds. Accountable tooling will eventually become the property of the purchaser or Government. Tooling possession is obtained after the vendor no longer requires its use. Tooling costs are normally applicable to subcontracted parts, but may be encountered with purchased parts.

(b) Engineering/Testing Costs. These costs are associated with vendor design effort, development activities, qualification testing, or first article qualification. Testing charges frequently include the cost of components used in tests that either destroy or impair article function.

Except for the eventual replacement of tooling because of wear, nonrecurring costs are onetime in nature and may suffice for several follow-on pricing actions. To avoid duplication, these costs should be shown separately and not included in the unit cost.

D-408.2 Estimating Methods

The methods employed to estimate material quantities and costs are largely dependent upon material type and information available at the time of proposal preparation. Material requirement data may range from detailed part lists to rough estimates based upon the available history on like items. Regardless of the method employed, estimates will be difficult to make and will be subject to significant error when a major portion of the materials represents unique items that have not been previously produced.

Direct material constitutes the major portion of material cost and requires expert technical knowledge to estimate. IT data bases are used in developing models which may be used in parametric cost estimating systems, and for development of compara-

tive---similar to---bills of material when discrete bills of material are not available. Indirect material and material burden are largely accounting issues.

The general procedures associated with estimating direct materials are as follows:

(1) Estimate quantity requirements.

(2) Determine raw material requirements; convert measurements as necessary; and estimate actual yields.

(3) Estimate current prices.

(4) Adjust estimated prices for cost trends and quantities and project total cost.

(5) Document procedures and methods utilized in the estimating process.

D-408.3 Bills of Materials (BOM)

Perhaps the most frequently used method of direct material estimating is the priced BOM. Most auditors are familiar with this mechanism and often use the BOM as a basis for sampling material costs. The auditor should evaluate both the unit prices reflected in a priced BOM and the material requirements aspect. At some contractor locations, there may be more than one type of BOM. The original bill of material, known as an engineering BOM, will list all of the parts required to produce the end products. In some cases, engineering may be unable to estimate certain actual-quantity requirements such as the length of a wire. To address detailed material requirements, manufacturing may develop a manufacturing BOM which is used as a manufacturing aid.

The BOM is a comprehensive list of all parts required to produce an end item. At large contractors, BOMs are loaded into computer data bases which provide the capability to request information in many formats. Additional information such as description, when used, as well as item number and dollar value may also be contained in the data base. A BOM can be requested for an end product or any subassembly. The two most common BOM sorts are as follows:

a. Part Number Ascending Order. This BOM is "exploded" and sorted by ascending part number showing total quantity required for each part of an end item. A detailed report may give further information including where the part is used. Figure D-4-1 illustrates a part number ascending order BOM.

b. Assembly/Subassembly "Christmas Tree". This BOM is hierarchical and lists major assemblies followed by all levels of subassemblies. The assembly/subassembly BOM is often referred to as a "Christmas Tree" BOM because of its pyramidal or Christmas-tree shape. Figure D-4-2 illustrates the assembly/subassembly BOM. Figure D-4-3 is another representation of the assembly/subassembly BOM. This representation is often referred to as an "indented" BOM.

Each format has advantages and disadvantages. Hierarchical BOMs permit tracing material assemblies to drawings, and accounting for the use of each part. Hierarchical BOMs do not communicate total part requirements; therefore, sampling is difficult because other formats may not be available. Part number ascending order BOMs disclose total requirements and pricing, but do not describe product organization and composition; therefore, auditors will normally have difficulty in determining actual part requirements.

Regardless of the format employed, the BOM is an essential tool in validating material requirements and serves as an intermediate vehicle in tracing requirements to original drawings. The drawings disclose part listings and show how the parts are integrated to form completed stages or finished products. Frequently, an estimating department will price a BOM to be used as supporting data. With the exception of tooling and other minor additives, a priced BOM should be comprehensive. Costs not shown in the bill of material can be verified through vendor tooling quotes or historical analyses.

D-408.4 Routing Sheets

A routing sheet is usually a process description showing discrete manufacturing operations and associated times. Some routing sheets will also disclose material quantity, tools, fixtures, and labor standards. They may be referred to as operations sheets.

Routing sheets are a main source of labor information and are also discussed in the labor section (D-407.2h). Routings may be used as a substitute for BOMs for cost-estimating purposes. Care should be exercised when routing sheets are used in conjunction with BOMs to ensure that costs are not duplicated.

Figure D-4-4 presents an example of the routing for the part number 8876902. In this example, there is only one line item, RS3000197, which is listed under product structure.

D-408.5 Engineering Drawings

Material requirements are normally determined from engineering drawings. To properly evaluate proposed material quantities, it is important that the auditor understand engineering drawings.

An engineering drawing graphically shows the configuration of a part or assembly. It can be a sketch drawn by a draftsman or generated by a Computer-Aided Design (CAD) system. The trend at most contractors is toward CAD. With CAD, operators can develop complete drawings using a light pen. A good feature of CAD is that drawings can be recalled from computer memory and changed with minimal effort. Regardless of method, drawings are essential in all phases of design and manufacturing.

Typically, engineering drawings are classified as either level 1, 2, or 3. These levels represent a natural progression from conceptual design to production. Level 1 drawings address conceptual and development designs; level 2 drawings are concerned with production prototypes and limited production quantities; and level 3 drawings are production oriented. A drawing level or various combinations of levels may be established by a contractor, or specified in a contract.

The drawing level and quantities required to satisfactorily depict product function and material requirements are determined by design complexity, product sophistication, and engineering judgment. Drawings illustrate and provide essential information needed to design and manufacture a product including:

(1) physical characteristics,
(2) dimensional and tolerance data,
(3) critical assembly sequences,
(4) performance ratings,
(5) material identification details,
(6) inspection tests,
(7) evaluation criteria,
(8) calibration information, and
(9) quality control data.

All product components should be supported by engineering drawings. All drawings should be tied to the end item drawing with major subassemblies and components identified. Drawings should be available to the lowest level unit part.

Normally, engineering drawings use the hierarchy or level concept. Each assembly or subassembly will have drawings identifying all components and additional levels of subassemblies that constitute the upper-tier product. For complex projects, as many as 10 levels of drawings may be used, beginning at the component or manufactured part level and culminating in an assembly or subassembly. Manufactured components may have material reference drawings which further define forging, casting, and similar requirements. In short, all parts required to manufacture an end-item will be shown in drawings along with their relationship to the next higher-level drawing.

Each drawing should contain certain basic information which can be used by the auditor to assess material requirements. Figure D-4-5 is an example of an engineering drawing.

D-408.6 Material Allowances

Material allowances, also known as material adjustment factors, are the difference between the product material requirement and the actual material consumed during manufacturing. The material-allowance factor represents allowances for scrap, attrition, rework, and other factors that influence material cost and cannot be precisely estimated because of incomplete BOMs and future design changes in subcontractor delivery requirements.

Contractors have used various approaches to estimate material allowances. Some of these approaches are acceptable, while others are questionable. Material allowances can be applied to an individual part and be included in the BOM quantity. In other cases, it may be applied as a lump sum to the total material requirement. The basis of these adjustment factors should be closely scrutinized to ensure they are reasonably valid and that there are no duplications. Historical evidence should be available to support the factors. However, the existence of history should not be considered as automatic evidence of validity because the previous losses may have occurred under different circumstances. Factors frequently used in pricing actions should be periodically reviewed under separate assignments. Section 9-407 further addresses material-allowance factors.

a. Scrap is defective material that cannot be used in its present condition. Scrap may result from operator error, unacceptable vendor material, handling damage, or out-of-control processes (such as poor heat treatment). Scrap allowances should normally be based on historical data. Reduction in scrap should be expected as learning occurs.

b. Process loss is the difference between the amount of material required at the beginning of a process and the final amount used for the finished part. In comparison, scrap loss is defective material while process loss is the material lost during the manufacturing process. Process loss may be estimated using an overall factor or separate factors for major sub-elements such as trim loss, chip loss, and excess casting material. BOM quantities for items manufactured from raw material such as sheet metal, bar stock, and composite frequently are adjusted to include process loss factors. Also note that raw-material items like sheet metal and bar stock are generally only available in certain industrial standard sizes and lengths. As a result, estimating factors are frequently applied to the finished material requirement to convert from industry standards to proposed sizes and lengths in order to determine the amount of material to be purchased.

(1) Process Trim Loss. This occurs when a rough cut is made from the standard-size purchased material. Because the dimensions of the rough cut are not perfectly compatible with that of the standard size, the leftover material is commonly known as process trim loss or residual loss. In some instances, it can amount to a large portion of the material required for the end product.

(2) Process Machining Loss. This is the difference between the rough-cut size and final size. The rough cut part may be bored, milled, ground, threaded, or processed in some other way to create a final part.

Process machining and trim losses are often figured together and added to the required raw material quantity. Scrap loss is added as a separate factor.

c. Inventory Adjustments. Physical inventory normally varies from the inventory of record. This is a result of theft, carelessness, or miscounting. Although the variance can be either positive or negative, it is usually negative and known as inventory shrinkage.

d. Inventory Obsolescence. Parts become obsolete in storage because of changes in their physical characteristics. Normally, it is not economically feasible to restore these parts to the required condition. Some parts have a specified shelf life and cannot be used even though they may look visually acceptable. Other parts go through physical deterioration because of excessive heat, humidity, and mishandling. Parts with excessive rust may be more expensive to clean and restore than to replace. Certain cables, electronic compo-

nents, and chemicals have shelf lives and are governed by military standards. These parts are disposed of because of expected deterioration.

e. Engineering Obsolescence. Material and parts may be become obsolete because of design changes. These design changes are a consequence of parts testing, failure in field use, and unanticipated user requirements. Engineering changes will result in material not being used on the product. This factor estimates the cost of material that can no longer be used.

f. Engineering Design Growth. Designers often fail to fully comprehend the technical requirements of a proposed product. As a complex program matures and develops, material content will often increase. The costs estimated by this factor should diminish as the program matures.

g. Attrition. This is the allowance established to compensate for loss, breakage, floor shortages, and other damage such as solder burns. The allowance is often used to finance the original overbuying or rebuying of material.

h. Other Allowances. Contractors use other allowance factors besides the attrition factor, and each factor needs to be carefully evaluated on its own merit. Material allowance factors may be offset by salvage income resulting from the sale of scrap or obsolete items. Salvage credits can be substantial, particularly for items categorized as obsolete according to DoD standards. The cost of material can be summarized as:

Total
Cost = Material Cost/Item +
(Material Allowances -
Salvage)

D-408.7 Estimating Raw Material

The process of estimating raw material can be complex. To explain the process, a sheet metal part is illustrated in Figure D-4-6.

Figure D-4-1
Ascending Order --- Bill of Material

"Exploded" for D-5930 Pedestal Drive Assembly

Part	Part Description	Where used	Seq.	Quant.	Code	Policy
4093	Pinion	D-3090	2	1	P	2
5065	Bearing	D-5930	4	2	P	3
D-3056	Retaining Ring	D-3090	3	1	P	4
D-3075	2," Bar Stock	D-3095	1	2	P	4
D-3095	Shaft	D-3090	1	1	A	1
D-3090	Shaft/Pinion Asm	D-5930	6	1	A	1
D-3740	2 X 8 Back Bracket	D-5725	1	1	P	2
D-3741	1 7/8" X 8 ft. Brkt.	D-5725	2	1	P	2
D-3742	1/8" Rubber Seal	D-5725	3	1	P	2
D-5725	Bracket Assembly	D-5930	5	1	A	1
D-5925	Pillow Blk. Base	D-5930	2	1	P	2
D-5926	Pillow Blk. Cap	D-5930	1	1	P	2
D-9002	3/8" Nut	D-5725	4	2	P	4
D-9003	3/8" Washer	D-5725	5	2	P	4
D-9004	3/8 X 4 1/2 bold	D-5725/5930	3/6	6	P	4

Figure D-4-2
Assembly/Subassembly --- Bill of Material

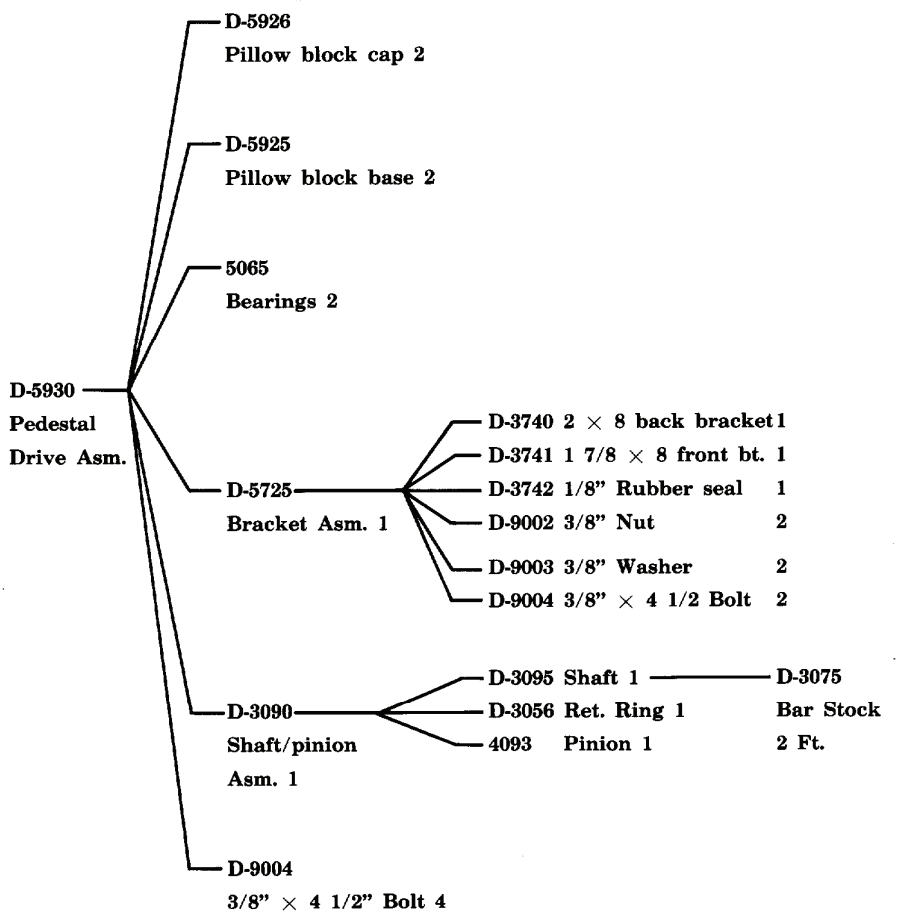

Figure D-4-3
Assembly/Subassembly ---"Indented" Bill of Material

Level	Part	Description	Where Used	Seq.	Quant.	Comm. Code	Policy
0	D-5930	Pedestal Dr. Asm.			1	A	1
1	5065	Bearings	D-5930	4	2	P	3
1	D-3090	Shaft/Pinion Asm.	D-5930	6	1	A	1
2	4093	Pinion	D-3090	2	1	P	2
2	D-3056	Retaining Ring	D-3090	2	1	P	4
2	D-3095	Shaft	D-3090	1	1	M	2
3	D-3075	2 2/4” Bar Stock	D-3095	1	2 ft	P	4
1	D-5725	Bracket Asm.	D-5930	5	1	A	1
2	D-3740	2 X 8 Bk. Bracket	D-5725	1	1	P	2
2	D-3741	1 7/8 x 8 FT. Brkt.	D-5725	2	1	P	2
2	D-3742	1/8” Rubber Seal	D-5725	3	1	P	2
2	D-9002	3/8” Nut	D-5725	4	2	P	4
2	D-9003	3/8” Washer	D-5725	5	2	P	4
2	D-9004	3/8 X 4 1/2 Bolt	D-5725	6	2	P	4
1	D-5925	Pillow Bl. Base	D-5930	2	2	P	3
1	D-5926	Pillow Bl. Cap	D-5930	1	2	P	2
1	D-9004	3/8 X 4 1/2 Bolt	D-5930	3	4	P	4

Figure D-4-4
Example of a Routing Sheet

PART NUMBER	RT CODE	ROUTING SHEET	PAGE NO 1 OF 1 PRINT DATE 9/25/86
8876 902	A1		

CHANGE NO	BY	ISSUE DATE	PART DESCRIPTION	PROGRAM DESCRIPTION	MIN-MAX
8876 902A	KP	09/24/86	ARMOUR PLATE	TARGET STATION	1 – 25

QUANTITY	R.MAT.CODE.	PRODUCT STRUCTURE	PRODUCT DESCRIPTION	DIMENSIONS
19.450	RSSA	R83000197	4340 SHEET STEEL	12 ¼ × 19 ½ × .197

OPER NO	BEQ NO	DEPT NO	WCN NO	PROCESS DESCRIPTION	T/F/G NUMBER	QT	T/F/G DESCRIPTION	FEED	SPEED	T	S.U. STD	T	PROD STD	M/MC RAT.	M
0010A1	010 020 030	471	4012	MARK AND SHEAR PER LAYOUT SHEET. 14 PIECES PER SHEET	8876902 8 01	1	LAYOUT SHEET			E	050	S	050	1.0	1
0020A1	010 020 030	472	4013	DRAW AND CUT TO SHAPE DEBURR EDGES & SHARP CORNERS	8876902 T 01	1	TEMPLATE			E	050	S	250	1.0	
0030A1	010 020	472	4020	USING JIG DRILL 7 HOLES AND DEBURR	8876902 J 01	1	DRILL JIG	2.00	250	S	250	S	200	1.0	1
0035A1	010	455	4001	INSPECT						N		N			
0040A1	010	473	2005	HEAT TREAT PER SPEC.	MIL-H-6875 M235	1	MIL. SPEC. SHEET			E	050	E	500	0.5	2
0045A1	010	455	2020	INSPECT FOR HARDNESS TO ROCKWELL C 54						N		N			
0050A1	010 020	475	3864	TEMPER FOR 2 HOURS BY HEATING TO 325 F + 20						E	050	E	2250	1.0	1
0060A1	010 020 030	475	3870	MANGANESE PHOSPHATE COAT PER MIL SPEC. TYPE M CLASS 2	MIL-P-16232 M280	1	MIL SPEC. SHEET			E	050	E	300	1.0	1
0070	010	475	3910	VAPOR DEGREASE						E	050	S	100	0.5	1
0080	010	475	3930	PRIME						E	050	S	100	1.0	1
0090	010	475	3931	PAINT GREEN PER SPEC.	MIL- M390	1	MIL SPEC. SHEET			E	050	S	230	1.0	1
0100	010	455	3940	INSPECT						N		N			

Explanatory notes to Figure D-4-4

(a) Part Number -- Identifies the processes described on the routing sheet to a specific part or assembly. There may be alternate routings for a part number if different types of processing are potentially required. The cost estimator should fashion estimates based on prime routing, or the routing which is most likely to be used.

(b) RT Code -- Code used to indicate whether the routing is primary (e.g. A1) or alternate (e.g. B1, C1).

(c) Change Number -- This number normally refers to an engineering change notice (ECN) number. It relates directly to a change on a drawing.

(d) By -- Initials of the person who made the last change to the routing sheet.

(e) Issue Date -- The day the last change was made. This date may be different from the ECN date. Changes in methods, standard, tooling, etc. may be responsible for changes in the issue date.

(f) Part Description -- A brief description, usually the name of the part.

(g) Program Description -- Indicates the main program or the assembly where this part will be used.

(h) Min-Max -- Describes an optimal quantity range for the processes described on the routing sheet. If the shop order quantity outside the indicated range, there may be a more efficient method of producing the part.

(i) Quantity -- Represents an amount of material that will be required to fabricate one unit. Quantity may be expressed in pounds, cubic inches or other units of measure. Sometimes, the units will not make sense by themselves. Familiarity with raw material codes and product structures will be required to interpret the quantity.

(j) R. Mat. Code -- Contains an abbreviation for the specific type of raw material used. In this example, the code is RSSA. "R" represents raw material, "SS" is for sheet steel, and "A" could mean a special kind of sheet steel, indicate a buyer code, or even a vendor.

(k) Product structure -- Indicates the next level part number required to manufacture the part. In this example, there is only one part number, RS3000197, which is a particular type and gauge of raw sheet steel.

(l) Product Description -- A name for the part number identified in product structure.

(m) Dimension -- Indicates the size of raw material required at the start of the manufacturing process. Normally, this space is used for raw material only. In some cases, it can be used to give more information about the components.

(n) Operation Number -- Identifies the work breakdown or operations required to produce the part. The numbers are ascending, and indicate the order in which the work must be performed. In this example, all operations are identified by a six character code. The first four characters specify the sequence, while the last two characters differentiate between primary and alternate operations. In the example, primary operations are identified by the code AI. Secondary operations could be identified by other codes such as B1 and C1. Primary and alternate processes may appear on the same routing sheet.

(o) Sequence Number -- Used in updating routing sheets.

(p) Department Number -- Identifies the principal department where work is to be performed.

(q) Work Center Number (WCN) -- A number identifying the work station where the operation is to be performed. It can refer to a machine, bank of machines, or an assembly bench. Sometimes, department and machine numbers are combined to form a WCN.

(r) Process Description -- Describes the process and gives instructions for operators and supervisors.

(s) T/F/G/ Number -- This number identifies a tool (T), fixture (F) or gauge (G) required to perform an operation. A tool number could be a physical tool, numerical control tape number, or an instruction sheet.

(t) QT -- Quantity of tools required to perform an operation.

(u) T/F/G Description -- Description of tools, fixtures, and gauges.

(v) Feed -- Indicates how fast the material should be advanced. Normally, feed is expressed in inches per minute, or inches per revolution.

(w) Speed -- RPM (revolutions per minute) at which a machine must operate to produce the part.

(x) T, E, S, and N -- T indicates type of labor standard used for set up and production; E shows standard was estimated; S indicates standard was studied or engineered; and N stands for nonstandard operation, or no labor standard (i.e., labor may be indirect or a factor).

(y) S.U. Std (Set-up Standard) -- Staff-hours required to setup an operation for production. The alpha character in the preceding column indicates whether the standard was estimated or engineered.

(z) Prod. Std. (Production Standard) -- Staff-hours required to perform the operation. The preceding column indicates if the standard is estimated or engineered. Standards are normally in hours per piece. They can also represent time required to produce a lot (e.g. 100 pieces). In this example, the operation is performed on a per piece basis. Hours are rounded to three decimal places. Care should be taken to ensure that estimators do not further round the numbers which may produce overstated estimates.

(aa) M/MC Rat. (Man/Machine Ratio) -- Indicates number of people required to perform a task. A operator/machine ratio of .500 means that an operator is required to operate two machines at the same time. A ratio of 2.00 means that the task requires two operators.

(ab) M -- Indicates number of machines available, and is used primarily as a scheduling tool.

Figure D-4-5
Example of an Engineering Drawing

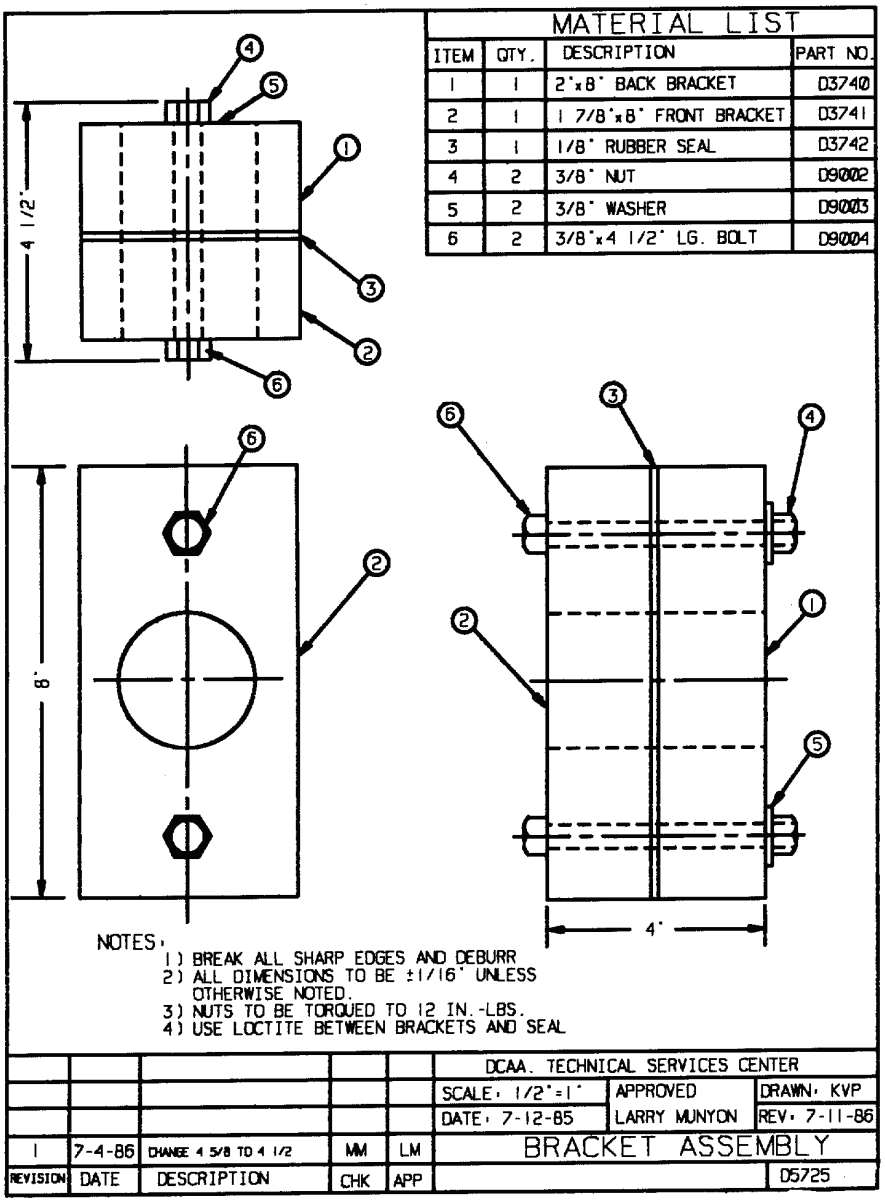

Figure D-4-5

Explanatory notes to Figure D-4-5:

(a) Drawing Number/Part Number -- All drawings are numbered by part or assembly number. In some cases, a part drawing may have more than one page. A drawing may depict more than one variation of a basic part.

(b) Sheet Number/Continuation Sheet -- Depending upon complexity, any number of sheets may be necessary to show the drawing for a particular item.

(c) Drawing Description -- A brief description of the part.

(d) Dimensions -- Indicates whether the metric or English system was used to prepare the drawing. A conversion table may be included on the drawing.

(e) Scale -- Shows scale used for preparing the drawing. All drawings are drawn to scale to give correct relationships to other components on the drawing.

(f) Tolerances -- Design engineers establish ranges for dimensions and other factors so that a manufactured part will function as intended. Tight tolerances result in more costly manufacturing processes.

(g) Size -- All drawings are standardized into five sizes for economical storage and reproduction purposes. Sizes range from A to E, with E being the largest. Most contractors store drawings on microfilm attached to punched cards which show part number, description, and drawing size.

(h) Revisions -- The revision log lists all changes from initial release and onward. It identifies Engineering Change Notice (ECN) numbers, description, dates, and personnel making the change. There may be ECNs in process which may affect the drawings. Such drawings changes will be incorporated by the drafting department after completion of the approval process. All parts must meet the latest change specifications unless a waiver is obtained from the customer.

(i) Material List -- Also known as a bill of material. The parts list identifies all components required to produce the part shown on the drawing by item number. Item numbers cross referenced to a parts list can be shown on the drawing or on a separate sheet. The parts list further provides additional information such as drawing numbers, quantity, part description, required materials, and references to the next higher level of assembly.

Inexperienced users will have to carefully examine drawings to determine material requirements. Occasionally, parts lists may not be included on the drawings or associated documentation. Additionally, some parts may be duplicated on the next drawing level.

(j) Type of Material -- Specifies materials to be used and/or alternatives. This reference is very important in verifying the "quality" of proposed parts. The majority of materials used by contractors will be military standard materials.

(k) Notes -- Used by the design engineer to communicate special nonstandard requirements or precautions.

(l) Type of Finish -- A symbol and/or number indicating the degree of smoothness (finish) required for different surfaces.

(m) Security Classification -- Drawings may have security classifications.

Figure D-4-6
Example of a Raw Material Drawing

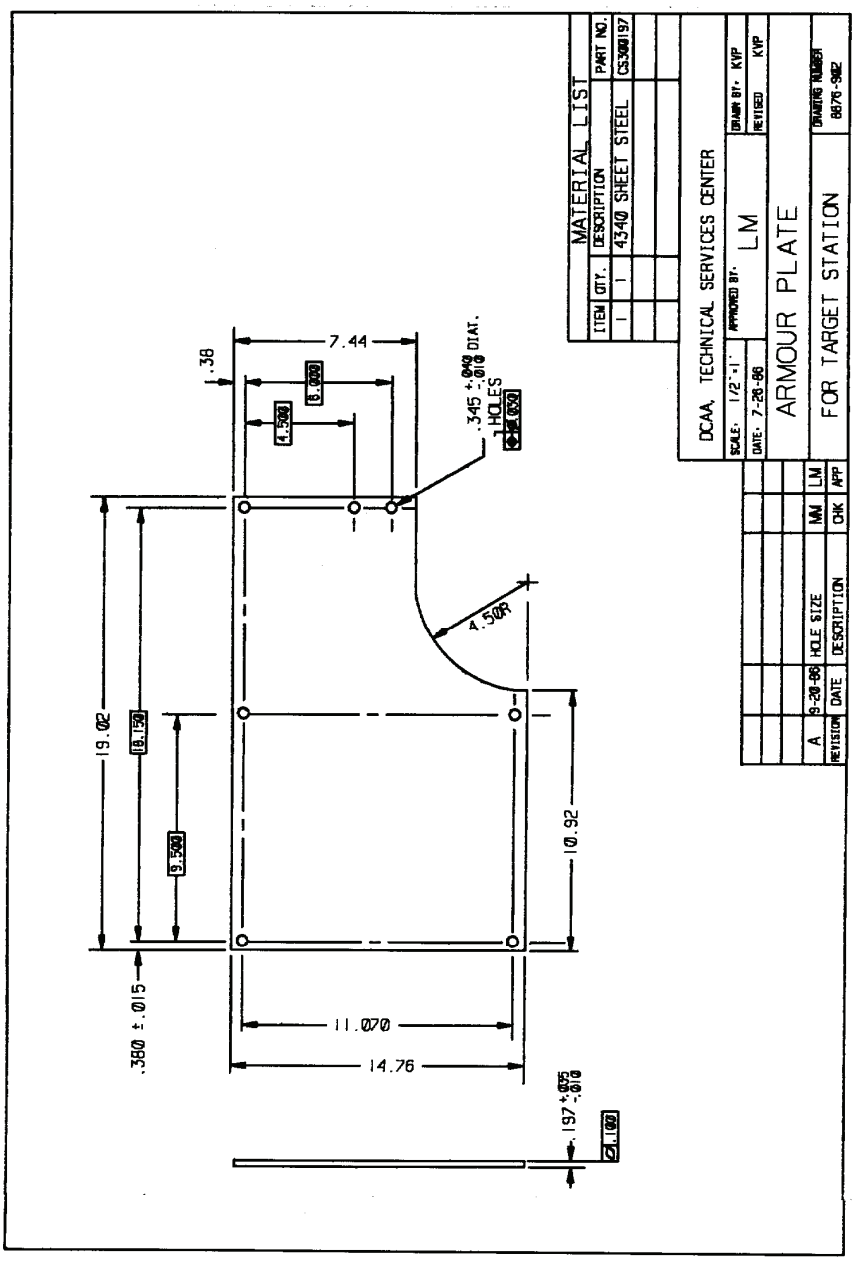

Figure D-4-6

Explanatory notes to Figure D-4-6:

(a) Process machining allowances are added to the designer's finished dimensions on the drawing. In this example, the largest part dimensions are 11.96" X 19.02" X .197" which equals 44.81 cubic inches. The manufacturing engineer knows that he will need to add at least 1/4" to two sides of the part. This allowance is based on the individual estimator's judgment and experience. Therefore, the amount of material specified is 12.25" X 19.5" X .197" = 47.06 cubic inches. The process machining allowance for this case amounts to 5.0 percent.

(b) Process Trim Allowances are calculated using a method similar to the one described below.

Example Assumptions:

Raw material is available only in 4' X 8' (48" X 96") sheets.

The dimensions of each piece are 12.25" X 19.5" (determined by adding 5 percent process machining allowance).

The contractor has calculated that 14 pieces can be obtained from each sheet.

Calculations:

Amount of material per piece = 64.84 cubic inches ((48" X 96" X .197") / 14)

Trim Allowance = 17.78 cubic inches (64.84 - 47.06)

Trim Allowance as a percentage = 37.8 percent (17.78 / 47.06)

Potential Savings:

If 17 pieces per sheet could be obtained with minimal add-on labor cost, the amount of material per piece could be reduced to 53.4 cubic inches.

This equates to a savings of 17.6 percent per piece when compared to the proposed amount ((64.84 - 53.4) / 64.84).

(c) Unit of Measure Conversion. Sometimes, raw material is expressed in different units of measure. For example, steel is normally purchased and sold by weight (pounds). In the manufacturing environment, it is measured in cubic inches. Conversion is fairly simple and can be accomplished by applying factors. To convert 64.84 cubic inches of steel to pounds, multiply by the factor .281 to obtain the amount (18.22 pounds). Some estimates may use rounded factors which may produce overstated amounts. For example, if .281 were rounded to .3, an overstatement of 6.8 percent would result.

APPENDIX E

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APPENDIX E

E-000 Graphic And Computational Analysis Techniques

E-001 Scope of Appendix

a. This appendix and Appendix F provide guidance for the auditor in the use of computational methods, charts, and graphs for analyzing contract costs and associated production data. The presentation is directed toward special problems of cost evaluation in the field of contract auditing and is not intended as a general discussion of graphic and computational analysis techniques. Each of the procedures presented should be considered from this limited viewpoint.

b. The techniques discussed in this appendix are not by themselves means of evaluating costs and cost estimates. They are, under appropriate conditions and combined with proper auditing procedures, valuable aids or tools which the auditor may use in establishing a basis of facts from which sound conclusions on the reasonableness and acceptability of the contractor's cost statements may be formed.

c. The discussion of improvement (or learning) curves, which also involves consideration of graphic and computational analysis techniques, has been placed for convenience in EZ-Quant.

E-100 Section 1 --- Correlation and Use of Scatter Diagrams

E-101 Introduction

This section presents information on the objectives of correlation techniques and the preparation of scatter diagrams.

E-102 Audit Objective

a. The auditor's objective when using the techniques described for Scatter Diagrams and Regression Analysis (E-200) is to evaluate the relationships and interdependencies that may exist between two or more variables. The auditor is concerned with determining, measuring, and describing the manner in which the level of a particular cost or group of costs is influenced by changes in other factors.

b. One of the principal audit uses of these techniques is for identifying current departures from historical cost patterns. The graphic presentations and computations described in the following paragraphs provide a ready means of focusing attention on those costs which are deviating from experienced trends and which, therefore, may be assumed to require some degree of special examination. By thus isolating cost factors needing special examination, the auditor is also provided with a means for improving the control and planning of the audit.

c. Another important use is for predicting costs. Such applications entail establishing a mathematical relationship between a cost the auditor wants to predict and one or more additional variables that can be predicted. For example, if the auditor determines that a contractor's overhead costs are related to direct labor hours, he can use this information to predict overhead rates. Such predictions assume that relationships observed in the past will continue in the future. They are most likely to be reliable when they are within the general relevant range of the historical data. If changed conditions or circumstances, such as operating efficiencies, changes in plant location, etc., which will affect overhead costs are anticipated, projections based on historical data should be adjusted to reflect the related change in costs anticipated.

d. Other applications of these techniques include the evaluation of how closely costs in an overhead pool have been related to various possible bases of allocation.

E-103 Terminology

a. A variable is a quantity that assumes different values at different times or for different units. A contractor's direct labor-hours, average labor rates, and expense levels are examples of variables that assume different values for different periods or points in time. The wage rate and period of service for individual employees are examples of variables that assume different values for different members of a population.

b. Two variables are said to be correlated when there is a measurable tendency for a change in one to be accompanied by a change in the other. If a variable (for example, direct labor hours) is considered to cause changes in the other, it is called the independent (or *x*) variable. The other variable (for example, indirect labor hours) is called the dependent (or *y*) variable. The nature of this relationship may vary from one of a high degree of dependence, where a change in the independent variable directly causes a change in the other, to one of merely a casual association. For example, some indirect labor is required to supervise and support direct labor. However, changes in other categories of indirect labor are not directly caused by changes in direct labor requirements. Rather, both are the result of changes in production requirements.

c. Unless otherwise stated, "average" signifies the "arithmetic mean" usually referred to simply as the "mean." In order to avoid any confusion with other types of averages, the word "mean" has been used throughout this appendix where appropriate. The word "average" is used either because it is an adjective or verb or because statistical usage requires it, as in the discussion of "semi-average" and "moving averages." The words "formula" and "equation" are generally used interchangeably. The latter term is preferred when the text pertains to the mathematics involved or where it is necessary to conform to statistical usage as in "simultaneous equations."

E-104 The Scatter Diagram

E-104.1 Purpose

The scatter diagram, sometimes called the scattergram, is the basic device for graphically displaying the relationship between two variables. Ordinarily the initial step in simple correlation analysis should be the drawing of such a diagram, either manually or by using computer software such as Microsoft's Excel scatter chart, or EZ-Quant Regression's Least-Squares Multiple Linear Regression program. If only a rough notion of the degree of relationship is required, the scatter diagram alone may yield adequate results. In other cases, further analysis may be advisable. Nevertheless, the scatter diagram is useful for exploratory purposes in any analysis of quantitative or trend relationships and can serve as a guide to further evaluation and audit work.

E-104.2 Construction – Scatter Diagram

A scatter diagram is plotted manually on graph paper or by computer software using a horizontal *x* scale to measure values of the independent *x* values and a vertical *y* scale to measure values of the dependent *y* values. The method of plotting should be clear from observation of Figure E-1-1, and it is evident that a scatter of points is obtained. Other illustrations of scatter diagrams are given in Figures E-1-2 to E-1-9. The size of the plot points in these graphs has been exaggerated for the purpose of illustration. In practice, accuracy requires more precise plotting.

E-104.3 Interpretation

a. Direction, Position, and Linearity of Pattern.

(1) The points of a scatter diagram normally form a pattern having a definite \direction in relation to the axes of the graph. It is inherent in the construction of diagrams of this type, as illustrated in Figure E-1-1, that when the general path of the pattern is from the lower left to the upper right of the graph, the dependent *y* values increase with increases in the independent *x* factor. The correlation in these cases is said to be direct or positive. When the path is from the upper left to the lower right (Figure E-1-2), the dependent *y* values decrease as the independent *x* values increase, and the correlation is said to be inverse or negative.

(2) The general path of the scatter of points also indicates whether the correlation is linear or curvilinear. If the central path through the pattern of points from the lowest to the highest *x* value is approximately a straight line as shown in Figures E-1-1 and E-1-2, the correlation is linear and there is said to be a constant or straight-line relationship between the variables. If the central path through the pattern is curved, as illustrated in Figure E-1-3, the correlation is curvilinear and a curved-line relationship is said to exist between the variables. It is important to distinguish between linear and curvilinear relationships because different computational techniques are required for analysis of the data. Serious errors may result from assuming a straight-line relationship when the true relationship is curvilinear. An important reason for constructing a scatter diagram prior to computational analysis is to determine from the path of the points the type of analysis that should be used. However, the determination of a functional relationship should not be made exclusively from a scatter diagram; the auditor should also consider the degree of logic in relating the variables concerned.

b. Degree of correlation.

(1) In the ideal case, all the points would fall precisely on a slanted straight line or smooth curve, as in Figures E-1-4 and E-1-5. In such a situation, seldom found in practical work, there is perfect correlation, and the value of one variable may be accounted for and computed from the value of the other variable. When this line is straight and lies at or near a 45 degree angle to the axis, assuming *x* and *y* scales of equal magnitude, a change in one variable would be associated with a proportionate change in the other variable. However, as the pattern approaches either the horizontal or vertical position, changes in one of the variables are associated with either much smaller or much larger changes in the other variable. When the plotted points fall in a line that is either horizontal or vertical, as in Figures E-1-6 and E-1-7, there is no correlation between the two sets of data, since one and only one value of one of the variables is associated with all values of the other variable. A scatter diagram of fixed expenses and direct labor hours, for example, would show this relationship.

(2) Ordinarily the points do not fall in a line but tend to form a band-like pattern as in Figure E-1-1. The width of this pattern (the scatter of the points), together with its slope as indicated by its line of central tendency, is a direct indication of the degree of correlation or the closeness of the relationship between the two series of data. The degree of correlation indicates the confidence that can be placed on the historical validity of the relationship, but not on its continuance. A very narrow sloping pattern, approximating a line, indicates a high degree of correlation. The wider the pattern and the more that a pattern of a given width approaches the horizontal or vertical, the lower the degree of correlation. If the pattern formed by the points is very wide, as shown in Figure E-1-8, little correlation is present as there is little tendency for one variable to change in consonance with the other.

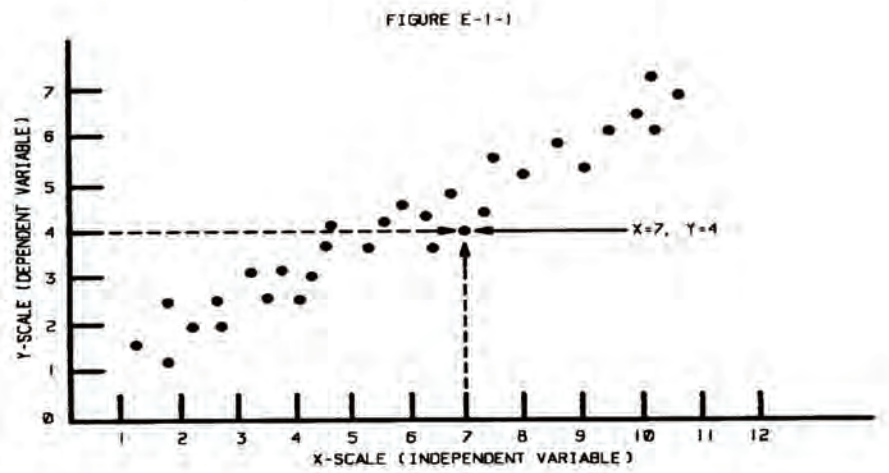
(3) A commonly encountered distribution or scatter of points is illustrated in Figure E-1-9. While most of the plotted points are located within an area that forms a cohesive generalized pattern, some of them lie outside this area, as at (A) in Figure E-1-9. Other points, (B) in Figure E-1-9, while adjacent to or a part of the general pattern area, may be so located as to produce a significant distortion of an otherwise smooth pattern. The values represented by these out-of-pattern points have the effect of reducing the degree of correlation between the two variables; and the more these values deviate from the general pattern of the rest of the

data, the greater their adverse effect on the correlation. A material variation in a few values from an otherwise uniform pattern suggests that unusual circumstances might have caused the extreme variation. The presence and nature of these circumstances, however, cannot be assumed. If examination indicates that such variations are characteristic of the data being analyzed and, therefore, pertinent to the analysis, they must be considered in any evaluation and in any estimate or computation. However, if the examination indicates that they are not pertinent to the analysis (for example, they might result from nonrecurring expenditures that have no bearing on the analysis), proper adjustment of the data and the diagram must be made before any further analysis of the data is undertaken or the data evaluated.

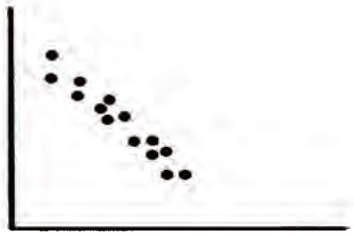
(4) Techniques for mathematically evaluating the extent of correlation are described in E-205.

Figures E-1-1 through E-1-3
Scatter Diagrams

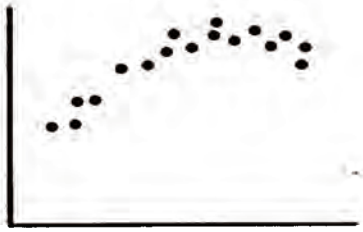
Close, Positive (Direct), Linear Correlation



CLOSE, NEGATIVE (INVERSE), LINEAR CORRELATION
FIGURE E-1-2



CLOSE, CURVILINEAR CORRELATION
FIGURE E-1-3

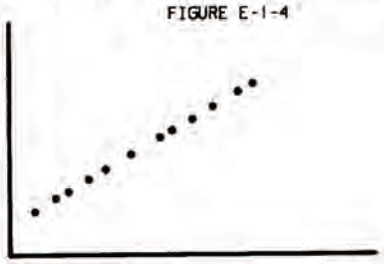


Figures E-1-4 through E-1-9
Scatter Diagrams

Close, Positive (Direct), Linear Correlation

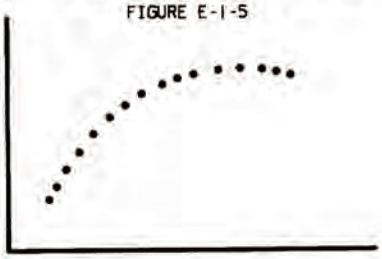
PERFECT, POSITIVE, LINEAR CORRELATION

FIGURE E-1-4



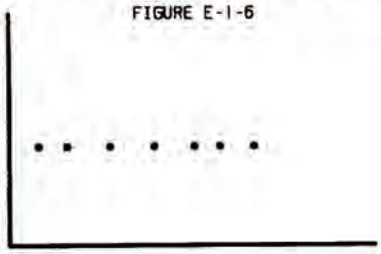
PERFECT, CURVILINEAR CORRELATION

FIGURE E-1-5



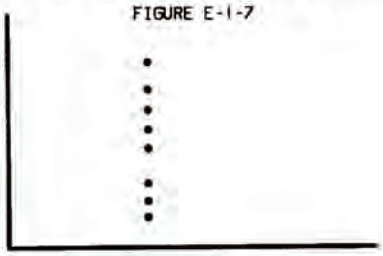
NO CORRELATION. (ONE VALUE OF Y IS ASSOCIATED WITH ALL VALUES OF X)

FIGURE E-1-6



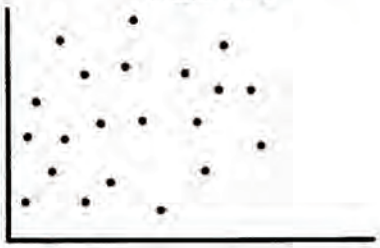
NO CORRELATION. (ONE VALUE OF X IS ASSOCIATED WITH ALL VALUES OF Y)

FIGURE E-1-7



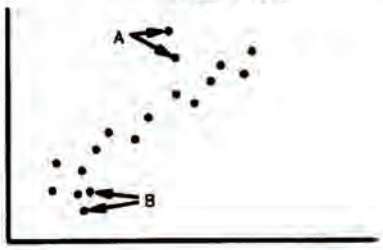
LITTLE OR NO CORRELATION. (NO UNIQUE ASSOCIATION BETWEEN VALUES OF X AND Y)

FIGURE E-1-8



DEGREE OF CORRELATION MATERIALLY REDUCED BY A FEW EXTREME VARIATIONS (A) AND (B)

FIGURE E-1-9



E-104.4 Selection of Appropriate Scales

a. Failure to prepare and to use scatter diagrams in an appropriate manner can lead to formulation of unsound conclusions as to the pattern of the plot points and the degree of correlation between the variables. Some of the relevant factors are discussed below.

b. Ordinarily, arithmetic scales should be used for both the *x* and *y* axes in most cases when constructing scatter diagrams. In some instances, it is desirable to emphasize the rate of change rather than the amount of change. This can be accomplished by using graph paper having a logarithmic scale on one axis (semilog paper) to prepare the scatter diagrams.

c. The scales selected must have a wide enough range to accommodate the lowest and highest values of the data to be plotted. It is good practice to organize the graph so that the plot points cover a fairly wide area. This will facilitate a visual evaluation of whether the points display a trend. Compression of the points into a small space may not convey a correct interpretation of the relationship between the variables. An example of a poor choice of scales is illustrated in Figure E-1-10. The restriction of the plot points to a narrow rectangular area at the bottom of the paper results in a diagram that is difficult to interpret. Figure E-1-11, where the same data have been plotted using an expanded scale for the *y* axis, provides a much better picture of the degree of scatter.

Figure E-1-10
Scatter Diagrams-Illustration of Poor Choice of Scales

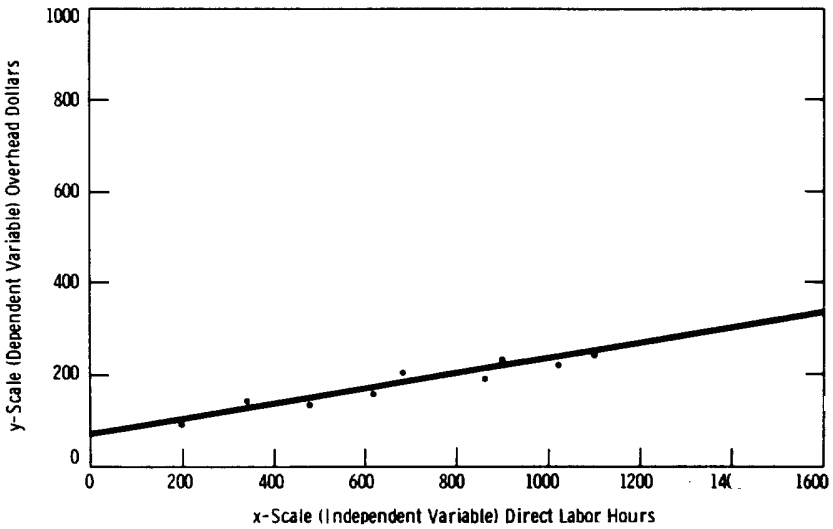
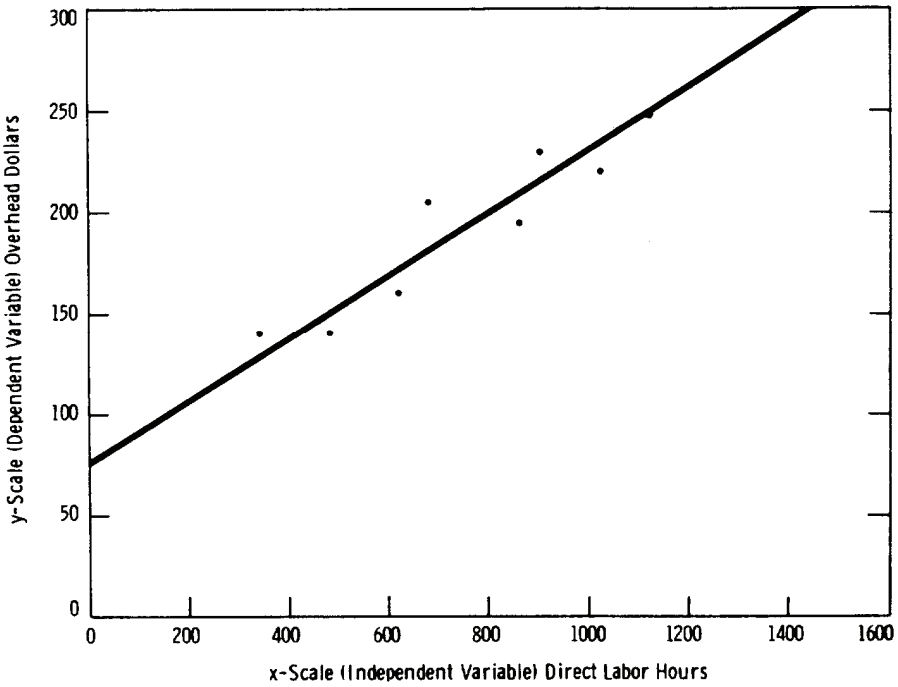


Figure E-1-11
Scatter Diagrams-Illustration of Correct Choice of Scales



d. In some cases, a better picture of the pattern and spread of the plot points can be obtained if the smaller values on one or both scales are not plotted. This will, however, result in a distortion of the range data relative to the total possible range. In addition, where the unit of measure (e.g. dollars) is the same for both the *x* and *y* values, the use of different scales will distort the relative magnitude of the variable. These distortions are not important when the sole purpose of the diagram is to evaluate the pattern of the plot points and degree of correlation of the two variables.

E-104.5 Time Relationships

a. Although no time scale is shown on a scatter diagram, the time element may be introduced by joining, numbering, coding, or otherwise identifying the successive points.

b. Figure E-1-12 is a chart correlating general and administrative expenses to the base, cost input, for a period of 13 quarters. The points have been joined according to their sequence in time. This line shows that the period was one of generally rising production except for two quarters between B and C. During this period of declining business, G&A expenses remained at a higher level relative to cost input than the auditor might expect from observation of the trend established during the first four quarters, A to B. When production again resumed an upward direction, the trend of G&A expenses was parallel to but at some distance above the previous trend. The auditor would want to know why G&A expenses did not decline during the period B to C and why the correlation of these expenses to cost input established a new trend at a significantly higher level than in the earlier months.

c. When used with discretion, indicating time on the diagram can be useful for detecting changes in relationships due to inflation or some other factor that occurs over a period of time and for identifying portions of the data that may require special examination. Because a least-squares line fitted to the same data may not reveal this type of information, it is advisable to use both techniques.

Figure E-1-12
Scatter Diagrams-Illustration of Joining Points by Time Sequence

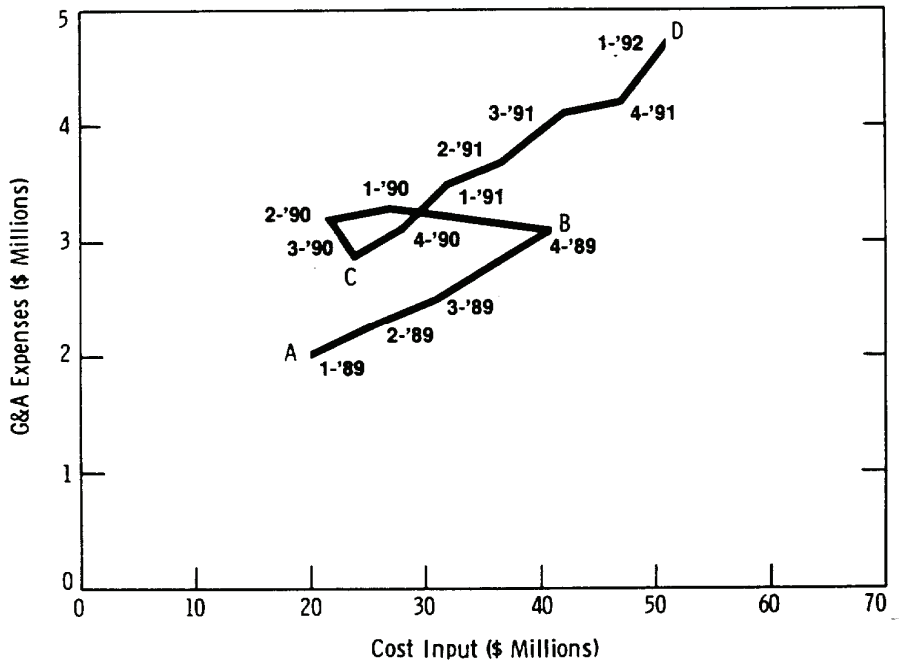
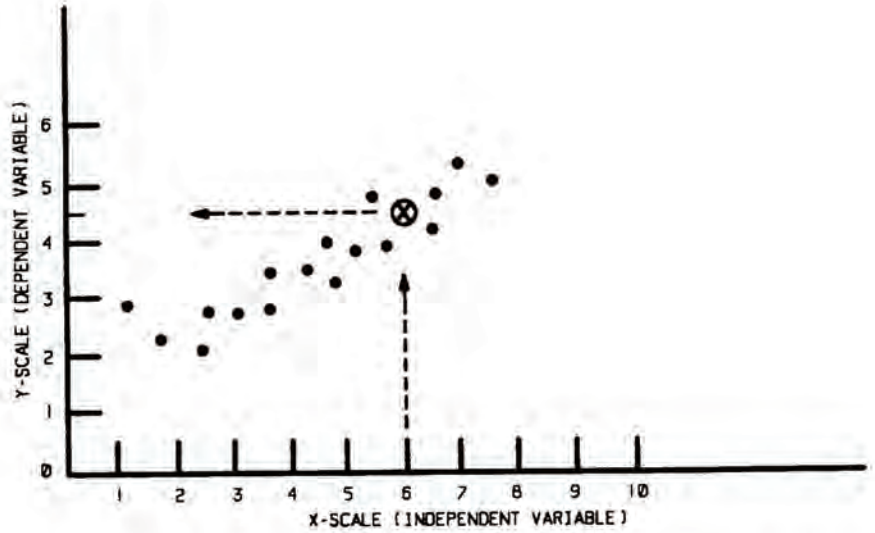


Figure E-1-13
Estimating or Evaluating an Estimate of the Dependent (Y) Value
From a Known Independent (X) Value



GIVEN: AN INDEPENDENT VARIABLE (X) EQUAL TO 6, MOVE VERTICALLY TO THE CENTER OF PATTERN OF POINTS REPRESENTED BY ⊗. FROM ⊗ MOVE HORIZONTALLY TO Y-SCALE AND READ THE SCALE VALUE OF 4½

THUS FOR X=6, Y=4½

Figure E-1-13

E-104.6 Use and Limitations

a. The scatter diagram, without the refinements of computational analysis discussed in subsequent paragraphs, may be adequate when the auditor's purpose is to identify current departures from historical patterns, as discussed in E-402. It also can provide a quick appraisal of the degree of relationship between two variables and the general pattern of this relationship.

b. A rough estimate of the amount of a dependent *y* variable from a given value of the independent *x* variable, or the evaluation of an estimation, may be made directly from the scatter diagram. To accomplish this, first locate, as in Figure E-1-13, the point on the horizontal *x* scale which represents a given value of the independent *x* variable. From this point, move vertically and parallel to the *y*-scale until the approximate center line of the pattern is reached. From this point move horizontally to the *y*-scale and read the indicated value as an estimated value of the dependent *y* variable. Alternatively, a line that follows the central path through the plotted points can be drawn judgmentally through the scatter diagram and used to estimate the amount of the dependent variable corresponding to any given value of the independent variable. The line should be drawn in such a manner that the sum of the vertical distances between the line and the points above the line is approximately equal to the sum of the vertical distances between the line and the points below the line. If a straight line best fits the pattern, this may be accomplished by drawing the line through the plotted mean values of the two variables. The first step is to average separately the *x* values and the *y* values and plot the point corresponding to these averages. The line may then be drawn based on visual observation by placing a ruler through the scatter of points and rotating it on the plot point of the mean values until it falls along a path that appears to provide the best fit.

c. While in many instances the scatter diagram and the approximated line of best fit described in b. above furnish sufficient information for preliminary determinations, their usefulness is limited by the auditor's inability, using only the diagram, to define precisely the location of the path of central tendency or to determine objectively the closeness of the association between the variables. Furthermore, a straight line fitted judgmentally to a scattergram will differ according to the opinion and experience of each individual and can be subject to disagreement as to whether it is properly drawn. E-200 discusses how a unique line of best fit can be fitted to historical data based on a mathematical equation which has been judgmentally determined to express a logical cause and effect relationship.

E-200 Section 2 --- Correlation and Regression Analysis

E-201 Introduction

This section presents a brief discussion of the mathematical procedures used to express relationships between two or more variables, the use of EZ-Quant for Windows (EZ-Quant)to perform the necessary calculations, and other aspects of regression and correlation analysis applicable to the evaluation of contract costs. The mathematics of regression analysis is beyond the scope of this appendix. Auditors who wish to understand the underlying computations should refer to a standard statistics textbook or the EZ-Quant, “Help” documentation for Regression Analysis.

E-202 Simple Linear Regression Analysis

E-202.1 Definition and Concept

a. Paragraph E-104.3a.(2) explained that it is possible to fit either a straight or curved line to a set of data. Different computations are required for each type of line and the type should be selected to express a logical relationship between the variables and follows the central path, or trend pattern, of the data. Many of the relationships, which are of interest to the contract auditor, tend to follow a straight line within the relevant range. This paragraph is limited to fitting a straight line to the data. To apply the described techniques to curvilinear relationships or situations involving more than two variables, see E-203 and E-204.

b. If two variables x and y are associated by a straight-line relationship, the equation expressing that relationship is commonly designated as:

$$y = a + bx$$

where a is the value or point at which the line if it were extended would intersect the vertical y axis and b is the slope of the line, that is, the ratio of the change in the dependent y variable that is associated with a given change in the independent x variable. In other words, b tells how much y changes for a unit change in the value of x. When the sign of b is positive, the line slopes upward, when negative, the line has a downward slope.

The values in a regression equation, which are calculated from the observed data, are referred to as "coefficients" (also termed "parameters"). Thus, a and b are the coefficients of this regression equation because they are calculated based on the observed values of x and y.

c. As indicated in E-104.6c, a freehand straight line, which is judgmentally fitted to a scatter diagram, will vary from individual to individual; different auditors using the same data would draw slightly different lines. However, there can be only one mathematically computed straight line of best fit. Such a line is not influenced by the auditor's judgment. A line so determined is commonly referred to as the simple linear regression line, the straight line of least-squares, the least-squares straight line, the straight line of average relationships, and the straight line of best fit. All of these names are descriptive of the characteristics of the unique line which satisfies the following requirement: the sum of the squares of the vertical distances from each point to the line is less than any other straight line. In order to obtain the equation of the line which meets this requirement, it is necessary to calculate values for the coefficients a and b so that the sum of the squares of the differences between the actual observed values of the independent variable y and the corresponding values calculated from the equation shown in paragraph b. is minimized.

d. The use of the least-squares principle is based on complex statistical concepts. Essentially, the principle produces a mathematical line of best fit that minimizes the sum of the squares of the differences between a series of numbers and their mean. Figures E-2-1 and E-2-3 show simple linear regression lines fitted to data points. Figure E-2-3 is particularly helpful in visualizing the following characteristics of such a line:

(1) The sum of the squares of the vertical distances between the regression line and the points is less than for any other straight line.

(2) The sum of the distances above the line equals the sum of the distances below the line.

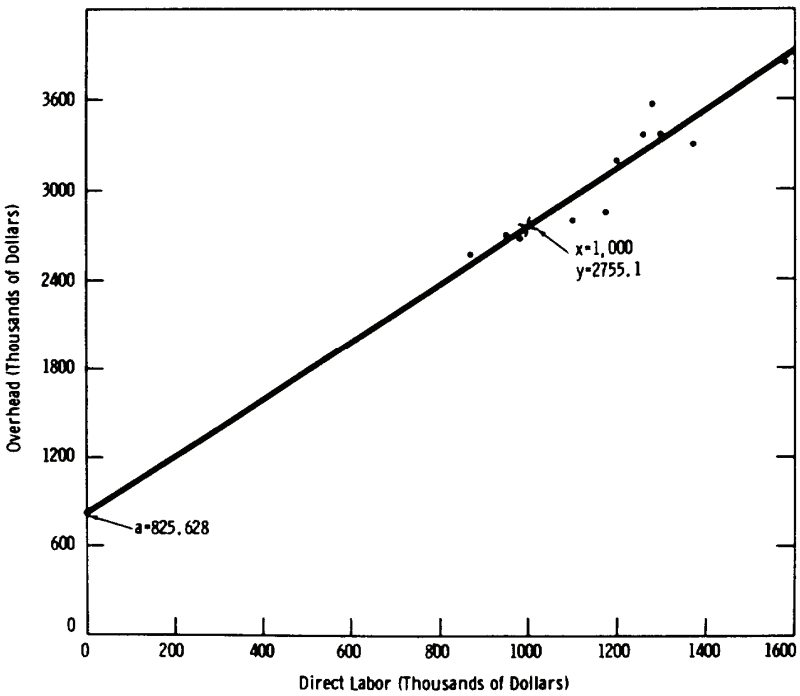
(3) The line passes through the point corresponding to the mean of the observed values of the *x* variable and the mean of the observed values of the *y* variable. The least-squares equations for the coefficients *a* and *b* are referenced in EZ-Quant, Help documentation for Regression Analysis.

e. In addition to the values of *a* and *b*, it is necessary to calculate other statistics which measure the degree of closeness of the fit of the calculated relationship between the dependent and independent variables. The statistics generally used for this purpose are the coefficient (or index) of correlation, denoted as *r*, and the coefficient (or index) of determination, denoted as r^2. Equations for both the coefficient of correlation and coefficient of determination are referenced in EZ-Quant, Help documentation for Regression Analysis.

f. The coefficient of determination (r^2) may be calculated by simply squaring the coefficient of correlation (*r*). The possible values of *r* range from -1 (perfect negative correlation) to 1 (perfect positive correlation) and the values of r^2 range from 0 (no correlation) to 1 (perfect correlation). Further information on the interpretation of these statistics is contained in E-205.

g. A considerable savings in auditor time, together with a greater assurance of accuracy, can be realized via the use of Agency software, such as EZ-Quant, to perform the calculations described in the preceding subparagraphs. Also, the use of Agency software provides the auditor with the ability to specifically document and explain the calculation methodologies employed. Further information on EZ-Quant is contained in E-202.2.

Figure E-2-1
Graph of Simple Linear Regression Line



E-202.2 Example of Computerized Regression

a. The EZ-Quant software is available to perform the regression analysis computations. EZ-Quant is described, operationally and with some theoretical treatment, in its “Help” documentation.

b. Figure E-2-2 contains the data used by the regression software to fit a line to the data shown below and plotted in Figure E-2-1. Figure E-2-2 shows only the most prominent output features of the EZ-Quant linear regression option.

Year	Quarter	Direct Labor X	Overhead Expense Y
			(in thousands)
1997	1	$1,203	$3,212
	2	1,304	3,367
	3	872	2,573
	4	1,104	2,804
1998	1	1,176	2,873
	2	1,258	3,376
	3	983	2,701
	4	1,283	3,572
1999	1	1,576	3,862
	2	1,372	3,303
	3	956	2,678
	4	957	2,684
Σ or	Total	$14,044	$37,005

c. The first part of Figure E-2-2 shows how the data file looks when it is ready for regression processing. The rest of the figure shows the regression output from the linear equation regression option. The first output table, Data Summary and Correlation Coefficients, depicts the linear correlation between pairs of variables.

d. The second output table, The Fitted Equation, lists the coefficients that were estimated by the regression analysis, the associated "*t*" value for the *b* coefficient, the "inclusion assurance" for the *b* coefficient, and the "comparison assurance" for the regression equation. The *t* values are computed for each independent variable coefficient to answer the question, "Is the appearance of a relationship (the value of the coefficient) simply a random event, or is there reason to believe that a relationship does exist between the dependent variable and this independent variable?" In this example, the computed "*t*" value corresponds to an inclusion assurance of 99.9 percent for the *b* coefficient. For each independent variable coefficient, the inclusion assurance is the assurance (or confidence) that the regression equation is a better predictor with (rather than without) that particular variable. The Help documentation for Regression Analysis in EZ-Quant provides additional guidance on acceptable levels for inclusion assurance values. The other calculated statistic, comparison assurance, is discussed in E-205.2c.

e. The third output table, Actual vs. Calculated Dependent Variable Values, compares the calculated and actual values for the dependent variable for each case (or observation). This table can assist the auditor in identifying out-of-pattern plot points which should be analyzed in detail with greater scrutiny. It also assists in identifying significant "runs" of points above and below the regression line, as described in E-208f.

f. The last output table, Projecting with the Regression Equation, shows how projections can be made using the regression equation. A projected value of the dependent variable (DVAR) will be calculated for each independent variable (IVAR) value entered by the auditor.

g. To manually plot the regression line, the value of *a* (i.e., 825.6276 which corresponds to $x = 0$) and any pair of *x* and calculated *y* values (for example, $x = 1203$ and $y = 3146.78$) are sufficient to determine the position of the regression line. Alternatively, for ease in plotting, the auditor may prefer to use a rounded value for the *x* variable, such as 1000. In Figure E-2-1 the auditor followed this procedure and found that when *x* is 1000, the projected *y* value is 2755.10. This pair of values as shown in Figure E-2-2 is then used for plotting the regression line. It is good practice to check the accuracy of a manually plotted line by verifying that a third pair of *x* and calculated *y* values falls on the line. When using computer software to generate a line of best fit, verifying the accuracy of the input data is sufficient to validate the line's accuracy.

Figure E-2-2
EZ-Quant Regression

Regression Data

Overhead (1000s of $)	Direct Labor (1000s of $)
3,212	1,203
3,367	1,304
2,573	872
2,804	1,104
2,873	1,176
3,376	1,258
2,701	983
3,572	1,283
3,862	1,576
3,303	1,372
2,678	956
2,684	957

Data Summary and Correlation Coefficients

Data Summary				
12	Number of Observations			
	Average Value	Minimum Value	Maximum Value	Standard Deviation
Overhead (1000s of $)	3,083.75	2,573.00	3,862.00	418.731
Direct Labor (1000s of $)	1,170.33	872	1,576.00	205.499
Correlation Coefficients Between Variable Pairs				
	Dependent Variable (Y)	Independent Variable 1		
	Overhead (1000s of $)	Direct Labor (1000s of $)		
Overhead (1000s of $)	1			
Direct Labor (1000s of $)	0.946917	1		

The Fitted Equation
$Y = a + b(X_1)$

Coefficients Estimated by Regression:				
	Variable	Coefficient Value	Computed T-Value	Inclusion Assurance (%)
a	Intercept	825.6276174	3.3585	99.3
b	X_1 is Direct Labor (1000s of $)	1.92946942	9.3145	99.9
Summary Statistics:				
	R squared	Regression Std Error		
	0.896651	141.183604		
	Comparison Assurance (%)	F Statistic	Regression Degrees of Freedom	Residual Degrees of Freedom
	99.9	86.7597	1	10

Figure E-2-2

Actual vs. Calculated Dependent Variable Values for
$Y = a + b(X_1)$

Data Item	Actual Value	Calculated Value	Difference (Actual-Calc'd)	% Diff (Diff/Actual)
1	3,212.00	3,146.78	65.22	2
2	3,367.00	3,341.66	25.34	0.8
3	2,573.00	2,508.12	64.88	2.5
4	2,804.00	2,955.76	-151.76	-5.4
5	2,873.00	3,094.68	-221.68	-7.7
6	3,376.00	3,252.90	123.1	3.6
7	2,701.00	2,722.30	-21.3	-0.8
8	3,572.00	3,301.14	270.86	7.6
9	3,862.00	3,866.47	-4.47	-0.1
10	3,303.00	3,472.86	-169.86	-5.1
11	2,678.00	2,670.20	7.8	0.3
12	2,684.00	2,672.13	11.87	0.4

Projecting With the Regression Equation $Y = a + b(X_1)$

	Independent Variable	Coeficient Value	Independent Variable Value	Contribution to Projection
a	Intercept	825.62762		825.63
b	X_1 is Direct Labor (1000s of $)	1.92947	1,000.00	1,929.47
	Projection:			
	Y is Overhead (1000s of $)			2,755.10

E-203 Curvilinear Regression Analysis

a. The same least-squares criterion which is used to obtain a straight line of best fit, as described in E-202, can be applied to more complicated equations. The equation used should be the one which has been judgmentally determined to reflect a logical relationship between the variables. Since these equations can be represented by a curved line on a scattergram, the process of mathematically fitting this line to data is referred to as curvilinear regression analysis. There are an infinite number of non-linear equations; however, only a few of them have been found to have application to contract cost audits.

b. The curvilinear models with greatest applicability to contract audit are improvement curves.

c. Another curve with applicability to certain business data is expressed by the simple exponential or compound interest equation.

$$y = a\,(1+r)^x$$

Several types of business data tend to follow such a curve. For example:

(1) where y is the principal plus interest of an amount a, compounded x times at a fixed rate r, or

(2) where y is the remaining book value of an asset purchased for an amount a, and depreciated x years by the declining balance method with rate r, or

(3) where y is a price level or wage level which has increased (or is expected to increase) from a level a, at a constant rate r for x periods of time, or

(4) where y is the price of a new product which has decreased (or is expected to decrease) from a level a, at a constant rate r for x periods.

It should be noted that in fitting a least-squares line to a time series, as suggested by (3) and (4), a thorough understanding of the caveats discussed in E-310 is essential.

d. An exponential curve appears as a straight line on semi-logarithmic graph paper. The Technical Audit Services Division (OTS) can be contacted for assistance in fitting this type of curve to historical data. An application of curvilinear analysis is discussed in E-311. Figure E-3-3 shows the important output features of the regression analysis option of EZ-Quant which can be provided by OTS. In this figure, the equation $y = a*b^x$ at first glance appears to be unlike the expression given above in E-203.c. That expression, when written in the form shown on the output, would be $y = a*(1+r)^x$. Since b is equal to $1 + r$, the expressions are functionally the same.

E-204 Multiple Regression Analysis

a. Multiple regression analysis is concerned with evaluating the relationship between a dependent variable and two or more independent variables, and is used in those applications where the regression of y on a single independent variable is found to be inadequate. It employs the least-squares method to determine the combined effect of the independent variables on the dependent variable. Since more than two variables are involved, this relationship cannot be plotted graphically; however, the same principles and techniques are involved as in simple regression analysis.

b. The equation used in most calculations of multiple regression analyses takes the form of

$$y = a + bx_1 + cx_2 \,.$$

where y is the dependent variable,

x_1 is the first independent variable,

x_2 is the second, and so on.

The letters a, b, c . . . stand for constants (coefficients) which minimize the sum of the squares of differences between the actual values of y and values calculated from the equation. In addition to calculating the values of these coefficients, it is necessary to calculate a statistic which measures the closeness of the relationship between the dependent variable and the independent variables. This statistic, called the coefficient of determination (r^2), is discussed in E-205.

c. The computations required in multiple regression analysis are so laborious that manually fitting just one least-squares equation can be prohibitively time-consuming. However, the computer performs the computations so rapidly that the auditor can experiment with various combinations of independent variables until he or she finds the combination which seems to provide the best prediction of the dependent variable in which he is interested.

d. The regression analysis option of EZ-Quant will perform a multiple regression on input data files that have two or more independent variables. Additional discussion of the multiple regression option is available in the EZ-Quant, Help documentation for Regression Analysis.

E-205 Correlation Analysis

As explained in the preceding paragraphs of this section, regression analysis is concerned with obtaining equations which express functional relationships among variables. Correlation analysis is concerned with evaluating how closely the variables are related.

E-205.1 Interpretation of Coefficient of Determination

a. The statistic most widely available and commonly used to evaluate how well an equation fits available data is the coefficient of determination, denoted r^2. The coefficient of determination quantifies how much of the change in the dependent variable is "explained" by the change in the independent variable(s). In simple regression, where there is only one independent variable, the r^2 indicates how much of the change in y is due to the change in x. In multiple regression, where there can be multiple independent variables (up to five in EZ-Quant), the r^2 indicates how much of the change in y is due to the changes in x_1,x_2, x_3, x_4, and x_5.

b. In simple linear regression, the coefficient of determination measures how much closer the plot points (historical values of y) are to the regression line than they are to a line drawn horizontally through the average of the y values. This is illustrated graphically in Figure E-2-3.

c. The coefficient of determination is used to evaluate the relative efficiency of predicting future values of y based on the regression equation, as opposed to predicting that future values of y will equal the average value of y in the historical data. The value of r^2 is not indicative of how much better (or worse) predictions based on the regression line will be compared with predictions based on, for example, a judgmental evaluation or the contractor's most recent experience.

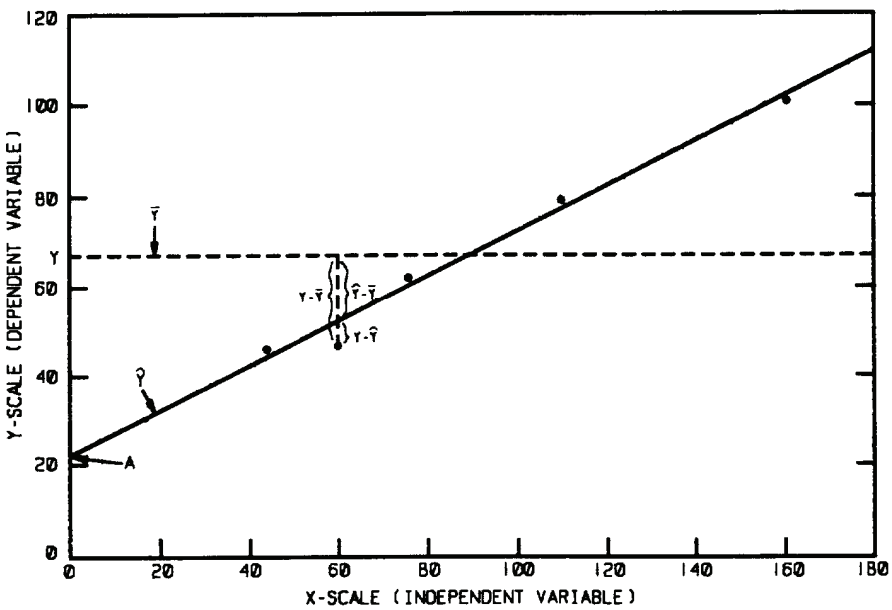
d. Even if the historical observations vary significantly about the regression line, a high coefficient of determination will be obtained if the variations about the mean are much wider. On the other hand, if the independent variable has remained fairly constant during the period covered by the observations, a low coefficient of determination can be obtained even though all observations are close to the regression line.

e. If all of the observed values of y fall on the regression line, r^2 will equal one, indicating perfect correlation. This result will always be obtained if the number of observations equals the number of coefficients in the regression equation (two in the case of simple linear regression); however, it will rarely occur otherwise. On the other hand, if there is no better fit to the historical data than the mean of the y values, then r^2 will equal zero. This result, which would produce a perfectly horizontal regression line in simple linear regression, is also very unlikely, regardless of whether or not the variables are correlated.

f. The principal problem encountered in the use of r^2 derives from the fact that if the number of observations is small, regression analysis may produce a high coefficient of determination even if the variables are unrelated. Instances have been noted where auditors have cited a high coefficient of determination as evidence of a good fit when, in fact, the coefficient of determination provides no evidence of correlation and could easily have

occurred by chance. When there are only a few plot points on a scatter diagram, it will usually be possible to draw a straight line at an angle which fits the points much better than a horizontal line. Consequently, a high coefficient of determination is nearly always obtained and the only use that can be made of the coefficient of determination is to test whether it is high enough to provide statistical support for an assumption that the variables are actually correlated (E-205.2). On the other hand, the larger the number of observations used, the more remote is the possibility of a high coefficient of determination occurring by chance; the coefficient of determination can then be regarded as a measure of the extent to which changes in the *y* values can be explained by changes in the *x* values (E-205.3).

Figure E-2-3
Graph Illustrating Computation of
Index of Determination (R2)



E-205.2 Determining the Existence of Correlation

a. Because a coefficient of determination (r^2) may be calculated for any data set, it is important that the value of r^2 is large enough to make it probable that the changes in the dependent variable are caused by changes in the independent variable. The reliability of a regression equation for making predictions must be evaluated by the auditor. Table E-2-1 or the "comparison assurance" reported by EZ-Quant can be used to evaluate the calculated coefficients of determination.

b. Table E-2-1 gives significant values of r^2 at the 75 percent and 95 percent confidence levels. To test the significance of the value of r^2 obtained from a regression analysis, the auditor selects the column corresponding to the number of coefficients in the regression equation and the row corresponding to the number of observations in the historical data. In simple linear regression, there are two coefficients (*a* and *b*). Consequently, in order to test the significance of the .9825 value of r^2 obtained in a simple

regression of data with five observations at the 95 percent confidence level, the auditor would compare it with .772 obtained from Table E-2-1. The table indicates that if the *x* and *y* variables were unrelated, there would be a 95 percent probability that the coefficient of determination would in turn be less than .772 and a 5 percent probability that it would, by chance, be greater than .772. Since .9825 is significantly larger than .772, the auditor could conclude that the probability of the *x* and *y* values being correlated is much greater than 95 percent.

c. Multiple regression analysis employs equations with three or more coefficients. For example, the model $y = a + bx_1 + cx_2 + dx_3$ has four coefficients (*a*, *b*, *c*, and *d*). If there were 16 observations, the appropriate value from Table E-2-1 for testing the coefficient of determination would be .466 at a 95 percent confident level. If the coefficient of determination exceeds .466, the auditor could conclude that there is more than 95 percent probability that the three independent variables (x_1, x_2, and x_3), as a group, could influence the values obtained for *y*.

d. EZ-Quant reports a statistic, the comparison assurance, for all of the regression analysis curve options and for all improvement curve regression options (Appendix F). The comparison assurance is the level of confidence (assurance) associated with the value of the coefficient of determination (r^2). Its function is similar to that of Table E-2-1 which helps the auditor decide how much reliance to place on the estimated regression equation. The difference between the two reference values is that Table E-2-1 shows the r^2 value needed to achieve a specific level of confidence while the comparison assurance indicates the level of confidence achieved by the r^2 value produced by the regression. A further discussion of comparison assurance is available in the EZ-Quant, Help documentation for Regression Analysis.

e. It should be clearly understood that simply because a regression analysis passes the test described in this section, it does not follow that the regression equation will provide the best possible estimates of future *y* values, or even that the estimates will be reasonably close. It merely means that a statistical analysis of the historical data identifies the probability that the equation will provide better estimates than could be obtained by merely averaging the historical values of *y*.

f. The auditor should also bear in mind that the test considers only the mathematical relationship between the variables. It does not take into account the audit significance of the relationship expressed in the regression equation. In this connection, the logic of the relationship is most important. If the regression equation expresses a relationship which can be strongly defended by logical arguments, and only a few observations are available, some significance can be attached to the analysis even if the test does not provide conclusive statistical evidence that the values are correlated. However, a special effort should be made in such cases to determine why the correlation is not close and whether the factors causing the observed variations or any other unusual conditions are likely to be present and materially affect the costs during the forecast period.

E-205.3 Evaluating the Extent of Correlation

a. The larger the number of observations that are included in a regression analysis, the smaller the significant values shown in Table E-2-1 become and the more remote the chance of a high coefficient of determination occurring by accident becomes. Consequently, the coefficient of determination can be regarded as a measure of the proportion or percentage of the total variance in the dependent variable(s). The larger the coefficient of determination, the smaller the proportion of the variance that is attributed to other influences. For instance, if the coefficient of determination obtained from fitting a regression equation is .92, it may be concluded that approximately 92 percent of the variance in the dependent variable is associated with changes in the independent variable(s) and 8 percent of the variance is associated with chance or other influences.

b. Even though the coefficient of determination may be large enough to provide ample assurance that the variables are related, it may be too small for the auditor's purposes. As-

sume, for example, that a simple linear regression analysis based on 20 observations produced a coefficient of determination of .3. Reference to Table E-2-1 indicates that this coefficient of determination provides substantially greater than 95 percent assurance that the variables are related. However, since such a small proportion of the variation in the *y* variable is explained by variation in the *x* variable, the auditor would generally seek a more reliable basis for predicting *y*. He or she may be able to identify the reasons for substantial deviations from the regression line and improve the fit by appropriate adjustments to the data. Alternatively, he may be able to identify and add to the regression equation another independent variable which is influencing the dependent variable, or he may consider methods of prediction other than regression analysis.

E-205.4 Comparison of Two Analyses

a. The coefficient of determination can also be used to determine which of two different equations (or independent variables) provides the better fit to historical data. A direct comparison between the values of r^2 obtained in two different regression analyses is valid only if both analyses employ the same observations and the same number of coefficients. Such a comparison provides an objective means of choosing between two equally logical equations. The greater the number of observations used and the more substantial the differences between the values of r^2, the more reliance it is possible to place on such comparisons.

b. In assessing the relative efficiency of two regression equations in explaining changes in the value of a dependent variable, the ratio of the values for $1 - r^2$ is more important than the difference between the values obtained for r^2. The value of $1 - r^2$, called the "coefficient of nondetermination," measures the extent to which variations in the historical values of the dependent variables are not explained by a regression equation. The greater the ratio of the larger value of $1 - r^2$ to the smaller value of $1 - r^2$, the greater is the confidence that can be placed on the superiority of the analysis which produced the larger value of r^2 (and hence the smaller value of $1 - r^2$). However, when the number of observations is small, the value of $1 - r^2$ obtained from one analysis can be several times larger than the value obtained from another analysis, without providing conclusive evidence of the superiority of the second analysis.

Table E-2-1
Table of Significant Values of the
Coefficient of Determination (R2)

Number of Data Points (n)	Confidence Level: 95%					Confidence Level: 75%				
	Number of Coefficients (k)					Number of Coefficients (k)				
	2	3	4	5	6	2	3	4	5	6
3	.994					.854				
4	.902	.997				.562	.937			
5	.771	.950	.998			.403	.750	.961		
6	.658	.864	.966	.999		.311	.603	.825	.972	
7	.569	.776	.903	.975	.999	.253	.500	.702	.866	.978
8	.499	.698	.832	.924	.980	.213	.426	.606	.761	.891
9	.444	.632	.764	.865	.938	.184	.370	.531	.674	.801
10	.399	.575	.704	.806	.887	.161	.327	.472	.602	.721
11	.362	.527	.651	.751	.835	.144	.293	.424	.544	.655
12	.332	.486	.604	.702	.785	.130	.265	.385	.495	.598
13	.306	.451	.563	.657	.739	.118	.242	.352	.454	.550
14	.283	.420	.527	.618	.697	.109	.223	.325	.419	.509
15	.264	.393	.495	.582	.659	.100	.206	.301	.389	.473
16	.247	.369	.466	.550	.624	.093	.192	.281	.363	.442
17	.232	.348	.440	.521	.593	.087	.180	.263	.341	.415
18	.219	.329	.417	.494	.564	.082	.169	.247	.321	.391
19	.208	.312	.397	.471	.538	.077	.159	.233	.303	.369
20	.197	.297	.378	.449	.514	.073	.150	.221	.287	.350
21	.187	.283	.361	.429	.492	.069	.143	.209	.272	.332
22	.179	.270	.345	.411	.471	.066	.136	.199	.259	.317
23	.171	.259	.331	.394	.452	.062	.129	.190	.247	.302
24	.164	.248	.317	.379	.435	.060	.124	.182	.237	.289
25	.157	.238	.305	.364	.419	.057	.118	.174	.227	.277
26	.151	.229	.294	.351	.404	.055	.114	.167	.218	.266
27	.145	.221	.283	.339	.390	.053	.109	.160	.209	.256
28	.140	.213	.273	.327	.377	.051	.105	.154	.201	.246
29	.135	.206	.264	.316	.365	.049	.101	.149	.194	.238
30	.130	.199	.256	.306	.353	.047	.098	.144	.187	.229
31	.126	.193	.248	.297	.342	.045	.094	.139	.181	.222
32	.122	.187	.240	.288	.332	.044	.091	.134	.175	.215

The number of coefficients *k* is the number of independent variables plus one for the intercept.
Critical R^2 values were computed from critical *F* values as $R^2 = F\cdot(k-1) / (F\cdot(k-1)+n-k)$, where *n* is the number of observations and *k* is the number of coefficients.

E-206 Prediction Intervals

a. In addition to the coefficient of determination, several other statistics are sometimes used to measure the extent of the historical correlation between the variables and the reliability which can be placed on projected values computed from the regression estimate. One such statistic is the "prediction interval." A confidence interval at any specified confidence level can be calculated for a prediction of the independent variable obtained from a regression equation. This interval is included in the output of many standard regression software packages. The mathematical equation used to calculate the interval assumes that (1) the relationships between the variables which existed in the period covered by the historical data will continue into the future and (2) the predicted values of the independent variable are accurate. For the reasons discussed below, prediction intervals have limited application to contract audit work.

b. Prediction intervals and confidence intervals (discussed in B-204 and B-205) are similar, but there are two important differences between them. First, the confidence intervals computed in sampling applications relate to the precision of the single estimate of the mean or, when the mean is projected, the corresponding single estimate of the total value of all items in the universe. A prediction interval in regression analysis relates to the precision of the regression estimate of the value of the dependent variable that is associated with given values for each of the independent variables. Since the independent variable values can vary without limit, there are an unlimited number of values that the dependent variable might take, hence the number of prediction intervals is unlimited. Each prediction interval is unique. Second, the auditor can reduce the range of a confidence interval by increasing the sample size, but cannot reduce a prediction interval if all pertinent historical data has been properly used. As a result, while a confidence interval can help the auditor determine the adequacy of the sample size, a prediction interval in regression analysis does not serve a similar purpose.

E-207 Adjustments for Economic Factors in Regression Analysis

Many contract audit applications of regression analysis include variables which are affected by changes in wage and price levels. When economic changes have significantly affected any of the variables during the period covered by the historical data, the regression analysis applied to the raw data will not produce reliable results. In such cases it is necessary to (1) include a measure of economic change as a separate explanatory variable in multiple regression or (2) adjust the data to eliminate the effects of the economic changes.

a. One method is to use multiple regression with an economic index as one of the independent variables. For example, to measure the effect of direct labor volume on labor costs, changes in costs resulting from economic factors (such as cost-of-living allowances) can be considered by applying the following multiple regression equation:

$$y = a + bx_1 + cx_2$$

where y is the average labor rate; x_1 is the number of employees; x_2 is an economic wage index; and a, b, and c are coefficients (constants) which minimize the sum of the squares of the differences between the actual values of y and values calculated from the equation.

(1) Economic indexes that can be used as an independent variable in the multiple regression are discussed in DCAAP 7641.74, Use of Economic Indexes in Contract Audits. Salary and wage changes generally include both inflation (cost-of-living) as well as the effects of other economic changes. The most precise cost-of-living adjustments can be made using wage-related economic changes specific to a particular contractor --- union agreements or other labor records. However, if such agreements or records do not exist or it is too time consuming to construct the data, economic indexes should be used to make the adjustments. If wages are to be adjusted to account for inflation alone, the Consumer Price Index, Urban Wage Earners and Clerical Workers (CPIW), should be used. How-

ever, if labor rates are adjusted for all wage-related economic changes (including inflation), wage indexes should be used. DCAAP 7641.74 provides a discussion of the types of indexes available to make such adjustments.

(2) EZ-Quant reports several statistics that are used to judge the adequacy of the regression equation that was fitted to unadjusted data. When accepted by the auditor, the multiple regression equation can be used to predict future costs.

b. A second way to perform a valid regression analysis is to adjust the cost data to eliminate the effects of economic changes. For example, to measure the effect of direct labor volume on labor costs, changes in costs resulting from economic factors (such as cost-of-living allowances) must be removed from the data. This is accomplished by removing the effects of the changes from all data during the historical period, thus placing all amounts on an economic level comparable to the earliest observation in the historical data. Alternatively, all of the data may be updated to the current economic level or adjusted to some other base period. Because this example has one independent variable (i.e., number of employees), the simple (two-variable) regression curve options of EZ-Quant can be used to fit a regression equation to the adjusted cost data.

(1) When adjusting an individual cost element or a homogenous grouping of similar costs, an economic index (commodity, industry, or category) that is the most appropriate disaggregate index available should be used. When adjusting a group of costs, either a composite index should be developed for the group, or the most representative disaggregate index of the group of costs should be used. The method for placing costs on a common base is discussed in DCAAP 7641.74.

(2) When the regression equation is used to predict future costs, the anticipated effects of economic changes between the base period and the prediction period must be considered. Economic data are used to adjust the results of the regression so that realistic future costs can be estimated. Predictions of future economic conditions, particularly long-range, can best be made by qualified economists. DCAAP 7641.74, provides information on the forecasting services purchased by DCAA, including the list of the indexes readily available to all auditors through DCAA's Intranet by selecting Economic Indices under Audit tools.

E-208 Other Considerations in Using Regression Analysis

a. Changes in facilities, production methods, and accounting procedures generally limit the period of time over which consistent cost data can be obtained without extensive adjustments. Accordingly, the historical data included in a regression analysis should normally cover this entire period. In addition, the use of quarterly or monthly data in performing regression analyses is usually favored over the use of annual data, in order to provide more plot points. The auditor's selection of an appropriate period for the development of historical cost data will, however, be governed to some extent by the contractor's operations and accounting methods. It may be necessary to use annual data if extensive adjustments to quarterly or monthly data would be required to compensate for accruals and seasonal fluctuations in activity or costs. When periods of a month or less are used, it may be necessary to adjust the data for the number of working days or hours, as discussed in E-309.

b. It is usually necessary to purify historical costs and bases to some extent. Adjustments for economic factors are described in E-207. Other adjustments may be required to eliminate unusual or nonrecurring costs (e.g., costs incurred during interruptions in normal activity because of strikes, floods, or fires), to compensate for accounting system changes, and to effect transfers of costs recorded in a period to which they do not apply.

c. It is essential that the equation used in a regression analysis represent the relationship between the variables. When, for example, the auditor uses the equation $y = a + bx$, he or she must first establish that a straight line best describes the relationship between the two variables. This step will require a scrutiny of the scatter diagram, consideration of how changes in the x variable can logically be expected to influence the value of the y

variable, and determination if a logical meaning can be ascribed to each of the *a* and *b* coefficients.

d. Sometimes the sign of a coefficient obtained from regression analysis is the opposite from that which could logically be expected. For example, in using the equation $y = a + bx$ to evaluate the relationship between direct labor *x* and overhead *y*, it would normally be expected that both the *a* and *b* coefficients would be positive. A negative value for *b* would indicate that increases in direct labor are accompanied by decreases in overhead. More commonly, a negative value of *a* would indicate a negative amount of fixed overhead. Under these conditions the auditor should reexamine the logic of the association between the variables and determine that the equation used expresses a valid relationship between the *x* and *y* values. The auditor should satisfy him or herself as to the acceptability of the basic data used in the correlation. In some instances the data may require further purification as described in paragraph E-208b. When the data appear to be correct but result in an illogical negative a value, consideration should be given to forecasting the value of *y* by some other method, such as the average or most recent ratio of the *y* values to the *x* values.

e. In the application of statistical methods to regression analysis, there is a fundamental assumption that the distance of each *y* value from the underlying regression line is independent of the other *y* values. If the *y* plot points are, for example, moving averages or cumulative averages, this assumption is not met. Consequently, a value of r^2 . obtained in fitting a least-squares line to such data has little or no meaning and cannot be tested for significance as described in E-205.2.

f. The auditor should be aware of the significance of a "run of points" in the data. A run consisting of a long series of points which are all above or below the regression line may occur when the historical data are arranged chronologically or in order of increasing values of the independent variable. The existence of such runs may indicate that (1) some factor not considered in the regression equation is influencing the dependent variable, (2) the equation being used in the analysis does not fully describe all the underlying relationships between the variables, and/or (3) the data do not satisfy the assumption of independence cited in paragraph e. Suppose, for example, that all of the earlier values of the dependent variable are below the regression line and all of the later values are above the line. This condition indicates that a general rise in price levels, or some other factor not considered in the regression equation, may have caused the dependent variable to increase over the period of time covered by the analysis. As an example of the second condition, suppose that all of the small and large values of the independent variable are below the straight line of best fit, while those for intermediate values are above the line. This condition could indicate the existence of a curvilinear relationship between the two variables.

g. Predictions made from a regression equation will be most reliable (precise) when the independent variable values are close to their average values in the data. In the case of simple linear regression, for example, the regression line passes through the point corresponding to the average observed values of the *x* and *y* variables. Small errors in the slope of the line, caused by random fluctuations in the data, can result in large errors in predicted values far away from this point. When the predicted values of the independent variable(s) are outside the range of the historical data, particular care must be exercised. A regression equation which does not represent the true underlying relationship between the variables can provide a reasonably good fit to historical data within a limited relevant range, but result in grossly erroneous predictions when the independent variable is outside that range.

E-300 Section 3 --- Time Series Charts

E-301 Introduction

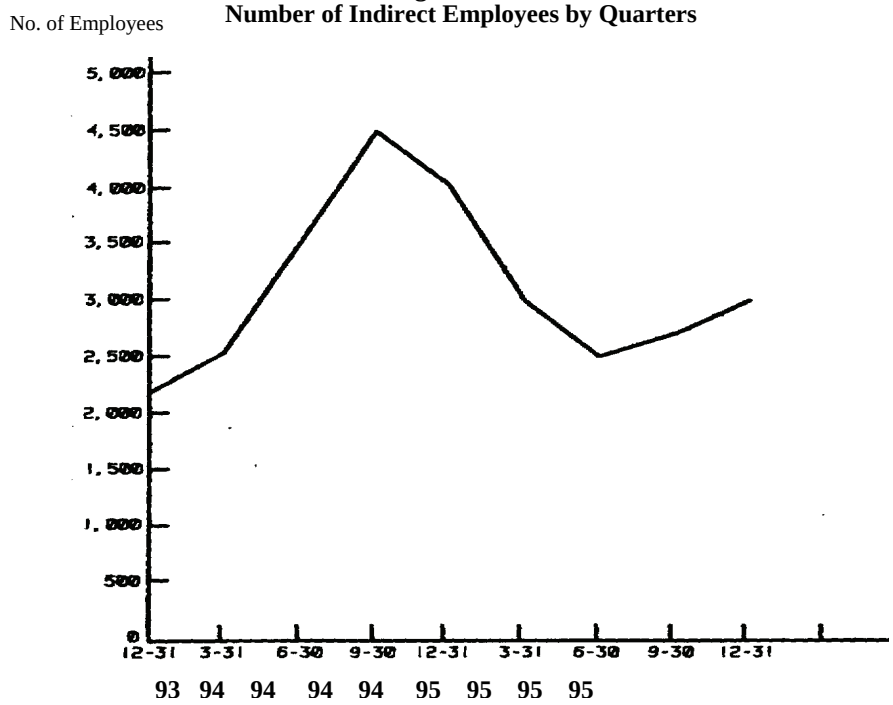
This section presents a discussion of the use of time series analysis to evaluate contract costs.

E-302 Definition and Concept

a. Data which are collected and classified by successive time intervals so as to reflect changes occurring with the passage of time form what is generally called a "time series." The graph of a time series is in effect a scatter diagram in which the independent variable has been replaced by a time element, such as years, months, or weeks. An illustration of indirect labor plotted as a time series is given in Figure E-3-1. As shown on the chart, successive plotted points are usually connected by a series of straight lines to show more clearly the variations in the data. This usually is not done in a scatter diagram because the plotted points are seldom in chronological order. A type of situation in which it would be informative to join the points is discussed in E-104.5.

b. The graphs of few time series approximate straight lines, a few others look like rough curves, but the majority gives the impression of a series of hills and valleys. For this reason, time series analysis is used to bring some order into the irregular pattern and seemingly erratic appearance of a time series. A variety of circumstances and conditions acting simultaneously and with their effects superimposed give the time series its irregular appearance. It is customary to divide the fluctuations of a time series into the following four general classifications: (1) chance and unusual variations, (2) secular or long-term industry and company trends, (3) seasonal variations, and (4) business or economic cycles.

Figure E-3-1
Number of Indirect Employees by Quarters



E-303 Chance and Unusual Variations

Chance and unusual variations of time series are those changes which, being caused by unusual events such as strikes, floods, and fires, do not follow the normal pattern of business operations. To the extent that variations are caused by chance, there is little that can be done to predict the behavior of the time series. However, changes in time series which are due to unusual events may be correlated with the events, simply by inspecting the data. The primary reason for the discovery and isolation of fluctuations due to rare events is that adjustment can subsequently be made for these variations in the investigation of secular trends and seasonal patterns.

E-304 Secular Trends

The term "secular trend" is used in this appendix to refer to any long term industry or company trend as distinguished from long term variations in the business data caused by the business or economic cycle.

a. Secular trends depict the gradual and consistent pattern of long term changes in the business operations. Whether a long term trend is secular or a phase of a longer term economic cycle is often difficult to determine; generally, however, it will represent a combination of both. It is for this reason that, as long as the data are comparable, it is advisable to have data covering as long a period of time as practicable.

b. In simple analyses and evaluations of time series, secular trends are usually thought of as straight lines fitted to the series indicating the gradual growth or decline of the variable. For example, if wage rates increase from year to year, we say there is an upward trend. Time series trends are usually shown as straight lines on regular or semi-logarithmic graph paper. A straight line on semi-logarithmic graph paper represents an exponential curve. This type of curve is applicable to a variable which tends to increase or decrease by a fixed percentage from one period to the next. Few time series are actually of such a simple nature that they closely follow a straight line when plotted on either regular or semi-logarithmic graph paper. For example, national indexes of wage and price levels generally have not closely followed either a simple linear or exponential curve. For reasons of simplicity, straight line trends are the most commonly used and this discussion, also for simplicity, will be limited to their use. Nevertheless, straight lines should be used only if they reasonably represent the trend for the desired period. When a straight line does not reasonably approximate the trend, the analysis requirements for cost auditing purposes can usually be met by drawing a moving average line as described in E-307.

c. As in the case of a scatter diagram, a convenient means for obtaining an objectively fitted trend line to time series data is by the method of least-squares described in E-202. An illustration of the computation of such a trend line using the quantitative methods software, EZ-Quant, is given in E-311. This approach is useful in studying the behavior of historical data when there is a reasonable degree of correlation between the passage of time and the growth of, or decline of, a variable. Such correlation is demonstrated when there are few changes in the general direction of the slope and if the approximate trend, when plotted on arithmetic paper, is a straight line. However, business data tend to result from the synthesis of many variable factors whose effects cannot be isolated or measured, resulting in a high degree of variability in the accumulated data. This variability may make the use of the mathematical precision of the least-squares line rather pointless for the analysis of time series; hence, when only a rough idea of the trend is needed, a freehand line based solely on judgment and sight is sufficiently accurate. Extreme caution should be exercised in using trend lines fitted to time series data as a forecasting technique. Use and limitations of such trend lines for forecasting purposes are discussed in E-310.

d. The precision of the semi-averages method lies between the method of least-squares and the freehand drawing of a line. This method, which also may be applied to several partial averages, requires the following steps:

(1) divide the data into two or more parts; normally, two equal parts are used; but, if it would be more appropriate, especially if a very long time period is used, the data can be divided into three or more parts,

(2) calculate the individual average (mean) for each part of the data,

(3) plot these averages at the midpoints of each part of the data, and

(4) extend a smooth line through the points.

(a) To illustrate the method of semi-averages, consider the following data:

Year	Month	Monthly Value	6-Month's Total	Monthly Average
1995	Jan	3,800		
	Feb	3,900		
	Mar	4,400	< Plot Point 22,800	3,800
	Apr	3,600		
	May	3,100		
	Jun	4,000		
	Jul	5,500		
	Aug	4,400		
	Sep	3,900	< Plot Point 29,400	4,900
	Oct	4,300		
	Nov	6,600		
	Dec	4,700		

(b) In the above table the six-month's totals and the corresponding monthly averages are listed at the midpoint of each averaging period; that is between March and April and between September and October. The monthly values from this table are then plotted at the midpoint of each month; and the two averages (3,800 and 4,900) are plotted at the midpoints of each six-month period. The line drawn through these two points is the semi-average trend line.

E-305 Seasonal Variations

a. The type of variation in a time series easiest to understand is seasonal variation, which consists of regularly repeating patterns of moderate or short duration in the contractor's operation. Although the name of this type of variation implies a connection with the seasons of the year, it is used to indicate any kind of variation which is periodic in nature, provided it is also of short duration.

b. While as a rule, it is easy to determine the length or period of seasonal cycles, the description of their characteristics is more involved. There are a number of techniques for describing them, including some which involve rather tedious calculation. A relatively simple method of measuring seasonal patterns, which may be called the simple average method, consists of constructing a seasonal index. This is a descriptive measure that compares, by a series of ratios, the value of each month with the overall monthly average for the entire period.

SEASONAL INDEX OF DIRECT LABOR HOURS

Year	Month	Direct Labor Hours	Seasonal Index
1994	Jul	38,414	88
	Aug	38,610	89
	Sep	45,203	104
	Oct	36,734	84
	Nov	31,368	72
	Dec	41,415	95
1995	Jan	55,556	127
	Feb	44,158	101
	Mar	34,545	79
	Apr	41,214	95
	May	68,252	157
	Jun	47,460	109
Total		522,929	
Monthly Average (522,929 ÷ 12)		43,577	

The seasonal index is computed by dividing the labor hours for the month by the monthly average labor hours and multiplying by 100. For example, the seasonal index for the month of July, rounded to 88 in the table, is computed as follows:

$$\frac{38{,}414}{43{,}577} \text{ X } 100 = 88.15$$

c. The principal use of the seasonal index in contract auditing is in the evaluation of the relative level of an estimate for an interim period. To illustrate this use, assume that the seasonal labor hour index for the month of May is 157, as shown in the above table, and that this value is considered typical. This would mean that based on the seasonal pattern the number of labor hours for May could be expected to be approximately 157% of the monthly average. If the total for the year were estimated at 600,000, the average monthly estimated hours would be 50,000 (600,000 ÷ 12) and the estimated hours for May would be 78,500 (50,000 x 157%).

E-306 Business Economic Cycle

a. Generally speaking, the economic cycle consists of those up and down movements of a time series which extend over long periods of time and originate from and are associated with general economic conditions such as prosperity, inflation, and depression. That is, the economic cycle for a particular business would be those variations in a time series for that business which would remain if the trend, the seasonal variation, and the chance or unusual fluctuations were eliminated.

b. The general business economic cycle may be analyzed into a number of different types of cycles associated with various theories which endeavor to explain their occurrence. However, since most cost evaluations for contract auditing purposes cover relatively short periods of time, it is not usually feasible to apply the refined techniques necessary to isolate the business economic cycle.

E-307 The Moving Average

E-307.1 Description

When the time series trend is not a straight line and when in evaluating costs the only interest is in the general movement of the series, it is customary to study the behavior of the series by means of a so-called "moving average." A moving average time series is an artificially constructed series composed of overlapping averages in which the value for each period is replaced by the average (mean) value for two or more adjacent periods. In computing the second and subsequent averages, the earliest value of the preceding computation is dropped and the next new value in point of time is picked up to yield the new overlapping average. In constructing a graph of a moving average time series each average value is plotted at the midpoint of its respective averaging period. The moving average has the effect of smoothing the minor fluctuations in a time series. In fact, a perfectly regular, periodic pattern can be eliminated from the series by the use of the appropriate moving average. The moving average method, however, will yield a smooth trend only if the variations to be eliminated are essentially stable in both duration and amplitude and if the trend is basically linear. By averaging the effects of the seasonal and other short term variations, the resultant average line will primarily express the approximate general trend of the longer term variations.

E-307.2 Construction – Moving Average

a. The first step in the construction of a moving average time series is the selection of the proper averaging period. As a general rule, it should correspond to the average length of the cycle of the variations to be eliminated. If a shorter period is selected, then influences pertinent to the average but occurring before or after the averaging period will be disregarded and, as a result, part of the cycle will remain in the moving average. On the other hand, if the period is too long, occurrences which in point of time are not pertinent to the average will be included in its computation.

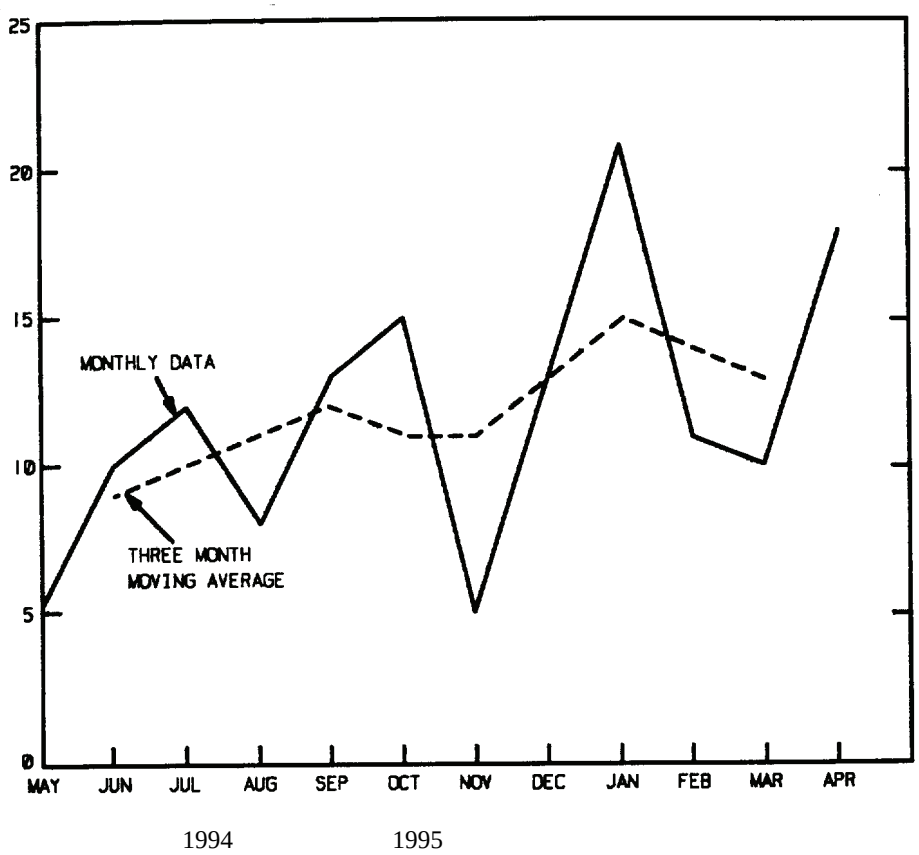
b. The computation of the moving average is illustrated in the following table; a graph showing both the monthly and moving average data is given in Figure E-3-2. For ease and clarity of presentation, an averaging period of three months was selected and data for only one year has been shown. The moving total, column 4, was computed by first adding the values for the first three months and entering the amount opposite the midpoint of the period, the second month. Next a similar total is computed by adding the values for the second, third, and fourth months, and entering the total after the third month. At each subsequent shift of the moving total a new total is computed dropping the earliest of the months previously used and substituting the value for the next succeeding month. The final total (for February, March, and April 1995) is entered opposite March 1995. The moving average values, column 5, are computed by dividing the moving total by the number of terms in the average period; in this case, three.

COMPUTATION OF A THREE-MONTH MOVING AVERAGE FOR FIGURE E-3-2

Year	Month	Monthly Values	Three-Month Moving Total	Three-Month Moving Average
1994	May	5		
	Jun	10	27	9
	Jul	12	30	10
	Aug	8	33	11
	Sep	13	36	12

	Oct	15	33	11
	Nov	5	33	11
	Dec	13	39	13
1995	Jan	21	45	15
	Feb	11	42	14
	Mar	10	39	13
	Apr	18		

Figure E-3-2
Three-Month Moving Average



E-307.3 General

a. As shown above, both the moving total and moving average are entered at the midpoint of the averaging period. The reason for this is that an actual figure or a calculated figure, referring to a given period of time, refers equally to all portions of that period; and it is usually best to show the figure as applicable to the middle of the period. A yearly figure is referenced to the middle of the year, July first, a monthly figure to the fifteenth of the month, and a figure applying to an odd number of terms (weeks,

months, or years) is referenced to the midpoint of the middle period. From this reasoning an average for an even number of terms would be located between the data for the two middle periods, and it may be so shown. However, it is usually desirable to show the average in its customary position, as applying to the middle rather than the end of a period; this requires one more computation to shift the average one half term. It may be accomplished by adding in turn each two successive moving averages and dividing by two. This latter average is then centered at the midpoint of the combined periods. This process, known as "centering the moving average," is applicable to any situation where the moving average period includes an even number of terms.

b. While the moving average will indicate the general direction and extent of a trend, it will closely portray only a linear trend. When the basic trend is curvilinear, the moving average line will follow a path which is inside the curve of data points. In effect, in a curvilinear situation the moving average values do not reflect the full swing of the trend variation, but tend to somewhat reduce it. Another limitation on the use of moving averages is that they cannot be computed for time periods nearer to the end of the series than approximately one-half of the averaging period.

E-308 Adjustment of Data

It is essential that the data be comparable item by item throughout the analysis period. Because this is not always true of the raw data, it is frequently necessary to adjust the figures before an analysis is undertaken. Two common types of adjustments are discussed below:

a. Adjusting for Changes in Classification Methods.

Since the methods of classifying and apportioning costs may be changed from time to time, the contents of the accounts to be analyzed may also change during the analysis period. Occasionally, these changes are not significant to the analysis and may be disregarded. This, however, is not usually true; and, to the extent that the changes are significant, the data accumulated before the change are not comparable to the data accumulated after the change. For evaluation of estimates, the contract auditor is interested in the analysis of only that data which were developed under current procedures. If a significant change in procedures is made, the auditor would have a choice of using a shorter analysis period, or adjusting the data to place it on a comparable basis, preferably adjusting the first part of the data. Adjustment of the data is the better method if the analysis period is relatively short. In this case, any further shortening of the period to avoid adjustment of the data could result in a period so short that the full pattern of the variations might not be reflected.

b. Adjusting for Periods of Various Length.

(1) Most of the data which the contract auditor will use are available in monthly, weekly, or daily forms; and the auditor must recognize that the work month, work week, and even the work day are variable units of time. The shortest month is about 10% less than the longest; and the variation may be even greater if holidays are taken into consideration. The work week may vary from one to seven days; and the work day may vary from a few hours to one containing considerable overtime or to one composed of three eight-hour shifts. The solution to the problem, usually, is to put the data on a "per standard working day" basis by dividing the total for each period by the approximate number of standard working days or hours. When there is considerable overtime, more than one shift, or an abnormally low work load, the reduced efficiency of these abnormal operations could also affect the comparability of the data, depending on the purpose of the analysis. For example, if the object of the analysis is to determine the normal costs for the operation of a production center at normal levels of production, reduction of the data to a standard working day basis without recognition of the extra costs due to the lowered efficiency of extended operations could distort the results of the analysis.

(2) The adjustment for the number of working days is necessary for any series, like that of monthly production and cost totals, where each individual working day means a more or less proportionate increase in the data values. There are, however, two kinds of data which do not require adjustment to a working day or similar basis: those involving values as of certain dates and those stated as averages. For example, figures showing the number of workers in departments are usually based on the number on the payroll on a certain day of the month; and inventory quantities and values are also stated as of a specific day. On the other hand, monthly average labor rates, and percentages, and index numbers are obviously values which do not depend in any systematic way on the length of the period to which they are applied.

E-309 Length of the Analysis Period

a. The length of the selected analysis period can greatly affect the outcome of a trend analysis. Although no simple rules can be given for determining the proper length, the period normally should be sufficiently long to reflect the full pattern of changes that may be pertinent to the purpose of the audit. When this is not possible and a trend analysis is prepared on the basis of a few observations, the auditor should bear in mind the resulting limitations.

b. In selecting the period for fitting a trend line to cyclical data, the series should normally start and end in about the same phase of the cycle. For example, if it is to end during a period of high costs, then it normally should also start during a period of high costs. If it starts and ends at different points in the cycle, then the slope of the trend line is apt to be steeper or more shallow than conditions warrant. On the other hand, changes that suddenly reverse a trend are not uncommon; and, if there is a distinct or abrupt change in the series, it is usually best to break the series into two parts and fit separate trend lines.

E-310 Interpretation and Use

The time series chart and trend lines have been used for a number of years in analyzing costs and in preparing cost estimates. While in most instances these devices and techniques have been properly and successfully used, a number of cases reflect a lack of understanding of the purpose, nature, and limitations of time series analysis in the evaluation and estimation of costs. Much of the misuse appears to stem from a confusion of the devices and methods of time series analysis with those of correlation analysis. Because of the similarity between these two techniques, the problems involved in the interpretation and use of a time series from the contract auditing standpoint can probably be best visualized in contrast with those of correlation analysis.

E-310.1 Comparison of Concepts

a. In the evaluation of contract costs and cost estimates, it is frequently important to know and to measure the interrelationships between the various costs and cost factors; to know whether, with what probability, and under what conditions a change in one cost parameter will be accompanied by a change in another cost parameter. These facts about the cost parameters can only be determined by studying their interrelationships independently of all other parameters, including that of time. The discovery and measurement of these interrelationships, without reference to the sequence of the events in which these relationships occur, is the objective of correlation analysis.

b. Although few occurrences in business are functions of time, the amount of cost that will be incurred in any operation is directly dependent on the nature and extent of the contractor's facilities and the skill and experience of its workers. These capabilities are dynamic; they are constantly changing and expanding with time as new facilities are acquired and experience is gained. Any evaluation of incurred or forecast costs must take into consideration this changing pattern of capability; therefore, any analysis of changes in costs or cost parameters must also take their sequential relationship into account. This is

the function of time series analysis; to discover, analyze by type, and depict in sequence the changing values of a variable during a selected period of time.

c. Correlation analysis and time series analysis are supplemental, not alternative procedures. For example, the growth and decline of indirect expense may be related to the changes in the direct labor by correlation analysis, but their relationship can be fully understood only if the changes in these variables are also considered in relationship to time. A time series chart displaying the costs of both direct labor and indirect expense might be used for this latter purpose; and these in turn could be correlated to the changes in plant capacity, such as the use of extra shifts and extra production lines.

d. A time series is a succession of periodically measured values from a sequence of individual events. The time series line which joins the otherwise disconnected points serves only to make fluctuations in the measured values and their sequential relationship more readily apparent. As a result, the segments of the line between the data points have no meaning in regard to intermediate values. Changes in the measured values during a period of time are associated, except in a few instances, with the changing events and not with the passage of time per se. Consequently, the trend line of a time series does not portray a mathematical relationship whereby the value of one variable may be computed from the known or assumed value of another variable. Instead, it indicates the general direction of the variable values during the total time period being analyzed.

E-310.2 Application

a. The fact that the trend line generally cannot be used as a regression line does not mean that it cannot be used in making or evaluating cost forecasts. The trend line and the moving average line may be projected into the immediate future to the extent that the future values will develop in a predictable manner based on the current operating position. Their usefulness, however, diminishes rapidly the farther they are extended; and, if this extension is carried beyond the point where influences may be evaluated, unknown factors intervene so that the connection from the current to the future operating status becomes tenuous. The extended lines then lose their value, and their use in making or evaluating an estimate is hazardous. The validity of using the extended trend line or moving average line in connection with cost forecasts is closely associated with the lead time of production and production planning, with industrial and economic conditions, and on the forecaster's or evaluator's knowledge and understanding of the cost parameters which will determine the trend of the costs from the present through the forecast period.

b. The time series readily reveals limits within the historical operations, such as the highest, lowest, and normal values. If similar factors can be expected to operate in the future these limits may be used as a guide to the audit evaluation of forecasted values. This use of time series must be based entirely upon judgment. The coefficients of correlation and determination cannot be statistically evaluated as described in E-205.2. The reason for this is that a time series has only one variable whose values are sequentially related and not two (or more) variables whose values tend to be related to one another, as in a correlation.

c. Arranging data in the form of a time series facilitates comparisons between data occurring at different points in time and thereby gives meaning to observations that otherwise would signify virtually nothing. For example, it is possible to ascertain whether the data reveals a trend in the movement of the values or whether their occurrences are erratic. If there is a trend, and it disappears and reoccurs over a period of time, it is usually indicative of a cyclic operation, and it would be desirable to determine its nature and causes. A study of the interrelationships implied by coincident troughs or peaks for several cost factors should lead to a better understanding of the effects of changes in production methods and policies. On the other hand, lead time is frequently indicated by changes in one cost parameter regularly preceding those of another parameter. This fact will often enable the auditor to anticipate changes before they appear as historical data.

E-311 Illustration of Computation of the Least-Squares Line for a Time Series

a. The values required for computation of the least-squares line for a time series study of material prices are given in the following table. In this example, a manufacturer of electronic components publishes quarterly price lists. A newly-developed component first appears in the list at $10 and nine quarters later has declined in price to $4.

Year	Quarter	Unit Price
1994	1st	$10.00
	2nd	9.00
	3rd	8.00
	4th	7.00
1995	1st	7.00
	2nd	5.50
	3rd	5.50
	4th	4.50
1996	1st	4.50
	2nd	4.00

b. Price levels often tend to follow an exponential equation more closely than a linear equation. The Technical Audit Services Division (OTS) can be contacted for assistance in performing a curvilinear (non-linear) regression analysis of historical data. Figure E-3-3 illustrates the output of EZ-Quant that can be provided by OTS, which used the exponential curve type to obtain an estimate of the price of the component in the 2nd quarter of 1997. A $2.60 estimate was accomplished by typing "14" in response to the computer inquiry for "*x*." The number 14 was used because the price list for the 2nd quarter of 1997 will be the 14th in the series.

Figure E-3-3
Computation of the Least Squares Line for a Time Series

Regression Data

Unit Price ($)	Time (in Quarters)
10	1
9	2
8	3
7	4
7	5
5.5	6
5.5	7
4.5	8
4.5	9
4	10

Figure E-3-3

Data Summary and Correlation Coefficients

Data Summary				
10	Number of Observations			
	Average Value	Minimum Value	Maximum Value	Standard Deviation
Unit Price ($)	6.5	4	10	2.041
Time (in Quarters)	5.5	1	10	3.028
Correlation Coefficients Between Variable Pairs				
	Dependent Variable (Y)	Independent Variable 1		
	Unit Price ($)	Time (in Quarters)		
Unit Price ($)	1			
Time (in Quarters)	-0.979837	1		

The Fitted Equation

$Y = a * b\text{^}(X_1)$

Coefficients estimated by Regression:				
	Variable	Coefficient Value	Computed T-Value	Inclusion Assurance (%)
a	Intercept	10.93722613	73.1707	99.9
b	X_1 is Time (in Quarters)	0.9024271	-19.4853	99.9
Summary Statistics:				
	R squared	Regression Std Error	Regression Std Error (log-based)	
	0.979364	0.278486	0.047858	
	Comparison Assurance (%)	F Statistic	Regression Degrees of Freedom	Residual Degrees of Freedom
	99.9	379.6781	1	8

Figure E-3-3

Actual vs. Calculated Dependent Variable Values for
Y = *a* * *b*^(X_1)

Data Item	Actual Value	Calculated Value	Difference (Actual-Calc'd)	% Diff (Diff/Actual)
1	10	9.87	0.13	1.3
2	9	8.91	0.09	1
3	8	8.04	-0.04	-0.5
4	7	7.25	-0.25	-3.6
5	7	6.55	0.45	6.5
6	5.5	5.91	-0.41	-7.4
7	5.5	5.33	0.17	3.1
8	4.5	4.81	-0.31	-6.9
9	4.5	4.34	0.16	3.5
10	4	3.92	0.08	2.1

Projecting With the Regression Equation Y = *a* * *b*^(X_1)

	Independent Variable	Coefficient Value	Independent Variable Value	Contribution to Projection
a	Intercept	10.93723		10.94
b	X_1 is Time (in Quarters)	0.90243	14	0.24
	Projection:			
	Y is Unit Price ($)			2.6

E-400 Section 4 --- Audit Applications of Graphic and Computational Techniques

E-401 Introduction

This section presents illustrations of the application of graphic and computational analysis to specific problems of cost evaluation in the field of contract cost auditing.

E-402 Identification of Departures from Historical Cost Patterns

E-402.1 General

a. Both time series analysis and scatter diagrams are easily used and especially helpful devices in focusing attention on costs which deviate from historical patterns. Regression analysis can also be used for this purpose. Whether or not a specific historical trend may be applicable to a current situation can be determined by a direct comparison of past and current data. The auditor should be aware of the cost patterns which are normal to the contractor's operation, and should look for, recognize, and investigate significant departures from normal patterns. Special attention should be given to the impact of any significant changes in products or production methods.

b. The analyses can and should be subjective since the auditor's goal is to identify those accounts which have deviated significantly from experienced trends and thus require a more detailed analysis. If, for example, there are significant changes in overhead expenses or rates or in direct labor costs which cannot be explained by a corresponding change in the level of production, the auditor will want to know the reason. Such changes may signal lack of management control over cost levels or a change in accounting procedures. This does not mean that costs falling within the normal pattern are automatically acceptable and need not be examined. The auditor should analyze individual expenditures which are so large that they have a material impact on Government contract costs. In addition, samples of items in cost categories which account for large proportions of the costs being audited should be examined. Appendix B provides guidance on the determination of appropriate sample sizes for this purpose.

c. By pinpointing costs that need special examination, by establishing a pattern within which costs may be considered generally acceptable and subject to only a minimum examination, and by indicating the trend of these costs in relation to some base of recognized acceptability, graphic and computational analysis techniques provide the auditor with an additional and quickly usable tool for determining both the direction and extent of required audit effort.

E-402.2 Compilation of Data

The data to be collected can be updated on a monthly or quarterly basis from the contractor's accounts and operating statements. Contractors frequently prepare graphs and analyses to identify cost trends and departures from historical patterns for attention by management. The auditor should attempt to identify and gain access to these documents in order to avoid duplication of effort. The following is a listing of basic variables, accounts and groups of accounts that may be useful for analysis purposes. In addition to collecting and analyzing current data for such variables, valuable information can be gained from tracking budgeted or forecasted amounts.

a. Overhead expenses, by pool, in total and segregated by account or homogeneous groups of accounts, such as:
(1) Indirect labor
(2) Employee benefits and payroll taxes
(3) Repairs and maintenance
(4) Marketing

(5) Bid and proposal expense
(6) Allocations
(7) Other variable overhead expenses
(8) Fixed expenses (depreciation, rent, etc.)

b. Overhead base for each pool.

c. Direct costs and other variables related to volume, such as:

(1) Direct material dollars
(2) Direct labor dollars and/or hours
(3) Other direct charges (tooling, travel, etc.)
(4) Sales
(5) Cost of sales or cost input
(6) Employees hired
(7) Number of employees, direct and indirect
(8) Square feet of plant space

E-402.3 Analyzing the Data

Some examples of the types of graphs that the auditor may wish to consider in identifying departures from normal cost patterns follow. The more points of data included in an analysis, the more useful the analysis will be for identifying deviations from historical patterns.

a. Time-Series Analysis.

(1) Overhead rates by month. Both the actual monthly and year-to-date rates should be plotted on a time-series graph. The current estimating rate should also be plotted for comparison. These graphs will enable the auditor to become aware of within-the-year trends and evaluate whether the current estimating rate is acceptable for the remainder of the year. If rates from prior years are also plotted this will enable the auditor to identify months which deviate from experienced trends.

(2) Relationship of estimated amounts of key variables to actual amounts. The objective of these analyses is to determine if there is any pattern of under- or overestimation by the contractor. For example, does the contractor consistently underestimate sales, the number of employees, or the amount of the overhead base? Does the contractor overestimate certain expenses which are not particularly susceptible to audit? Over a period of time, such patterns, if they exist, will show up and the auditor can consider them in his audit of future estimating rates. The analyses can be accomplished by plotting the estimates on graphs used to track the actual data.

b. Scatter Diagrams.

(1) Relationship of overhead dollars to the base of allocation. The total overhead dollars are plotted, preferably monthly or quarterly, on a scatter diagram on which overhead dollars are scaled on the *y* (vertical) axis and the base is scaled on the *x* (horizontal) axis. This type of graph can also be used to compare individual accounts or groups of accounts with the base. Such graphs will assist the auditor in determining when overhead costs for a period are out of pattern. In addition, it will give the auditor some insight into whether the overhead costs are dependent on the base of allocation or whether they are controlled by other factors.

(2) Relationship of overhead expenses to other variables. For example, scatter diagrams relating total overhead expenses to sales, cost of sales, or direct labor will enable the auditor to evaluate whether overhead costs are increasing or decreasing consistently with changes in business volume. A scatter diagram relating indirect labor dollars, hours or employees to direct labor dollars, hours or employees will indicate whether indirect labor is increasing or decreasing disproportionately. A graph relating rent, depreciation and/or maintenance expense to floor space may be helpful in determining the reasonableness of these expenses. A graph relating the expenses of the payroll and/or personnel operations to the number of employees is helpful in evaluating the reasonableness of the expenses of these operations. Other potentially useful graphs are the

relationship of allocated expenses to the appropriate allocation bases; the relationship of employee benefit costs to the total labor dollars; the relationship of recruitment and personnel costs to the number of employees hired; and the relationship of material handling costs to material costs.

c. Regression Analysis.

(1) Scatter diagrams are adequate to detect significant departures from historical relationships between two variables. Consequently, regression analysis should be used for this purpose in applications which are sufficiently computerized to avoid the expenditure of excessive auditor time. EZ-Quant can be used for this purpose. Where it is important to evaluate the reasonableness of a cost in terms of more than one independent variable, multiple regression will be required.

(2) If possible, obtain the contractor's historical data in an electronic file format, preferably as an ASCII or Excel file. EZ-Quant can import data files that were saved in a proper format using Excel. The Help facility in EZ-Quant contains guidance related to "saving an Excel file as a different file type." Otherwise, the EZ-Quant Regression Analysis Wizard can be used to manually input data into a file and to complete the regression analysis steps.

E-403 Evaluation of Proposed Overhead Costs

a. One of the most important applications of regression analysis is analytical testing the reasonableness of estimated overhead costs. Overhead rates vary in response to many causes but because many overhead costs are fixed or semi-fixed, the level of operations is one of the most important factors. Overhead rates generally are lowest when a plant is operating at capacity and increase substantially when production levels are reduced. This relationship becomes increasingly significant in evaluating bid proposals for large contracts which will involve production over extended periods of time. In these cases it is necessary to predict overhead rates many years in advance on the basis of operating levels projected for these years.

b. The simplest way of using regression analysis to evaluate proposed overhead costs is to fit a least-squares line to the historical amounts of an overhead pool (the dependent variable) and the base of allocation or some other predictable measure of the level of operations (the independent variable). A computerized example is presented in E-202.2. This procedure assumes that the overhead pool consists of (1) fixed expenses which remain approximately the same at all operating levels, (2) variable expenses which tend to be directly proportionate to the base and (3) semi-fixed expenses which cannot be reduced below a certain level while the plant is in operation, and which increase above this level in proportion to the base. The value obtained for "*a*" will then represent the average value of the fixed expense plus the fixed portion of semi-fixed expenses during the period covered by the historical data. The value obtained for "*b*" will represent the average ratio of the variable expenses plus the variable portion of the semi-fixed expenses to the base. Estimates of the a and b parameters can also be obtained by judgmentally segregating fixed and variable expenses based on an evaluation of each account in the overhead pool. However, many overhead accounts consist of semi-fixed expenses and it is difficult to judgmentally determine the amount of fixed and variable expense in each such account. Consequently, regression analysis may be an easier means of estimating the total amount of fixed and variable expenses in an overhead pool. For reasons discussed in E-208g, caution should be exercised in the use of the *a* value obtained from a regression analysis as the total amount of fixed expense. However, in many contract audit applications, the use of simple linear regression as described in this paragraph has been found to provide sufficiently accurate and reliable predictions of overhead costs. The following paragraphs describe refinements to this basic procedure which may be needed to improve predictions of overhead. The extent to which these refinements are appropriate in any given audit situation depends on the

extent to which departures from the assumptions cited earlier in this paragraph can be expected to affect Government contract prices.

c. If the variables included in the regression analysis have been significantly affected by changes in major economic factors (such as inflation or wage levels), adjustments of the type described in E-207 will be required. As discussed in E-208a. and b., adjustments may also be required to eliminate unusual or nonrecurring costs and to compensate for accounting system changes.

d. Some overhead expenses can often be predicted more accurately by methods other than regression analysis. For example, future depreciation expense may be obtained from depreciation schedules for existing facilities and planned acquisitions. Likewise, future rental expenses may be predicted based on existing leases. Acceptable research and development and bid and proposal expenses may be predictable based on advance agreements. Changes in union agreements, management policies and payroll tax laws can cause significant deviations from past patterns of employee benefit costs. Consequently, it may be necessary to predict employee benefits based on a judgmental consideration of these factors in conjunction with anticipated employment levels.

e. In some situations management may be planning to institute changes which will result in greater operating efficiencies and lower costs. The auditor should adjust projections based on historical data accordingly.

f. Some overhead expenses may vary in response to a parameter other than the base of allocation. If the parameter is predictable, better forecasts of the related costs may be obtained by applying regression analysis to the historical amounts of these costs and the parameter. In some cases, more than one parameter can be identified as influencing certain expenses. For example, maintenance costs may vary in response to both floor space and direct labor. Multiple regression analysis should be considered as a means of forecasting such expenses.

g. The use of regression analysis assumes that overhead costs will be the same in the future as the past except for predictable changes in the independent variable(s). If a change in the basic pattern of an expense is anticipated, regression analysis applied to historical data will obviously not provide useful results and some other method of prediction should be employed. When significant changes in production capacity are planned, it generally will not be reasonable to assume that past patterns will continue. However, if no drastic changes in operating methods are planned, it may be possible to compensate for the changes by adjusting the value of "*a*" obtained from the application of regression analysis to historical data.

h. In some cases, it may not be practical to adjust prior data to compensate for the creation of new overhead pools and transfers of functions among pools. In such cases, the application of regression analysis to the combined expenses in two or more pools should be considered. Of course, when this is done, some means of breaking out predictions of overhead costs among pools must be devised.

E-404 Evaluation of Allocation Bases

a. While perfect correlation between any overhead pool and any available base of allocation is unlikely, some bases of allocation will provide a greater degree of correlation than others. The higher the correlation, the more likely it is that a base will provide an equitable distribution of overhead. One of the principal arguments that can be presented to support an audit recommendation for a change in a contractor's base of allocation is an analysis which shows that variations in the overhead pool have historically been more closely related to variations in the base recommended by the auditor than that being used by the contractor. An objective evaluation of the relative efficiency of alternative bases of allocation can be obtained by comparing the coefficients of determination obtained as a result of fitting a least-squares line to the pool and each base. A discussion of such comparisons is presented in E-205.4. In order to maintain comparability between the coeffi-

cients, data for the same periods must be included in each analysis. The relationship between each base and the overhead pool should be tested over a sufficient period of time to establish its historic stability. Both the conditions tending to produce stability and the causes of any material deviation should be evaluated.

b. As noted in E-403f., better predictions of some expenses in an overhead pool may be obtained by correlating them with some parameter other than the base of allocation. When this situation is encountered, consideration should be given to recommending that these expenses be included in a separate pool for allocation based on this parameter.

E-405 Evaluation of Proposed Labor Rates

E-405.1 General

a. In recent years labor rates have generally increased from one period to the next. However, it must be remembered that this pattern of increase applies only to individuals with the same qualifications doing the same job. In analyzing labor rates projected for a Government contract, the auditor must be sure that the types of employees whose wages are being projected are the same as those to be assigned to the contract. It would not be proper, for example, to project engineering department labor costs based on average departmental rates, if a proposed contract will require a disproportionate amount of time by lower paid draftsmen. In addition to the category of work required, the auditor must consider changes in the projected level of production, e.g., if new workers are to be hired, they will probably start at wage rates lower than the current average.

b. In the usual application of regression analysis to the prediction of labor rates, average historical rates are first adjusted to eliminate the effect of changes in wage-related economic factors, as discussed in E-207b. The adjusted wage rates are then correlated with the plant population or the number of labor hours. The logic underlying this procedure is that as the number of employees increases, new employees will be hired at rates below the plant average, thereby reducing the average labor rate. Conversely, when the plant population is reduced, the employees with the least seniority and experience will be released first, thereby increasing the average labor rate. This procedure has produced excellent results in many contract audit applications. However, it does have limitations. It is most appropriate when the historical data included in the regression analysis is relatively recent, so that the auditor can be reasonably sure that manufacturing techniques and conditions have not changed substantially during the period of time covered by the data. It is also best when the projected plant population falls within, or close to, the range of population levels included in the data. A possible complication is that although a plant's population may vary at times, average seniority and hence labor rates may tend to rise during extended periods (say several years) of stable plant population. Under such circumstances, an evaluation based on estimates of the number of employees to be hired and separated and the average wage rates of the employees in each category may be required. In any projection of labor rates, the impact of expected changes in economic factors and employee mix must be considered along with the impact of expected changes in the number of employees.

c. Cautions set forth in E-310.1 in regard to limitations of the use of time series analysis are pertinent to the forecast of labor rates using multiple regression analysis. In other words, wherever time is not appropriate as an independent variable in a simple regression analysis, it is equally not appropriate when combined with another independent variable in a multiple regression analysis.

E-405.2 Illustration of the Use of Analysis in the Evaluation of Labor Rates

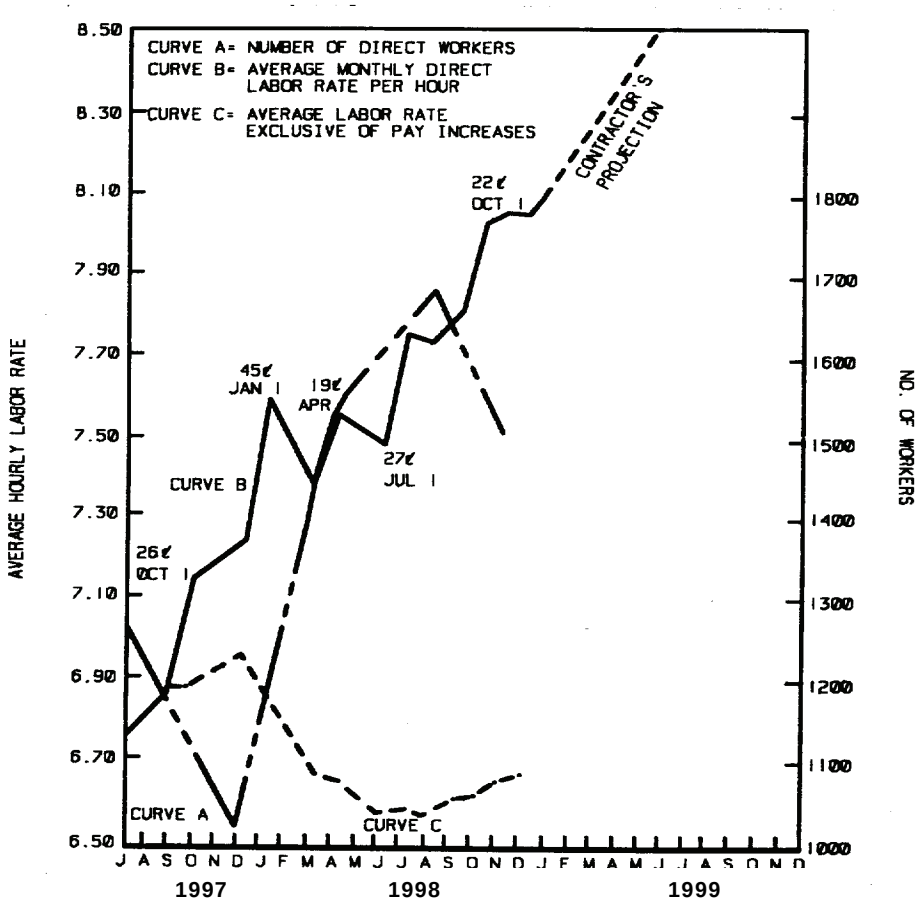
a. The time series chart in Figure E-4-1 graphically portrays hypothetical data on the number and average hourly rate of a contractor's direct manufacturing employees for an 18-month period starting July 1, 1997 and ending December 31, 1998. The data are shown in Table E-4-1.

Table E-4-1
Average Monthly Direct Labor Hourly Rates
and Number of Direct Workers
Curves A, B, and C
July 1997 to December 1998

Month		Average Hourly Labor Rate	Cumulative Rate Increases	Adjusted Hourly Labor Rate	Number of Employees
1997	Jul	$ 6.76	$ -	$ 6.76	1,289
	Aug	6.80	-	6.80	1,227
	Sep	6.88	-	6.88	1,143
	Oct	7.15	.26	6.89	1,128
	Nov	7.20	.26	6.94	1,053
	Dec	7.22	.26	6.96	1,022
1998	Jan	7.60	.71	6.89	1,117
	Feb	7.52	.71	6.81	1,244
	Mar	7.39	.71	6.68	1,419
	Apr	7.56	.90	6.66	1,532
	May	7.50	.90	6.60	1,564
	Jun	7.48	.90	6.58	1,617
	Jul	7.76	1.17	6.59	1,652
	Aug	7.74	1.17	6.57	1,682
	Sep	7.78	1.17	6.61	1,613
`	Oct	8.01	1.39	6.62	1,568
	Nov	8.05	1.39	6.66	1,513
	Dec	8.06	1.39	6.67	1,452

b. Three lines and two scales are shown on the chart (Figure E-4-1). The right-hand scale applies to Curve A, which indicates the number of workers employed each month, while the left-hand scale is used with Curve B, which shows the average direct labor rate per hour exclusive of premium pay. The dotted line, Curve C, represents a replotting of Curve B to eliminate the effect of general pay increases granted during the period. The example assumes that the union contract provides for quarterly cost-of-living adjustments to wage rates and that a general wage increase was negotiated as part of a 2-year contract effective in January 1998. These pay increases, the effective dates of which are indicated on the graph by arrows, total $1.39. The peak month of employment occurred in August 1998 when there were 1,682 workers. The cumulative pay increases up to that time totaled $1.17. Adding this increase to the July 1997 starting rate of $6.76 would make a prospective average rate of $7.93 ($6.76 + $1.17) as of August, 1998. The average rate excluding overtime at that time was however, only $7.74. The decline of 19 cents ($7.93 = $7.74) resulted from other causes, primarily the increase in the number of direct workers from 1,289 in July 1997 to 1,682 in August 1998. During the following four months when the number of workers declined to 1,452, the trend was reversed and the wage rate increased 32 cents, of which only 22 cents was accounted for by wage increases. A projection line has been constructed indicating an expected increase in the average hourly labor cost over the next year of 8 cents per month. This represents a projection made by the contractor and corresponds to the average experience for the last 18 months. Two defects in this projection are apparent: (1) the projected rate of increase reflects the general wage increase granted in January, 1998 although only cost-of-living increases are provided under the union contract during the period covered by the projection and (2) it gives no consideration to any anticipated changes in the number of direct employees.

Figure E-4-1
Average Monthly Direct Labor Rates and
Number of Direct Workers



c. It is apparent from a comparison of curves A and C that changes in the number of employees have had an impact on hourly rates. However, the precise relationship between these two variables cannot be determined from the graph. Figure E-4-2 illustrates the use of the hyperbolic curve type, that was selected using the regression analysis option of EZ-Quant, to estimate the relationship between the number of employees and the average labor rate. Based on the analysis in Figure E-4-2 it is concluded that the adjusted labor rate tends to follow the following equation:

Rate = $5.95717 + (1033.5/Number of workers)

d. The following computation illustrates how the foregoing analysis might be used in the evaluation of proposed direct labor costs. It is assumed that the contract will be performed in the second, third and fourth quarters of 1999 with employment reaching a peak in the third quarter.

	Year 1999		
	2nd Qtr	3rd Qtr	4th Qtr
Estimated Number of Employees	1,500	1,650	1,450
Estimated average rates based on regression analysis in Figure E-4-2 (base Jul 1997)	$6.65	$6.58	$6.67
Estimated cumulative increases since Jul 1997 ($1.39 in 4th Qtr 1998, plus $.27, $.30 and $.31 for each respective Qtr thereafter)	$1.66	$1.96	$2.27
Estimated hourly labor rate	$8.31	$8.54	$8.94
Estimated direct labor hours for proposed contract	62,000	119,000	31,500
Estimated total direct labor cost for proposed contract	$515,220	$1,016,260	$281,610

E-405.3 Alternative Methods

a. In the preceding example, the adjustment of historical data for pay increases was simplified by the fact that the union contract provided for uniform increases for all workers. If the increases had not been uniform, a more detailed computation based on the amount of the raise granted to each class of worker and the number of workers in each class would have been necessary. When the number of workers in each class is not readily available, estimates may be based on samples of the workers.

b. At some contractor locations, union pay increases are granted to non-union workers. In such cases, the union agreement can be used to adjust the rates paid to non-union personnel. Even at some plants which are not unionized, management grants across-the-board increases to employees to compensate for changes in economic levels. Adjustment of historical data for such increases can be accomplished in the same manner as for union increases.

E-406 Other Applications

a. An application of graphic and computational analysis techniques to the evaluation of proposed material prices is illustrated in E-311.

b. Correlation techniques may also be used in evaluating standards, such as:

(1) material handling costs,
(2) scrap, rework, and spoilage,
(3) export packaging costs, and
(4) field service warranty or guarantee expense.

As indicated in Chapter 9, contractors frequently use loading factors based on such standards in developing cost estimates. Before accepting such a standard, the auditor should know:

- the relationship between the costs included in the standard and the costs to which the standard is applied and
- the causes of any material deviations from this relationship.

Figure E-4-2
Correlation of Hourly Labor Rates and Number of Employees

EZ-Quant Regression
Regression Data

No. of Employees	Ave. Hourly Labor Rate ($)
1,289	6.67
1,227	6.8
1,143	6.88
1,128	6.89
1,053	6.94
1,022	6.96
1,117	6.89
1,244	6.81
1,419	6.68
1,532	6.66
1,564	6.6
1,617	6.58
1,652	6.59
1,682	6.57
1,613	6.61
1,568	6.62
1,513	6.66
1,452	6.67

Data Summary and Correlation Coefficients

Data Summary				
18	Number of Observations			
	Average Value	Minimum Value	Maximum Value	Standard Deviation
Average Hourly Labor Rate ($)	6.727	6.57	6.96	0.136
No. of Employees	1,379.72	1,022.00	1,682.00	225.762
Correlation Coefficients Between Variable Pairs				
	Dependent Variable (Y)	Independent Variable 1		
	Average Hourly Labor Rate ($)	No. of Employees		
Average Hourly Labor Rate ($)	1			
No. of Employees	-0.972254	1		

Figure E-4-2

The Fitted Equation

$$Y = a + b / (X_1)$$

Coefficients Estimated by Regression:				
	Variable	Coefficient Value	Computed T-Value	Inclusion Assurance (%)
a	Intercept	5.95717063	158.5538	99.9
b	X_1 is No. of Employees	1,033.50	20.768	99.9
Summary Statistics:				
	R squared	Regression Std Error		
	0.964231	0.026427		
	Comparison Assurance (%)	F Statistic	Regression Degrees of Freedom	Residual Degrees of Freedom
	99.9	431.3104	1	16

Actual vs. Calculated Dependent Variable Values for
$$Y = a + b / (X_1)$$

Data Item	Actual Value	Calculated Value	Difference (Actual-Calc'd)	% Difference (Diff/Actual)
1	6.67	6.76	-0.09	-1.3
2	6.8	6.8	0	0
3	6.88	6.86	0.02	0.3
4	6.89	6.87	0.02	0.2
5	6.94	6.94	0	0
6	6.96	6.97	-0.01	-0.1
7	6.89	6.88	0.01	0.1
8	6.81	6.79	0.02	0.3
9	6.68	6.69	-0.01	-0.1
10	6.66	6.63	0.03	0.4
11	6.6	6.62	-0.02	-0.3
12	6.58	6.6	-0.02	-0.2
13	6.59	6.58	0.01	0.1
14	6.57	6.57	0	0
15	6.61	6.6	0.01	0.2
16	6.62	6.62	0	0.1
17	6.66	6.64	0.02	0.3
18	6.67	6.67	0	0

Figure E-4-2

Projecting With the Regression Equation Y = *a* + *b* / (X_1)

	Independent Variable	Coefficient Value	Independent Variable Value	Contribution to Projection
a	Intercept	5.95717		5.96
b	X_1 is No. of Employees	1,033.50	1,500.00	0.69
	Projection:			
	Y is Ave. Hourly Labor Rate ($)			6.65

Projecting With the Regression Equation Y = *a* + *b* / (X_1)

	Independent Variable	Coefficient Value	Independent Variable Value	Contribution to Projection
a	Intercept	5.95717		5.96
b	X_1 is No. of Employees	1,033.50	1,650.00	0.63
	Projection:			
	Y is Ave. Hourly Labor Rate ($)			6.58

Projecting With the Regression Equation Y = *a* + *b* / (X_1)

	Independent Variable	Coefficient Value	Independent Variable Value	Contribution to Projection
a	Intercept	5.95717		5.96
b	X_1 is No. of Employees	1,033.50	1,450.00	0.71
	Projection:			
	Y is Ave. Hourly Labor Rate ($)			6.67

APPENDIX F Reserved

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APPENDIX I

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APPENDIX I

I-000 Work Sampling

I-001 Scope of Appendix

This appendix presents the principles and techniques of work sampling as related to contract auditing. It concentrates on the application of work sampling to estimate workforce utilization. General guidance is provided for the selection and use of appropriate work sampling methods for accomplishing audit objectives.

I-100 Section 1 --- Work Sampling Overview

I-101 Introduction

The section presents an overview of work sampling with focus on background, definition, advantages, terminology, and software. In addition, the connection between work sampling and statistical sampling in general is demonstrated.

I-102 Background

a. Work sampling is a commonly used industrial engineering technique designed to estimate how resources such as people, machines, facilities, or equipment are being utilized. The objective of work sampling is to assess the workforce utilization of a selected portion of an organization's operations. If an operation is to be audited, work sampling is a low cost alternative to continuous monitoring, just as sampling in the audit context is a low cost alternative to 100 percent evaluation of an account. The cost of continuous monitoring of an entire operation is generally prohibitive, and work sampling can yield a reasonably accurate estimate at a fraction of that cost.

b. Work sampling studies are used by auditors to evaluate a contractor’s labor utilization. When performing a work sampling study, the auditor makes a specified number of observations of contractor personnel involved in the operation being audited. Each observation is classified according to type of activity, the activity types being specified prior to sampling. Using information gathered during the study, the auditor can estimate the percentage of time that the workers actually spend in each activity.

c. With minimal specialized training, an auditor can identify various worker actions and determine whether a contractor’s management practices yield reasonable and acceptable levels of working activity. Work sampling may disclose underutilized workers, poor work practices, overstaffing, inadequate training, inefficient plant layout, excessive delays (caused by poor planning, material scheduling, or tooling), or other deficiencies.

I-103 Definition

a. Work sampling is broadly defined as the application of statistical sampling techniques to the study of work activities. In the audit context, work sampling is typically used to estimate the proportion of workers' time that is devoted to different elements of work activity. Work sampling is also known as activity sampling. It can be also used to estimate equipment or vehicle utilization.

b. For DCAA applications, the observed activities are grouped into one of two main classifications: working or nonworking.

(1) The working classification can be subdivided into desirable or undesirable. Hands-on activities like assembling, machining, drawing, designing, etc., are desirable work related efforts, while waiting for material handlers to move parts, talking to supervisor,

cleaning work areas, or walking to get tools, though necessary, may be undesirable activities.

(2) Nonworking activities include unnecessary delays, needless walking, nonbusiness conversations, personal time, etc. These activities may be broken down further to help identify contributing factors. The degree of detail will depend on the overall objectives of sampling, the type of work environment, and the sampling plan.

I-104 Assessing the Reasonableness of Labor Costs

a. Contractors develop labor estimates and budgets based on incurred labor cost history. If these costs reflect undesirable work activities, they are not a reasonable basis for estimating future costs. Typically, auditors perform two significant audits to determine whether incurred labor costs are allocable and reasonable. These audits are:

(1) Labor allocation audits determine whether the contractor's workers are charging the activities to which they are actually assigned.

(2) A work sampling study estimates the amount of time that workers spend on various activities.

b. The typical DCAA work sampling audit does not assess worker effectiveness or efficiency. Its primary concern is whether the work force is working.

I-105 Application of Statistical Sampling

a. The statistical basis for work sampling is the same as that for the statistical sampling methods discussed in Appendix B. The objective of work sampling should be to make unbiased and representative observations. The observations to be made must be selected randomly from the entire work sampling universe. The observations themselves must be free of any bias. If these conditions are met, the sample results will differ from the actual conditions in a random manner and will be a representation of the activities in the universe under study. Furthermore, with an increasing number of observations, the sample results will more closely approximate the actual conditions.

b. Work sampling can enhance auditor productivity. Worker activities, like records or items in an account or bill of materials, can be sampled instead of being totally or continuously audited.

I-106 Advantages, Terminology, and Software

a. Some of the primary advantages of work sampling are as follows:

(1) Sampling is less expensive than continuous observation techniques.

(2) Observers with minimal specialized training can conduct the sampling.

(3) The number of observations can be adjusted to meet desired levels of precision.

(4) Sampling is an effective means of collecting facts that would not normally be collected by other means.

(5) Sampling results in less anxiety and agitation among workers than continuous observation.

(6) There is minimal interference with the worker's normal routine.

b. An understanding of the principal work sampling terms is necessary to use this guidance and work sampling software. Key terms and their definitions are as follows:

(1) SURVEY AREA (Universe): the total of all workers or machines to be covered in the survey.

(2) PRELIMINARY SURVEY (Probe): the preliminary "work/no-work" observations are conducted to determine the general amount of nonworking in the survey area. This survey helps to estimate the approximate number of observations that will be required for the work sampling audit. Additionally, the preliminary survey aids in identifying the categories of nonworking activity.

(3) PRELIMINARY POINT ESTIMATE: the preliminary estimate of nonworking activ-

ity determined either by the preliminary survey (probe) or past experience.

(4) KNOWLEDGE WORKERS: those workers whose output is mostly intangible (e.g., accountants, engineers, clerks, etc.). Often referred to as nontouch workers.

(5) PHYSICAL WORKERS: those workers whose output is mostly tangible (e.g., welders, machinists, assemblers, etc.). Often referred to as touch workers.

(6) GROUP SAMPLING: a method in which groups of workers are collectively observed at randomly selected areas and times.

(7) INDIVIDUAL SAMPLING: a method in which the workers are randomly selected and individually observed at randomly selected times.

(8) OBSERVATION TOUR (Round): a tour performed at a specific time to determine the work classification of an individual worker or a group of workers.

(9) OBSERVATION: the recorded results of an individual or group sampling observation tour. An example of a group observation is: 5 working, 3 nonworking (2 nonbusiness talking, 1 reading newspaper).

(10) OBSERVATION TIME: a randomly selected time for initiating an observation.

(11) NONWORKING ACTIVITY: that effort which does not contribute to the output of the operation. Eating and nonbusiness talking are examples of nonworking activity.

(12) WORKING ACTIVITY: that effort which directly or indirectly contributes to the output of the operation. Assembling and designing are examples of working activity.

(13) UNDESIRABLE WORKING ACTIVITY: an activity that is classified as working but can be eliminated or reduced by improved procedures. Examples include walking, waiting, cleaning, etc.

(14) CONFIDENCE LEVEL: the chance (or probability) that the true universe value that is being estimated by the sample is included in a specified range (see item (15) below). In evaluation of sample results, the desired confidence level is specified by the sampler and the precision range is computed accordingly. In sample size determination, both the desired confidence level and the desired precision range are specified, and the sample size is computed accordingly. For example, if the desired confidence level is 95 percent and the precision range computed from the sample results is from 12 to 18 percent nonworking, there is a 95 percent chance that the true nonworking is between 12 and 18 percent. Normal desired confidence levels are 90 or 95 percent.

(15) PRECISION RANGE: a range of possible universe values that is determined according to the confidence level (see item (14) above). When computed from sample results to meet a specified confidence level, the precision range consists of an upper and lower limit. In sample size determination, the desired precision range (sometimes referred to as desired precision) is specified along with the desired confidence level. It does not depict an upper and lower limit, but instead it consists of a desired limit on the amount by which the sample point estimate might differ from the true universe value. In work sampling desired precision ranges are typically 6 percent.

(16) CONSIDERATION FACTOR: a factor or consideration to allow for some nonwork related activities which is determined based on the sampling plan to allow for some nonwork related activities, Accordingly, it is applied to reduce the observed non-work amount by that amount.

c. A spreadsheet program or DCAA software may be used to process the results of a work sampling study. The DCAA software was developed internally and can analyze individual or group sampling results. Consult your regional operations audit supervisor, or OTST for further information. A copy of the software is available on the DCAA intranet. The DCAA software computes the average percentage of nonworking activity, related precision ranges, and estimates of the number of observations required to achieve desired precision at various confidence levels. In addition, the program can be used to analyze causes, areas, and timeframes of nonworking activity.

I-200 Section 2 --- Planning for Work Sampling

I-201 Introduction

The section presents the step-by-step procedures of planning and preparing for a work sample.

I-202 Decision to Sample

The decision to work sample may be based on general perceptions or specific findings. Examples include routine floor checks that reveal a significant amount of non-work activities or unnecessary staffing, or volume adjustments that suggest the need for staffing reductions where none have occurred. Whatever the stimulus, a probe can be performed to determine the need for a detailed work sampling audit.

I-203 Planning the Work Sample

a. At the outset, prepare an audit program with audit steps for the preparation of a sampling plan. Be sure to dedicate adequate time and resources to the sampling plan. General steps are as follows:

(1) Develop audit objective and define the universe.
(2) Establish familiarity with contractor's operation.
(3) Choose either the group or individual sampling method.
(4) Obtain necessary data from contractor (such as organization charts, plant layouts, and shift schedules).
(5) Determine activity classifications for workers being audited.
(6) Design observation forms to accumulate and summarize data.
(7) Conduct a probe to evaluate classifications, estimate nonworking activity, evaluate observation areas, as well as any other required area or activity.
(8) Establish audit dates and duration.
(9) Estimate sample size and select audit staff.
(10) Prepare team folders containing such items as schedules, observation forms, and plant layouts.
(11) Train audit team observers.
(12) Estimate the consideration factor (I-204).

b. The sequence and steps may be altered to fit specific situations as particular audits evolve or may be tailored to suit uniquely different audits.

I-203.1 Defining Audit Objective, Universe, and Work Sampling Method

a. The auditor should begin by defining the audit objective. List various reasons for considering work sampling, such as excessive walking, idleness, and poor use of resources. Define the universe (area, population, and work periods) to be studied. These two steps will help clarify and focus the audit. As a part of the audit objective, develop a precise statement of purpose. Data accumulation and savings computations hinge on a precisely defined objective.

b. The auditor should become familiar with the target universe. Information sources include facility layouts, organization charts, department charters, product lines, process sheets, and occupation codes. Gather information about support service functions and areas including test labs, CAD/CAM rooms, technical libraries, tool cribs, stock rooms, production/quality control points, and setup and maintenance areas.

c. Choose either the individual or group sampling method.

(1) In individual sampling, for each observation, a worker is randomly selected from the defined population. The activities of the entire defined population are determined

based on an analysis of the activities of the randomly selected workers. The advantages of the individual method are as follows:

(a) Individual sampling allows detailed scrutiny of employee work activities. The observation consists of only one individual worker at a time. Any missing worker in the sample must be accounted for.

(b) Individual sampling adapts readily to detailed classification of activities. This aids in the analysis of nonworking activities.

(2) In group sampling, for each observation, the activities of groups of workers from the defined population are recorded. The advantages of the group method are as follows:

(a) Group sampling requires, at maximum, less than half the time to conduct each observation round. Seeking specific individuals is time consuming.

(b) Group sampling is less disruptive to the work force because individuals are not singled out for sampling and, unlike individual sampling, no follow-up action to account for missing workers is required. Therefore, discussions with supervisors or coworkers to trace whereabouts of individuals are avoided.

(c) With group sampling, the potential for worker-induced bias is reduced. Workers are not forewarned, as is likely when specific individuals are sought.

d. Select the appropriate sampling plan and selection procedure. The sampling plan can be either simple or stratified, and random sample selection procedure can be either unrestricted or restricted.

(1) Restricted sample selection generally takes the form of systematic sampling. For a general discussion of random sample selection procedures geared to audit sampling, see Appendix B-700. The concepts are fully applicable to work sampling. Systematic sample selection in work sampling generally is most useful in setting the time when rounds will be made. A fixed time interval between one observation and the next is established. The time interval must be large enough to give the sampler adequate time to make a round at one location and move to the next. The starting time, the time of the first observation, is selected randomly and can be anywhere between a specified minimum and maximum starting time. The difference between the minimum and maximum starting times must equal the fixed time interval the subsequent observations are to be made. Subsequent rounds must be made at fixed intervals from the randomly selected starting time.

(2) A stratified sampling plan consists of subdividing the universe into strata, which are essentially separate smaller universes. Either simple or systematic selection can be used on the individual strata. There are various reasons for stratification. As discussed in I-400, it enables the sampler to control the number of sample observations that are drawn from specified subsets (strata) of the universe. In group sampling, stratification can yield sample results that are more precise than those of simple random samples of the same sample size. This would be the case when certain areas of activity can be expected to have exceptionally high variation (or wide fluctuation) in nonproductive activity from one observation to the next. If stratification is done, the strata should be well defined and the conclusions based on the sample from each stratum should be limited to that stratum.

I-203.2 Obtaining Contractor Data

a. Notify the contractor of the pending work sampling audit. In a brief formal letter, explain the sampling technique, purpose, and tentative schedule. Request that the contractor assign a liaison contact. Also, if appropriate, propose a date for an entrance conference. Ask for support from key contractor and government personnel in not disclosing information to the workforce about the pending audit.

b. At some early point, ask the contractor for data needed to support the audit. Typical pre-sampling information includes:

(1) Detailed maps or layouts of work areas and facilities.

(2) Department charters, job classifications, and position descriptions.

(3) Policies and schedules for work hours and break and lunch times.

(4) Procedures for labor utilization and work measurement.

(5) Organization charts and employee rosters.
(6) Other relevant information or IT file access that will facilitate the audit.
(7) Union environment and agreements
c. In addition, arrange to interview supervisors responsible for the areas to be sampled. Ascertain their understanding of policies and practices relative to their responsibilities. Emphasize the importance of not disclosing the upcoming work sampling activities to the workforce.

I-203.3 Classifying, Formatting, and Probing

a. In work sampling, subcategorization of activities under "working" and "nonworking" is desirable. Define subcategories that are clear, concise, and mutually exclusive. Subcategories should permit "snapshot" observation and recording without time-consuming decisions. Create enough classifications to sustain audit objectives without being too exhaustive. If the number of classifications is excessive, sampling may become too cumbersome to accomplish effectively. Below is an example of subcategorization. W1 and W2 are subcategories of work activity, whereas N1, N2, N3, N4 are subcategories of nonworking activity. This example may be used as a model to develop a sampling plan. Modify or expand the subcategories as appropriate to reflect the sampling population and type of work being evaluated. Subcategories not described below may be required to perform a good work sample that meets the specific audit objectives.
(1) Working subcategories:
W1: Operative or "hands-on" (such as machining, welding, setting up, cleaning, inspecting, adjusting, and monitoring)
W2: Business conversations (including conversing with supervisor, engineer, maintenance, material handler, and timekeeper)
(2) Nonworking subcategories:
N1: Idle (such as waiting on assignment, material, tools, maintenance, and inspection)
N2: Personal (including eating, drinking beverage, smoking, and tending to personal hygiene)
N3: Non-business talking (such as joking and chitchatting)
N4: Miscellaneous (such as horseplay, reading newspaper, gambling, and sleeping)
b. Design the observation form in a simple chart format. Leave adequate space to record brief comments that make each observation unique. For every round, one form is used to collect, summarize, and input observed activity. These forms become part of the working papers to support the audit position.
c. Conduct a probe to test the adequacy of the observation forms and the adequacy of overall preparation. The probe will also provide a preliminary point estimate. The point estimate is used to determine sample size from which an audit timeframe and staffing needs can be calculated. The probe also provides data that can be used to familiarize auditors with the Agency's work sampling software.

I-203.4 Scheduling, Sizing, and Staffing

a. Schedule the dates and duration of work sampling to cover a period of operation that is typical of the contractor's normal business activity. Key factors to consider are required sample size, audit team availability, contractor production and work schedules (including shutdowns, holidays, and vacations), and the cyclical nature of worker activities. Sampling periods of 5 to 10 cumulative days in duration are preferred. Sampling periods should never be less than five days. If the number of work days in the sampling period is greater than the number of observation days, observation days should be selected randomly in the sampling period.
b. Sample size is estimated by using the Agency work sampling software.
(1) The sample size for individual sampling is derived by selecting an option-for sample size and specifying the point estimate, confidence level, and precision range.

(2) To estimate a sample size for group sampling, conduct the probe and input the requested data. The software will analyze the data and provide a table of sample size for five different confidence levels with precision ranges.

(3) The sample size will vary with the amount of nonworking activity, desired confidence level, and desired precision. However, precision has the largest effect on a sample size. The effect of each of these three factors on the sample size are as follows:

(i) For a given desired confidence and precision level, the required sample size will increase with the amount of nonworking activities until the nonworking activities reach 50 percent. After nonworking activities exceed 50 percent, the sample size will then begin to decrease with further increases in nonworking activities.

(ii) For a given level of nonworking activity (the point estimate) and a given desired precision, the required sample size will increase with an increase in the desired confidence level.

(iii) For a given level of nonworking activity and a given desired confidence level, the required sample size will increase with a decrease in precision range (more precise) and decrease with an increase in precision range (less precise).

c. Audit team staffing is based on sample size divided by potential number of observations per team per day (visits in the case of group sampling). Allow a sufficient margin of extra observations to compensate for possible problems. If possible, schedule about twenty percent additional observations. These extra observations will strengthen the audit.

(1) Determine the number of people required, select the individuals, and advise them of scheduled dates for training and auditing.

(2) Do not understaff. Work sampling is a physically demanding activity that will require occasional substitutes.

I-203.5 Training Audit Teams

a. Prepare one folder for each team including predated and sequenced observation forms with specific times and locations (and people, if using individual sampling), daily summary sheets for tabulating observations, a copy of the defined activity classifications, facility maps, and any other relevant information.

b. Schedule a training day for all team members as close as possible to the first audit day. Key points to emphasize include:

(1) scope and objective of the work sampling study.

(2) classifications of activity.

(3) work sampling forms administration.

(4) use of maps and layouts.

(5) role of team members.

(6) observation techniques.

c. Provide the work sampling teams with an opportunity to practice under audit conditions. This practice may help air many remaining questions before the actual sampling begins.

I-204 Establishing the Consideration Factor

a. Since some nonworking-related activity is virtually unavoidable and can be expected at any work place, a consideration factor is applied to lower the observed nonworking-related activities. This factor is known as the work sampling consideration.

b. In DCAA work sampling audits, the amount of the work sampling consideration will vary depending on variables such as the type of industry, work environment, sampling plan (classification of working and nonworking categories), sampling universe (time and area under observance), company policies and procedures, and union contracts. Because of the various complexities involved, there are no set guidelines in industry for developing work sampling consideration factors. Therefore, the judgment of the auditor in determining reasonableness of the observed levels of nonworking activities is extremely important.

The following guidance is provided to help the auditor develop work sampling consideration factors.

I-204.1 General Discussion

The normal industry or contractor PF&D (personal, fatigue, and minor delays) allowance factors used for setting labor standards for measuring productivity should not be applied to work sampling studies. These factors are used in situations where a job is scrutinized in great detail and the normal time for performing the task is determined by an industrial engineer or other experienced time-study staff A DCAA work sampling study does not measure productivity. However, these factors can be used as a guide in estimating work sampling considerations. The auditor should analyze the contractor's PF&D factors and make any needed adjustments based on the sampling plan. A majority of DoD contractors do not use engineered work measurement standards and may not have PF&D factors that can be used for this guidance.

I-204.2 Personal Component

a. Personal needs are normally met by visiting restrooms, water fountains, the cafeteria, and taking breaks in a work area. Companies normally allow one break in the morning and one in the afternoon, of 10 to 15 minutes duration, to meet these needs. This is equivalent to 4.2 to 6.3 percent of daily work time. The length of these breaks is normally specified in a union contract or in the company's policies and procedures.

b. In a work sampling study, DCAA does not normally make observations during break times. Additionally, personal needs during work periods are commonly met outside the immediate work areas. Therefore, very little consideration, if any, is required to compensate for personal needs.

c. In instances where employees do not have scheduled breaks or where their break areas are not excluded from the sampling universe, some consideration is necessary. This consideration is necessary because some employees may prefer to take breaks in their work areas.

d. Generally a 4 to 5 percent consideration could be considered appropriate providing the following two conditions are met: (1) all areas except restrooms and lunchrooms are included in the sampling universe, and (2) all work hours, including break times, are included in the sampling universe.

I-204.3 Fatigue Component

a. Fatigue normally results in a slowdown of work pace and, in some instances, a minor stoppage of work. However, it is believed that breaks help to reduce the effects of fatigue. Some experts in the field of work measurement suggest that no additional fatigue allowance is necessary in companies with scheduled work breaks, except in unusual situations.

b. DCAA work sampling does not measure the efficiency of employees or the speed at which they work. DCAA work sampling simply records whether an individual is working or not working. Therefore, under normal circumstances, a consideration for fatigue is not necessary.

c. However, certain work environments (e.g., hot and humid foundry working conditions, or the continuous observance of monitors) may necessitate workers taking short "breathers." These breathers may be accomplished in work areas and include eating, smoking, and talking to other workers; or they may take place outside work areas and include visiting a water fountain, using the restroom, or getting coffee. If unscheduled relief from monotonous work is achieved outside the workplace, DCAA work sampling will not normally observe it,, in which case no consideration is necessary. However, if the relief from monotonous work is achieved at the workplace, some considerations may be necessary.

Since each work environment is different, the consideration has to be left to the auditor's judgment. Normally a range of 1 to 3 percent consideration may be more than adequate.

I-204.4 Minor Delay Component

a. Minor delays (such as talking to a supervisor, waiting for someone to get out of the way, or changing tools) are work interruptions over which an employee does not have direct control. Since these delays occur randomly, an individual performing a time-study to establish labor standards to measure labor productivity will exclude this time from total observed time. Then, based on the type of work observed, he or she adds a reasonable amount of time to the raw work time to compensate for the delays. In the absence of in-house developed allowances for delays, the manufacturing industry normally adds 5 percent to develop work standards.

b. Most traditional minor delays, which are considered undesirable when setting productivity standards, are normally identified as work-related activities in DCAA work sampling audits. Therefore, very little delay consideration for work sampling is necessary. However, unusual situations (such as frequent waiting for inspectors to approve work) may result in employees performing activities other than those which are considered work related activities by the DCAA study. As addressed in I-204.4c., if it is determined that other work-related activities cannot be performed during these interruptions, a reasonable consideration may be necessary.

c. The work sampling study itself may identify various types of interruptions that commonly occur in the work area. Accordingly, the auditor may want to wait until the work sampling study is complete before making an evaluation for determining the reasonableness or the need of a delay consideration.

I-300 Section 3 --- Conducting and Analyzing Work Sampling

I-301 Introduction

This section presents guidelines for conducting the actual work sample and analyzing the results.

I-302 Conducting the Work Sample

One auditor should be designated as the overall coordinator for the work sampling application. The coordinator has the following responsibilities.

a. Arrange for adequate office space for teams to meet, communicate, and prepare daily reports. Team leaders are responsible for generating narrative summaries of each day's observation experience. Summaries should include potential causes for nonworking activity, contractor supervisor and employee attitudes, impact of environmental factors, etc. These summaries will be used in conjunction with the work sampling results to produce the final audit report.

b. Establish sampling schedules that are realistic and will minimize errors caused by haste. Emphasize the need to avoid personal absence and tardiness. Have substitutes readily available for unavoidable absences. Initial, as well as subsequent observations must be taken at the pre-selected times.

c. Meet with observers at the start and close of each day to make pairings and assignments and distribute folders. Use these sessions to verify completeness, organization, and accuracy of folder information and communicate collective concerns and resolve each day's problems.

d. Review each team's daily summaries and, as necessary, spot-check observation forms for accuracy and completeness. Arrange for input of data to DCAA software or other applicable software, request desired output, and analyze cumulative performance against objectives. Review the software output to:

(1) Compare and contrast team performances to isolate unusual trends. Rotate auditor pairings frequently to minimize the possibility of bias. Encourage team members to switch, at least once per day, the job of recording observations. Observations should be made independently, but discussed and agreed upon before recording.

(2) Track daily point estimates to verify adequacy of projected sample size. This is done by computing an updated required sample size using the updated point estimate and the original values for the desired precision range and confidence level.

I-303 Evaluating the Work Sample Data

The primary objective of work sampling is to determine how well contractors use their resources. Evaluation of sample data is the last step in that process.

a. The DCAA software provides different sort options for sample data. Subareas of the contractor's operation may be brought into focus by sorting the data with respect to such characteristics as date, time, shift, area, department, supervision, process, product, teams, etc.

b. Examine the data using various sorts to identify subareas of unusual nonworking activity. Concentrate analysis on subareas impacting audit objectives. Only subareas which make up a stratum (as defined in the original sampling plan) can be validly assessed statistically, but other examinations can still yield useful information.

c. Focus attention on the "nonworking" and "undesirable working" classifications in the sampling.

(1) For activities classified as non-working, expect to find histogram spikes occurring around start-up, break, lunch, and quit times. Late starts, extended breaks, and early quits are indicative of relaxed work rules. Another non-working classification, "talking," occurs frequently at remote and isolated work stations where direct supervision is infrequent or unstructured work is performed.

(2) Activities classified as undesirable working activity such as excessive walking, frequent business discussions, repetitive equipment and tool problems may indicate poorly trained employees or poorly engineered products, processes, or production environments.

d. Work sampling data is the "effect" portion of the "cause/effect" sequence. The contractor is ultimately responsible for determining cause and implementing corrective action. There may be data in the supporting summaries that suggests "cause". Sharing such useful information with the contractor is appropriate.

e. Undesirable activities should be documented for follow-up in future work sampling studies.

I-304 Summarizing the Audit

a. Draft the audit report using the format in 10-400 and discuss findings with the supervisory auditor.

b. Consult with the Agency technical specialists as necessary.

c. Organize supporting documentation and arrange for exit conference.

d. Conduct an exit conference in accordance with 4-304.

e. Prepare final audit report.

I-400 Section 4 --- Work Sampling Concerns

I-401 Introduction

The section discusses major concerns specific to the sample as a valid representation of the universe, stratification, and bias. An understanding of statistical sampling (Appendix B) is recommended when using this section.

I-402 The Sample as a Valid Representation of the Universe

The universe in a work sampling study is the contractor activity being audited. Operationally, it is defined in terms of the entire work environment connected with the activity, including the work force, the work period, the workplace, and the work itself. For purposes of statistical sampling, the universe consists of all possible observations of the activity that could be made. Any sample that gives every possible observation an equal chance of selection is a valid representation of the universe.

I-403 Stratification of the Work Sample

a. Stratification divides the universe into separate smaller universes, or strata. Stratification in the typical audit context is discussed in B-600, the primary reason cited being the potential for improvement in sampling precision. The same principles can be applied directly to work sampling but there are also other reasons for stratification. Among these reasons is control of the relative proportions of different types of observations that appear in the sample.

b. In work sampling, the observed event is the activity of the observed individual(s) at the moment of observation. However, the sampler is often interested in the nonworking status of specific subsets of the universe, categorized according to such characteristics as day of the week, type of work, or shift. There is an intuitive (but unwarranted) impulse to require that such characteristics be represented in the sample in the same proportions as they exist in the universe. However, a valid sampling procedure provides no guarantee that these characteristics will be proportionally represented.

c. The occurrence of specific characteristics in the sample can be controlled through stratification according to the characteristics. If it is considered important, for instance, that specific proportions of the sample items be drawn from each work shift, the universe could be stratified according to shift. This in effect would create a separate universe (stratum) for each shift. Each stratum could be further stratified by type of work if so desired.

d. In work sampling, stratification by day of the week is the most frequent stratification scheme, yet there is little mention of stratification in work sampling handbooks or similar literature. The sampler may not even be aware of the stratification, but it is implicit anytime the work sampling plan calls for a specific number of observations per day. Error results not during the sampling itself but when evaluation of the sample results ignores the stratification.

e. For administrative and practical convenience, work sampling plans often require the same number of observations per day of the study. Handbook literature that deals with this practice ignores the implicit stratification. The reason for this omission is that with sufficiently large sample sizes, the effect of the practice is minimal. Work sampling studies typically involve at least several hundred observations, and often involve more than a thousand. With such large sample sizes, it is overwhelmingly likely that very close to the same number of observations per day would be drawn anyway, even if the daily constraint were not placed on sample selection. In such cases, the error incurred by evaluating the sample as though no stratification were done is minimal.

f. Workers within a population differ in numerous ways. There can be touch/ nontouch, technical/administrative, hourly/ salaried, union/ nonunion, and supervisor/ subordinate personnel within a given population. Because of these differences, the auditor should first

define the population in which the study will be conducted. Depending on the audit objective, the contractor's population may be subdivided or stratified. The contractor's organizational structure may provide a logical population grouping. Exercise care when defining the strata.

g. Selection of the work sampling study period must be done carefully so that contractor operations during the period typify operations throughout the year. Periods include days of the year and times of the day.

(1) Most work sampling studies are conducted over a 1-2 week period. Special attention should be directed at period selection. It may be appropriate to consult with the contractor to arrive at a mutually acceptable time to conduct the study. Advance agreement should eliminate subsequent problems on this point.

(2) Consider the impact of shift work on worker behavior. As a general rule, working activity deteriorates from first to second to third shift. Reasons for the decline in work activity include inadequate offshift supervision and support.

(3) Exclude from consideration certain time periods in the contractor's universe that will bias the study. Examples include time segments surrounding major staffing or production schedule changes, holidays or pending plant shutdowns, or significant weather extremes which affect the work. Inclusion of these periods would distort the nonworking content in the study.

(4) The time period over which the sampling will be conducted should emulate a typical day's operations. To illustrate, consider cyclical variations which occur normally within a workweek. Monday morning and Friday afternoon are typically transition times. However, to avoid bias, each work day must be given an equal opportunity to contribute to the sample.

(5) Periodicity is the tendency of subjects to adapt to normal routine or fixed patterns. Examples of periodicity include start, break, lunch, and quit times. Typically, high nonworking activity clusters around these periods. Randomly selected observation times will ensure inclusion of these periods.

I-404 Avoiding Observation Bias

a. Observation bias, sometimes referred to as measurement bias, is the tendency to either overestimate or underestimate the true value of the observed event. Intentional or otherwise, observation bias can be caused by both the observer and the observed.

b. Bias caused by observers can be eliminated through proper training and formation of observation teams.

(1) A team should normally consist of two people. It may consist of two auditors, though teaming an auditor with a procurement employee or a contractor's representative can promote acceptance of work sample results. Teams of more than two should be avoided because they become conspicuous, distract the work force, and thereby induce observation bias through their influence on the observed.

(2) Conduct training first in a classroom environment, then in the workplace. Establish clear, concise procedures and mutually exclusive classifications. Anticipate, discuss, and resolve "gray areas" (telephone or face-to-face conversation classifications) and issues of potential disagreement.

(3) Advocate techniques that prevent classification problems. Nonworking workers often alter their activity once aware of observers' presence. Avoid arriving too early for an observation. Loitering in the area will likely bias the observation.

(a) Classify based on the first impression; the "snapshot" observation. Use worker's subsequent behavior modification to confirm initial suspicion of nonworking activity.

(b) In some instances the snapshot is inadequate. A closer observation supplemented with listening may be required.

(4) Before the regular study, observers should tour the workplace. "Walk throughs" condition observers to the workers' environment, and reduce the likelihood of bias in actual observations.

(5) Work sampling does not require in-depth knowledge of the work being performed. The observer need know only whether the worker is working. Most of the time that will be obvious. If questionable, classify them as "working." The study will not suffer from these infrequent cases of indecision.

c. In addition to the observers, those being observed are sources of potential observation bias.

(1) The employees under observation can influence the outcome of the study. Workers might change their activity once they are aware of being observed. Such influence can be minimized or eliminated by varying routes, blending with appropriate attire, expediting observations, and being as nondisruptive as possible. Avoid discussions with the workers unless essential.

(2) If the first day or two of the audit reflects abnormal working activity, i.e., results substantially different from the preliminary probe, bias is to be expected. Routine will return as workers become accustomed to the observation teams. If strong bias exists, early data may be discounted.

(3) Delay or terminate the audit if deliberate biasing occurs. Overt attempts by contractor management to bias the sample may include: restricting access, staging work, limiting the universe, signaling workers, etc.

TI-000 TOPICAL INDEX TO THE CONTRACT AUDIT MANUAL

TI-001 Topical Index

This section is an internal index to the Contract Audit Manual (CAM). It is an alphabetical listing of subjects captioned in the individual CAM subsections.

TI-002 Other Resource Availability

DCAA maintains the full text of the CAM, all Standard Audit Programs, Shell Reports, Supplemental Materials, and Audit Guidance on our current Intranet. DCAA's Intranet also provides links to other locations that contain regulations and guidance such as FAR, DFARS, BLS, OMB Circulars, and other FAR Supplements.

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