### Activity Code 12500  
Material Management and Accounting System (MMAS)

**Version 10.9, dated June 2019**

**B-1 Planning Considerations**

<table>
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<th>Type of Service - Attestation Examination Engagement</th>
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<tr>
<td><strong>Audit Specific Independence Determination</strong></td>
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Members of the audit team and internal specialists consulting on this audit must complete the Audit Specific Independence Determination (WP 34) prior to starting any work on this assignment.

*(Note: Because staff is sometimes added to on-going audits, supervisors should ensure that all individuals who are directing, performing audit procedures, or reporting on this audit as a member of the audit team who are performing as a consultant have signed this work paper. For example, an FAO may add additional auditors (e.g., technical specialists) to the audit assignment or may need to consult with an internal specialist (e.g., industrial engineers, and operations research specialists) as the audit progresses.)*

### Purpose and Scope

The Material Management and Accounting System (MMAS) audit is conducted to examine contractor compliance as prescribed in DFARS 252.242-7004. Material Management and Accounting System, system criteria. As a part of the examination, auditors will:

- Obtain an understanding of the contractor’s compliance with DFARS 252.242-7004(d);
- Determine if the contractor is compliant with the material management system criteria prescribed in DFARS 252.242-7004(d); and
- Report both significant deficiencies/material weaknesses and less severe than significant deficiencies/material weaknesses, but require the attention of those charged with governance.

### Other Audit Planning Considerations

**DFARS and GAGAS REPORTING REQUIREMENTS**

- DFARS 252.242.7004(a) (1), requires the auditor to report significant deficiencies. This “means a shortcoming in the system that materially affects the ability of officials of the Department of Defense to rely upon information produced by the system that is needed for management purposes.
• GAGAS requires auditors to include in the audit report, both significant deficiencies and material weaknesses in internal controls, based on the AICPA auditing standards definitions.
• GAGAS also requires auditors report deficiencies in internal controls that are less severe than a significant deficiency/material weakness but warrant the attention of those charged with governance. Consider the reporting options to communicate these deficiencies with your supervisor.
• Appropriate language and presentation are included in the MMAS audit report shell.
• The audit team should discuss the audit program steps and tailor as applicable (i.e., size, complexity, operations, etc.), for the contractor being examined.
• If the entity is a Non-profit, Federally Funded Research and Development Center (FFRDC) (excluding those operated by Educational Institutions), or State and Local Government, the auditor should modify the risk assessment to include specific procedures in accordance with the OMB Circulars applicable to that entity.

TIMELY COMMUNICATION OF SIGNIFICANT DEFICIENCIES/MATERIAL WEAKNESSES

Timely communication of significant deficiencies/material weaknesses, to those charged with governance is essential to correcting internal control deficiencies. After discussion with your supervisor, it may be determined that a system deficiency report should be issued on a real-time basis, prior to completion of the audit. In those cases, a separate assignment should be set up using the System Deficiency Report activity code 11090. Establishment of this assignment should not occur until there is sufficient evidence that a significant deficiency/material weakness exists and the audit team has fully developed the elements of a finding for the deficiency (see CAM Chapter 10). Whether to issue a deficiency report during the course of the audit is a matter of audit team judgment, depending on the specific circumstances.

CONTRACTS THAT DO NOT HAVE THE DFARS 252.242-7004 CLAUSE

Contractors that do not have DoD contracts (i.e., contractors that are 100 percent reimbursable) are not contractually required to comply with the DFARS criteria.

UNDERSTANDING AUDIT CRITERIA

Read CAM guidance and obtain an understanding of the DFARS regulations identified in the reference section below.
Audit References

- DFARS Subpart 242.72, Contractor Material Management and Accounting Systems, (Contract Administration Policies and Procedures)
- DFARS 252.242-7004, Material Management and Accounting System, (Contract Clause)
- Cost Accounting Standard 411, Accounting for the Acquisition of Costs of Material
- FAR 31.205-26, Material Costs
- CAM 5-100, Obtaining an Understanding of a Contractor’s Internal Controls and Assessing Control Risk
- CAM 5-700, Audit of Material Management and Accounting System (MMAS) Internal Controls
- CAM Chapter 10, Audit Reports on Operations and Internal Control (System Audits)

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<th>B-1</th>
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COMMUNICATING THE ENGAGEMENT

1. **Planning Meeting with Contractor.** Hold a planning meeting with the contractor’s manager(s) responsible for the MMAS to:

   - provide notification of the upcoming audit;
   - inquire about the locations of inventory and production facilities to determine if coordination with other DCAA offices is necessary;
   - schedule the entrance conference (and “kickoff” meeting, if applicable), and to request the contractor prepare a general overview of their system for presentation at the entrance conference;
   - discuss the content and timing of detailed system demonstrations for each significant MMAS process to follow the entrance conference; and
   - request the initial data needed to identify the significant MMAS processes and assess risk.

COMMUNICATION and COORDINATION WITH OTHERS
2. **Contracting Officer Coordination.**

Contact the contracting officer to discuss and obtain their concerns related to the contractor’s MMAS and compliance with the DFARS criteria. Invite the contracting officer to the entrance conference and contractor system demonstrations.

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<tr>
<td>a.</td>
<td>Coordinate with DCMA to identify and obtain copies of corrective action reports pertaining to the MMAS system and inquire about contractor’s late deliverables to Government.</td>
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<tr>
<td>b.</td>
<td>Discuss with contracting officer risk related to the contractor’s financial condition that will impact the audit and adjust the audit scope and procedures accordingly. If information regarding the contractor’s financial condition is unavailable from the contracting officer/ACO, the auditor should perform the procedures addressed in CAM 2-306.1c(2) and (3). If during the course of the audit the auditor becomes aware of unfavorable or adverse financial conditions, they should immediately communicate their concerns to the contracting officer/ACO, and appropriately adjust the scope of audit.</td>
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<td>c.</td>
<td>Inquire about the extent of DCMA surveillance of the MMAS, including Government-owned inventory and material transferred using loan-payback techniques, along with any leads related to compliance with DFARS 252.242-7004.</td>
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<tr>
<td>d.</td>
<td>Document the results of this coordination and consider during audit planning.</td>
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3. **Coordination with other FAOs.**

In cases where this examination covers MMAS at multi-segment contractors, follow the guidance in CAM 5-103.2 and 5-110e. Auditing MMAS at multi-segment contractors requires effective coordination among cognizant auditors to identify the audit responsibilities at each location to ensure appropriate audit coverage when contractor locations share components of the system, such as policies and procedures, common technologies (e.g., software) or common management. FAOs cognizant of segment locations should initiate assist audits from off-site locations as necessary. FAOs cognizant of off-site locations should not self-initiate audits of
MMAS. Coordinate effort needed with other DCAA offices (e.g., CAC, Corporate offices, assist audit offices, FD) as necessary.

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<th>4. Initial Team Discussion</th>
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<tr>
<td>a. Hold a preliminary planning meeting with the audit team (e.g., RAM, FAO Manager, Supervisor, Auditors). Topics to discuss should include:</td>
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<td>• relevant environmental factors and information related to the nature of the entity;</td>
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<td>• how to obtain and document the system understanding;</td>
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<td>• the audit objectives (primarily compliance with DFARS 252.242-7004); and</td>
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<tr>
<td>• coordination with other DCAA offices (e.g., CAC, Corporate offices, other locations where accounting functions are performed, FD, etc.).</td>
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### PERMANENT FILES

**Research and Planning.**

The audit report will opine on the contractor’s compliance with DFARS 252.242.7004 (d), system criteria for a specified period of time. Plan the audit and select transactions within the time period under audit. Limit the time between the material transaction testing and report issuance to the extent possible. (For example, the audit team may decide to document the understanding of the system before finalizing the period for any planned substantive testing.) Accordingly, the team may adjust the timing of some of the planning steps below.

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<th>5. Identify MMAS Significance</th>
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<tr>
<td>a. Review the contract mix and universe of material dollars provided by the contractor for the period. Verify completeness and accuracy of schedule.</td>
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<tr>
<td>b. Verify the DFARS 252.242-7004 MMAS clause is included in the contracts identified by the contractor. Test the completeness and accuracy contractor provided data (e.g. compare to EDA, DCMA records, and FAO records).</td>
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<tr>
<td>c. Based on the risk information gathered in the preceding steps,</td>
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6. Review and document audit leads and other issues affecting this assignment (e.g., Form 1s and fraud referrals made or in process (DCAA Form 2000) and voluntary contractor disclosures related to material).

7. Review and document other relevant information to include environmental factors, the nature of the entity, and changes from the prior period. This information may be available in the contractor’s annual Form 10-K report, quarterly Form 10-Q report, Interim Form 8-K reports (if applicable - to cover special material events that occur between 10-K and 10-Q filings), and its annual report to shareholders.

*Note: Not all of the following examples will be relevant in each audit. Document information relevant in the specific circumstances based on a review of the permanent files and the sources discussed in the paragraph above.*

Environmental factors include industry conditions, such as the competitive environment, supplier and customer relationships, and technological developments; the regulatory environment encompassing among other matters, relevant accounting pronouncements, the legal and political environment, and environmental requirements affecting the industry and the entity; and other external factors, such as general economic conditions. The nature of the entity refers to the entity’s operations, its ownership, governance, and the way the entity is structured. An understanding of the nature of an entity enables the auditor to understand the classes of transactions, and account balances. Identifying significant changes in the environment and entity from prior periods is important in gaining a sufficient understanding of the entity to identify and assess risks of material misstatements and noncompliances.

*Note: Other audits may have similar information (e.g., accounting system, billing audit). To avoid duplication of effort, incorporate any current and relevant information from those audits into this section.*

8. Review prior MMAS audits, MMAS deficiency reports, and if applicable, Survey of Contractor’s Organization, Accounting System and System of Internal Controls (ICQ). Document the impact to this audit.

9. Determine if a current 11070 Accounting System audit exists. If so, summarize the results and assess its impact on the contractor’s MMAS. If not, discuss with supervisor the need to perform a separate assignment (i.e. accounting system audit).
10. Review other related audits. Examples include MAARS 13 (Activity Code 10320).

11. Document results and impact of any other relevant audits on this audit.

12. Document, if applicable, any CAS noncompliances that affect the processes and internal control related to compliance with the DFARS 252.242-7004 system criteria.

13. Review permanent file to determine if previous audits included findings and recommendations that impact the subject matter under audit (GAGAS 5.06). If there were findings, auditors should document this information in the risk assessment and perform the following procedures:

   During the entrance conference, or other appropriate meeting:
   a. Ask contractor management if it took corrective actions to address findings and recommendations reported in previous DCAA audits (e.g., questioned costs, business system deficiencies, CAS audits) that are relevant to the subject matter of audit. If yes, have contractor explain corrective actions taken and determine if additional audit procedures should be included in the fieldwork to test the corrective actions.
   b. Document the results of the inquiry and impact of the corrective actions to the subject matter under audit. (Note: The purpose of this question is to follow up with contractor on relevant prior DCAA audit findings that could have a material effect on the subject matter of audit.)

14. Review permanent file to determine if the contractor has previously provided other studies or audits (e.g., summary listing of internal audits or external audit reports) that directly relate to the subject matter under audit (GAGAS 5.06). If there are no other studies or audits, document that information in the work papers and perform the procedures below. (If you do not perform the following procedures, you must document your justification for the departure.)

   a. During the entrance conference, or other appropriate meeting:
      - Ask contractor management if it performed internal audits. If yes, request contractor provide a summary listing of the
internal audits that would assist us in understanding and evaluating the efficacy of the internal controls relevant to the subject matter of the audit.

- Ask contractor management if other types of audits or studies were performed by other than DCAA (e.g., other Government audit agencies, consultants, Independent Public Accountants, etc.) that would impact the subject matter under audit. If yes, have contractor explain what type of audits or studies were performed, if there were any related findings or recommendations, and any contractor corrective actions taken as a result.

b. If the review of the perm file or the contractor identifies relevant internal audits:

- Determine if access to these reports is necessary to complete the evaluation of the relevant internal controls to support the risk assessment or audit procedures related to the subject matter of the audit. There must be a nexus between the internal audit reports and the scope of this specific assignment.

- Document the results of the determination in writing.

- If assignment is at a major contractor location, coordinate with the CAC or FAO point of contact (POC) for internal audit reports to request the contractor provide access to the reports.

- If assignment is at a non-major contractor and the FAO does not have a designated POC, the auditor should request the contractor provide access to the internal audit reports.

- The request, issued by the CAC, FAO POC or auditor, should include information on how the internal audit report is relevant to the DCAA audit. Place a copy of the request in the assignment administrative work papers.

c. If the review of the perm file or the contractor identifies relevant other audits or studies:

- Obtain publicly available information for the relevant other Government agency audits (e.g., websites for DoD IG or other IGs, service audit agencies, etc.).

- Make appropriate adjustments to your risk assessment and planned procedures based on the reported findings.

d. Document the results of the inquiries including the response
received from contractor’s for any request for access to internal audit reports. (If access was not granted this should include the contractor’s rationale or justification for not granting access).

e. Determine if additional audit procedures are needed to address any identified risk. (Note: The purpose of this question is to discover any new audit leads that could affect the scope of current audit.)

15. **Contractor Notification Letter.**

Draft the Contractor Notification Letter using the working paper 11b pro forma. The pro forma contains a list of information needed from the contractor to perform the risk assessment and identifies the key areas of the MMAS to be addressed during system demonstration. The notification may be provided at or prior to the entrance conference. The notification letter finalizes the preliminary information request already discussed during the planning meeting with the contractor.

**DETECTING AND DOCUMENTING FRAUD**

16. During the entrance conference, or other appropriate meeting, make inquiries of contractor management regarding knowledge of any fraud or suspected fraud affecting the fiscal years’ incurred cost under audit, management’s awareness of allegations of fraud or suspected fraud affecting the incurred cost audit(s), and management’s understanding about the risks of fraud relevant to the incurred costs under audit.

   Note: This discussion and any data submitted should be documented in the working papers.

17. Based on the team's understanding of the criteria, subject matter, and the contractor and its environment, the audit team should discuss and identify potential noncompliances, due to error or fraud that could materially affect the subject matter. The discussion should include:

   - relevant prior audit experience (e.g., questioned cost, relevant reported MMAS or accounting system deficiencies),
   - relevant aspects of the contractor and its environment,
   - risk of material noncompliance due to fraud (e.g., the extent of incentives, pressures and opportunities to commit and conceal fraud, and the propensity to rationalize misstatements)
   - other known risk factors, including management inquiries,
   - the audit team’s understanding of relevant internal controls.

Document the discussion and fraud risk factors/indicators (see -
Sources of Fraud Risk Factors below) that are present and could materially affect the subject matter. If fraud risk factors are present, document specific audit procedures designed to address the increased risk of material noncompliance due to fraud.

Throughout the audit, continue to communicate among audit team members about the risk of material noncompliance due to error or fraud as needed.

Sources of Fraud Indicators:

- Fraud Detection Resources for Auditors ([Fraud Detection Resources](http://gao.gov/products/GAO-12-331G)).
- GAGAS Appendix Section A.10 – Examples of Indicators of Fraud Risk ([http://gao.gov/products/GAO-12-331G](http://gao.gov/products/GAO-12-331G)).

(To access the Sources of Fraud Indicators copy and paste the web address shown above into the address block in a web browser (Firefox, Edge, etc.).)

### 18. ENTRANCE CONFERENCE

(For large contractors with significant contracts subject to MMAS, the entrance conference may be split into 2 meetings-- a “kickoff” meeting to discuss the general MMAS audit process with all contractor and Government personnel with an interest in the MMAS followed by the MMAS managers’ system overview presented to the audit team.) The purpose of this meeting is to:

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<td>a.</td>
<td>Provide (unless previously provided) the Contractor Notification Letter and discuss information being requested from the contractor;</td>
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<td>b.</td>
<td>Discuss the purpose of the audit and expectations such as MMAS demonstration requirements, level of detail that should be covered in the demonstrations, who should participate in the meetings, length and location of meetings, and other pertinent information;</td>
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<td>c.</td>
<td>Have the contractor provide a general overview of the MMAS and processes (to be done at the system demonstration/walk-through);</td>
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<td>d.</td>
<td>Set up dates for demonstrations on the key MMAS processes. Hold demonstrations early in the audit process;</td>
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<td>e.</td>
<td>Follow up with contractor management on corrective actions that address previous DCAA audit findings and recommendations; and</td>
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<tr>
<td>f.</td>
<td>Follow up with contractor management regarding other studies or audits (e.g., internal auditors, consultants, Independent Public</td>
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Accountants) that impact the subject.

**SYSTEM DEMONSTRATIONS**

System Demonstrations/Documenting an Understanding of the MMAS. (The entire team should attend the demonstrations if possible.)

The purpose of the contractor demonstrations is to obtain and document an understanding of the contractor’s MMAS compliance with the DFARS 252.242-7004(d), system criteria. During the demonstrations, the audit team should ask questions and take detailed notes on the contractor’s system descriptions and policies and procedures, to assist in documenting their understanding of the system.

*Note - Inquiry alone is not sufficient to obtain an understanding of the contractor’s compliance with DFARS 252.242-7004(d), system criteria*

Procedures to obtain an understanding of contractor compliance include inquiries of contractor personnel, observing the application of specific internal controls/control activities, inspection of documents and reports, tracing transactions through the various processes (i.e., master production schedule, inventory, general ledgers, costing records, etc.) and performing “walk-thru” of the MMAS (including).

19. **Contractor Demonstrations of its MMAS Policies and Procedures.**

   Request the contractor demonstrate how its policies and procedures and system flowcharts illustrate the internal control activities associated with the following MMAS areas:

   a. Master Production Schedule (MPS)
   b. Bill of Material (BoM)
   c. Material Costing
   d. Inventory Accuracy
   e. Material Transfers
   f. Material Allocations

20. **Plant Tour of Material Processes.**

   Request the contractor perform a physical “walk through” with the MMAS audit team to demonstrate the key material warehouse processes for its storage warehouses (e.g., material receipt, WIP and finished goods inventory processes, security, etc.), to validate the contractor inventory internal control practices.

**FINALIZING/SUMMARIZING THE UNDERSTANDING OF THE**
**MMAS**

It is critical to document and summarize the auditor understanding of the contractor’s MMAS. The summary will serve as a basis for planning the audit and assist in identifying potential noncompliances, consideration of factors that affect the risk of material noncompliances and will help to design audit procedures to test contractor compliance with DFARS 252.242.7004(d).

21. Using the information obtained during the entrance conference and system demonstrations, finalize and document your understanding of the contractor’s MMAS in WP B-02, and cross-reference it to detailed descriptions and information obtained and documented during the contractor’s demonstrations (e.g., flowcharts, policies and procedures, desk procedures, screenshots, etc.). As reflected on the WP B-02 framework, the documented understanding should address each of the 10 DFARS, MMAS system criteria. Note: The MMAS Audit Information Request (WP 11b) includes Items (2) – (5).

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<td><strong>1) Control Environment</strong> – Obtain the most recent audit assessment of the control environment during the initial planning steps. Update working papers for any additional information related to the assessment of the control environment and the potential impact on the MMAS.</td>
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<td><strong>2) Contractor’s Risk Assessment</strong> - Document how the contractor identifies and addresses risk associated with each critical MMAS process.</td>
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<tr>
<td><strong>3) Contractor Monitoring</strong> - Document the contractor’s activities to monitor the overall operation of each MMAS process. (Note: Periodic monitoring is also one of the DFARS criteria.)</td>
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<tr>
<td><strong>4) Information System and Communication</strong> - Document the contractor’s process for initiating, processing, authorizing, controlling, reporting, and communicating information related to each type of critical MMAS process.</td>
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<tr>
<td><strong>5) Control Activities</strong> – The control activities are generally those processes the contractor uses to ensure compliance with each of the system criteria prescribed in DFARS 252.242-7004(d).</td>
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22. Based on the understanding of the relevant controls (documented in...
B-02) and the current system audit assessments (i.e. adequate or inadequate), document your assessment of the control risks and document the audit work performed (or will be performed) that supports reliance on the computer-based evidence that will be used to achieve the objectives of the audit.

23. Prepare a **high-level** summary of your understanding of the internal controls the contractor uses to comply with DFARS 252.242-7004 for each critical MMAS process to provide to the contractor for confirmation of accuracy. After the detailed (WP B-02) and summary understanding of the contractor’s MMAS (WP 11c) have been documented and reviewed by your supervisor, provide the summary to the contractor and obtain written confirmation from the contractor that the understanding is accurate.

24. Summarize the high-risk areas identified during the demonstrations and other preliminary steps to address during the team discussion below.

### SUMMARY OF RISK ASSESSMENT AND SCOPE OF AUDIT

25. Hold an interim team planning meeting (e.g., RAM, Manager, Supervisor, Technical Specialist and Auditors) and discuss results of preliminary planning, entrance conference information, risks identified, and the understanding of the system and areas of potential impact (preliminary steps performed in section B-01, steps 1 through 7). This should be a detailed discussion and include specifics on the period covered by the audit, areas to test, what attributes to test for, how much testing should occur **based on risk**, and how to select the applicable samples.

26. During the meeting discuss risk factors identified subsequent to the initial team discussion that indicate potential fraud, illegal acts, or violations of contracts that could have a material effect on material management and accounting, and develop audit steps in response. If no risk factors are identified, document this in working paper **B**.

   a. Consider the need for technical assistance, if any, and document on working paper **B-03**.

   b. Document the results of the team discussion (e.g., risk identified, areas to test based on risk, what attributes to test for, generally...
27. **Document the Initial Risk Assessment Detailed Audit Procedures Including Fraud Steps, if applicable.**

   a. Document on WP B, the risk factors and any fraud indicators identified during the team discussions and other risk assessment procedures.

   b. Document on WP B the audit procedures designed to meet the audit objectives and provide reasonable assurance of detecting fraud, and other noncompliances with applicable laws and regulations that could have a material effect on the audit.

   c. Tailor (line-out/modify) the detailed audit program steps and/or develop additional steps to address areas of identified risk.

28. Electronically transmit an acknowledgement/notification letter to the appropriate contracting officer notifying them of the commencement of the audit and that we will advise them of the expected completion date when we complete the risk assessment. Issue the acknowledgement/notification letter in accordance with CAM 4-104.

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<th>C-1</th>
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In section C, the auditor will test key processes and controls to determine if the contractor’s MMAS complies with the system criteria in DFARS 252.242-7004. In addition to DFARS 252.242-7004(d)(2), the auditor will evaluate compliance with DFARS 252.242-7004(d)(1), (3), (4), and (10), as these criteria are integral part of the evaluation of all MMAS processes. Note that DFARS 252.242-7004(d)(10) – Internal Review requirements can significantly overlap DFARS 252.242-7004(d)(3) – Monitoring. The contractor’s system evaluation processes may include, for example, management reviews, internal audits, or personnel performing duplicate checks and can be accomplished through ongoing activities built into the contractor’s normal recurring activities, separate evaluations, or a combination of the two. If noncompliances exist, determine which of the 2 criteria best fits the condition.

In some instances, the auditor may use the same sample to test multiple
criteria. If auditors use sampling methods to test multiple criteria, ensure the sample is sufficient to cover all requirements being tested.

Consider the size and complexity of the company’s processes, operations, and accounting system. Tailor (add, line-out, or modify) the audit steps based upon your understanding of the contractor’s processes, related internal controls and the risk identified in the risk assessment.

**Inquiry alone is not sufficient to test the contractor’s compliance with its MMAS system description or DFARS 252.242-7004 requirements.**

1. **System Description, DFARS 252.242-7004(d)(1)** - The contractor will have an adequate system description, including policies, procedures, and operating instructions compliant with Federal Acquisition Regulations and Defense FARS Supplement.

   a. For BOM accuracy, determine whether the contractor’s system description, policies, procedures and operating instructions for developing and maintaining the BOM, in addition to the contractor’s process for measuring and reporting BOM accuracy, provide sufficient information on how the system is intended to operate and that they comply with the FAR and DFARS.

   b. Verify (e.g., through testing, observation, re-performance of contractor tests, inquiry) the contractor's actual practices comply with its system description. Evaluate whether the data used is complete and calculations are accurate. Discuss with the contractor what it considers an error and assess the reasonableness of that basis.

   *(Assess whether this step is warranted, if the audit team concludes the contractor’s described procedures are not compliant with the DFARS requirements (step 1a above).)*

2. **BOM Accuracy, DFARS 252.242-7004(d)(2).** – The contractor will ensure that costs of purchased and fabricated material charged or allocated to a contract are based on valid time-phased requirements as impacted by minimum/economic order quantity restrictions. A 98 percent bill of material accuracy is desirable as a goal in order to ensure that requirements are both valid and appropriately time-phased.

   a. Determine if the contractor’s metric for reporting BOM accuracy reasonably measures whether the BOM represents the material consumed in the product as built. A meaningless or incorrect BOM metric will not significantly impact the ability of DOD officials to rely upon information produced by the system (DFARS
252.242-7004(a)(5)) if other contractor practices ensure the BOM is accurate. However, the audit team should communicate the lack of a meaningful BOM metric to the ACO.

b. If engineering changes are significant, determine whether the contractor’s process for maintaining the BOM requires adjusting the BOM for engineering changes. Evaluate whether the process for adjusting the BOM ensures changes are accurate and timely (e.g., require appropriate approval, document support).

c. Evaluate whether the contractor’s process prevents the ordering and billing of parts over and above contract requirements without sufficient justification.

d. Document whether the contractor meets the goal of 98% accuracy in its reported BOM accuracy metric or by other processes that measure BOM accuracy. If accuracy levels fall below 98%, determine whether the contractor provided adequate evidence that (1) there is no material harm to the Government due to the lower accuracy levels and (2) that the cost to meet the accuracy goal is excessive in relation to the impact on the Government. If adequate evidence was not provided discuss with supervisory auditor and ACO responsible for MMAS.

e. Based on the results of the steps above, determine whether an independent test by the auditor of the BOM accuracy is warranted and discuss with supervisory auditor. Design and perform tests of BOM accuracy and summarize conclusions.

3. **Bill of Material Monitoring and Exception Reports DFARS 252.242-7004(d)(3)** - *The contractor will provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as excess/residual inventory, as soon as known.*

   a. Determine if exception reports used by the contractor monitor indications of an inaccurate BOM (e.g., obsolete material, excess material, inventory with no demand).

   b. Determine whether the contractor identifies, reports, and resolves system weaknesses and exceptions (e.g., excess and residual materials available for transfers, no cost transfers, lost/found parts, proper disposition of lost/found parts) in a timely manner.

   c. If contractor reports identify significant exceptions, evaluate the
contractor's conclusions and/or corrective action plans.

4. **Audit Trail, DFARS 252.242.7004(d)(4)** – *The contractor will provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired.*

   a. Determine the adequacy of the audit trail for allowing the evaluation of transactions/contractor actions for BOM Accuracy.

   b. Determine whether the contractor provided sufficient evidence through transaction testing to show its system is operating as desired and in compliance with DFARS.

5. **Periodic Internal Reviews, DFARS 252.242-7004(d)(10)** – *The contractor’s MMAS should be subjected to periodic internal reviews to ensure compliance with established policies and procedures.*

   a. Determine if the contractor’s MMAS requires periodic internal reviews to monitor BOM accuracy to determine that controls are operating as intended and modified as appropriate.

   b. Evaluate management reviews and other monitoring activities for the period covered by the audit to determine if the contractor is performing reviews in accordance with periods and guidelines established in the policies and procedures. Determine if management conducts reviews periodically and makes corrections to the MMAS as indicated by the reviews. Determine the reasonableness of timeframes and guidelines of the periodic reviews given the complexity of the material system operation.

6. **Summarize Conclusions.**

Summarize results of work performed and audit conclusions.

   a. Evaluate whether noncompliances with the DFARS criteria identified during the audit are significant deficiencies/material weaknesses or are less severe than significant deficiencies/material weaknesses, but important enough to merit the attention of the responsible contracting officer and contractor management officials.

   b. Identify the rough order of magnitude (ROM) harm to Government
contracts (e.g., over-billings, late contract delivery, excessive carry costs, pricing data). If unable to quantify the impact, provide a qualitative analysis to describe the material adverse impact to Government contracts.

7. **Supervisory/Management Discussions.**

Discuss with supervisor and management the results of the fieldwork. If a deficiency is identified, determine if a Statement of Conditions and Recommendations (SOCAR) is warranted and provide a draft to management as soon as the deficiency is supported. [CAM Chapter 10 and GAGAS 5.11 define the elements of a finding.]

8. **Coordinate Result of Audit with Cognizant Government Officials.**

Discuss the results with the DACO or other government official responsible for administration of surveillance of the MMAS.

<table>
<thead>
<tr>
<th>D-1</th>
<th>Compliance with DFARS 252.242-7004 – MPS Accuracy</th>
<th>WP Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version 10.9, dated June 2019</strong></td>
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</table>

In section D, the auditor will test those key processes and controls to determine if the contractor’s MMAS complies with the system criteria in DFARS 252.242-7004. In addition to DFARS 252.242-7004(d)(2), the auditor will evaluate compliance with DFARS 252.242-7004(d)(1), (3), (4), and (10), as these criteria are an integral part of the evaluation of all MMAS processes. Note that DFARS 252.242-7004(d)(10) – Internal Review - requirements can significantly overlap DFARS 252.242-7004(d)(3) – Monitoring. The contractor’s system evaluation processes may include, for example, management reviews, internal audits, or personnel performing duplicate checks and can be accomplished through ongoing activities built into the contractor’s normal recurring activities, separate evaluations, or a combination of the two. If noncompliances exist, determine which of the 2 criteria best fits the condition.

In some instances, the auditor may use the same sample to test multiple criteria. If auditors use sampling methods to test multiple criteria, ensure the sample is sufficient to cover all requirements being tested.

Consider the size and complexity of the company’s processes, operations, and accounting system. Tailor (add, line-out, or modify) the audit steps based upon your understanding of the contractor’s processes, related internal controls and the risk identified in the risk assessment. (Refer to the Guidebook for considerations specific to smaller, less complex contractors.)
Inquiry alone is not sufficient to test the contractor’s compliance with its MMAS system description or DFARS 252.242-7004 requirements.

1. **System Description, DFARS 252.242-7004(d)(1)** - The contractor will have an adequate system description, including policies, procedures, and operating instructions compliant with Federal Acquisition Regulations and Defense FARS Supplement.

   a. For MPS accuracy, determine whether the contractor’s system description, policies, procedures and operating instructions for developing and maintaining the MPS, in addition to the contractor’s process for measuring and reporting MPS accuracy, provide sufficient information on how the system is intended to operate and that they comply with the FAR and DFARS.

   b. Verify (e.g., through testing, observation, re-performance of contractor tests, inquiry) the contractor's actual practices comply with its system description Evaluate whether the data used is complete and calculations are accurate. Discuss with the contractor what it considers an error and assess the reasonableness of that basis.

   (Assess whether this step is warranted, if the audit team concludes the contractor’s described procedures are not compliant with the DFARS requirements (step 1 above).)

2. **MPS Accuracy, DFARS 252.242-7004(d)(2)** – The contractor will ensure that costs of purchased and fabricated material charged or allocated to a contract are based on valid time-phased requirements as impacted by minimum/economic order quantity restrictions. A 95% material production schedule accuracy is desirable as a goal in order to ensure that requirements are both valid and appropriately time-phased.

   a. Determine if the contractor’s metric for reporting MPS accuracy reasonably measures whether the material is appropriately scheduled and time-phased to promote on-time deliveries and to avoid excess costs and early billings resulting from early receipts. A meaningless or incorrect MPS metric will not significantly impact the ability of DOD officials to rely upon information produced by the system (DFARS 252.242-7004(a)(2)) if other contractor practices ensure the MPS is accurate. However, the audit team should communicate the lack of a meaningful MPS
metric to the ACO.

The accuracy measure must be supported by adequate evidence of the reliability of the schedules being measured. This includes documentation showing that the data used in the MPS is consistent with actual shop floor practice. The documentation should include all processes that contribute to timely scheduling of material receipts and end item completion at the point that the measure is taken. The contractor is expected to establish a reasonable basis for accuracy measurements, and a program for on-going measurement and improvement of accuracy levels to reach desired accuracy goals. (e.g., If the contractor only measures on-time delivery of end items the schedule should be evaluated for additional days of cushion to ensure on-time delivery.)

<table>
<thead>
<tr>
<th>b.</th>
<th>If the contractor’s metric does not measure whether material is appropriately time-phased, determine whether the contractor's scheduling or related procedures ensure proper time-phasing when compared to the scheduled need date (e.g., contractor reporting for end item on-time delivery, assembly station on-time start and stop dates, inventory month’s on-hand, and production material scheduled to actual completion dates).</th>
</tr>
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<tbody>
<tr>
<td>Evaluation Consideration:</td>
<td>The standard specifies accuracy goals as a validity measure to assure that the master production schedule (MPS) reflects the most accurate, complete, and current information. Auditors must be alert for situations where the contractor's current systems are accurate (the MPS system is identifying accurate material need dates) but contracts include invalid or unreasonably time-phased materials. (e.g., Contractors may use material months-on-hand, material requirements to replenishment, or Inventory Aging Reports.)</td>
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| c. | Evaluate the contractor's process for comparing planned receipt dates (due dates which are based on scheduled lead times) to actual receipt dates, and identify patterns of "early receipt and billing". Consider the contractor’s rationale/justification for material acquisition based on minimum buy orders, economic order quantities, advanced funding purchases, etc. |

| d. | Document whether the contractor meets the goal of 95% accuracy in its reported MPS accuracy metric or by other processes that measure MPS accuracy. If accuracy levels fall below 95%, |
determine whether the contractor provided adequate evidence that (1) there is no material harm to the Government due to the lower accuracy levels and (2) that the cost to meet the accuracy goal is excessive in relation to the impact on the Government. If adequate evidence was not provided discuss with supervisory auditor and ACO responsible for MMAS.

e. Based on the results of the steps above, determine whether an independent test by the auditor of the MPS accuracy is warranted and discuss with supervisory auditor. Design and perform test of MPS accuracy and summarize conclusions.

### 3. MPS Monitoring and Exception Reports, DFARS 252.242.7004(d)(3) - The contractor will provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as excess/residual inventory, as soon as known.

a. Determine if the exception reports used by the contractor monitor MPS accuracy (e.g., schedule deviations, over or under (assembly/manufacturing) capacity, material and labor time-phasing that is either early or late when compared to the schedule need date).

b. Evaluate whether the contractor identifies, reports, and resolves system weaknesses and exceptions in a timely manner.

c. If the contractor has system reports that identify significant exceptions, evaluate the contractor's conclusions and corrective action plans.

### 4. Audit Trail, DFARS 252.242.7004(d)(4) - The contractor will provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired.

a. Determine the adequacy of the audit trail for allowing the evaluation of transactions/contractor actions for MPS accuracy.

b. Determine whether the contractor provided sufficient evidence through transaction testing to show its system is operating as
<table>
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<th>Desired and in compliance with DFARS.</th>
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5. **Periodic Internal Reviews, DFARS 252.242-7004(d)(10)** — *The contractor’s MMAS should be subjected to periodic internal reviews to ensure compliance with established policies and procedures.*

   a. Determine if the contractor’s MMAS requires periodic internal reviews to monitor MPS accuracy to determine that controls are operating as intended and modified as appropriate.

   b. Evaluate management reviews and other monitoring activities for the period covered by the audit to determine if the contractor is performing reviews in accordance with periods and guidelines established in the policies and procedures. Determine if management conducts reviews periodically and makes corrections to the MMAS as indicated by the reviews. Determine the reasonableness of timeframes and guidelines of the periodic reviews given the complexity of the material system operation.

6. **Summarize Conclusions.**
   Summarize results of work performed and audit conclusions.

   a. Evaluate whether noncompliances with the DFARS criteria identified during the audit are significant deficiencies/material weaknesses or are less severe than significant deficiencies/material weaknesses, but important enough to merit the attention of the responsible contracting officer and contractor management officials.

   b. Identify the rough order of magnitude (ROM) harm to Government contracts (e.g., over-billings, late contract delivery, excessive carry costs, pricing data). If unable to quantify the impact, provide a qualitative analysis to describe the material adverse impact to Government contracts.

7. **Supervisory/Management Discussions.**

   Discuss with supervisor and management the results of the fieldwork. If a deficiency is identified, determine if a Statement of Conditions and Recommendations (SOCAR) is warranted and provide a draft to management as soon as the deficiency is supported. [CAM Chapter 10 and GAGAS 5.11 define the elements of a finding.]
8. **Coordinate Result of Audit with Cognizant Government Officials.**

Discuss the results with the DACO or other government official responsible for administration of surveillance of the MMAS.

<table>
<thead>
<tr>
<th>E-1</th>
<th>Compliance with DFARS 252.242-7004 - Inventory Accuracy</th>
<th>WP Reference</th>
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<td><strong>Version 10.9, dated June 2019</strong></td>
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<td>In section E, the auditor will test key processes and controls to determine if the contractor’s MMAS complies with the system criteria in DFARS 252.242-7004.</td>
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<td>In addition to DFARS 252.242-7004(d)(5) and (9), the auditor will evaluate compliance with DFARS 252.242-7004(d)(1), (3), (4), and (10), as these criteria are an integral part of the evaluation of all MMAS processes. Note that DFARS 252.242-7004(d)(10) – Internal Review - requirements can significantly overlap DFARS 252.242-7004(d)(3) – Monitoring. The contractor’s system evaluation processes may include, for example, management reviews, internal audits, or personnel performing duplicate checks and can be accomplished through ongoing activities built into the contractor’s normal recurring activities, separate evaluations, or a combination of the two. If noncompliances exist, determine which of the 2 criteria best fits the condition.</td>
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<td>In some instances, the auditor may use the same sample to test multiple criteria. If auditors use sampling methods to test multiple criteria, ensure the sample is sufficient to cover all requirements being tested.</td>
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<td>Consider the size and complexity of the company’s processes, operations, and accounting system. Tailor (add, line-out, or modify) the audit steps based upon your understanding of the contractor’s processes, related internal controls and the risk identified in the risk assessment.</td>
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<td><strong>Inquiry alone is not sufficient to test the contractor’s compliance with its MMAS system description or DFARS 252.242-7004 requirements.</strong></td>
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<td><strong>1. System Description, DFARS 252.242-7004(d)(1)</strong> - The contractor will have an adequate system description, including policies, procedures, and operating instructions compliant with Federal Acquisition Regulations and Defense FARS Supplement.</td>
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<tr>
<td></td>
<td>a. For inventory accuracy, determine whether the contractor’s system description, policies, procedures and operating instructions for maintaining accurate inventory records, as well as the process for measuring and reporting inventory accuracy, provide sufficient</td>
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information on how the system is intended to operate and that they comply with the FAR and DFARS.

b. Verify (e.g., through testing, observation, re-performance of contractor tests, inquiry) the contractor's actual practices comply with its system description. Evaluate whether the data used is complete and calculations are accurate. Discuss with the contractor what it considers an error and assess the reasonableness of that basis.

(Assess whether this step is warranted, if the audit team concludes the contractor’s described procedures are not compliant with the DFARS requirements (step 1a above).)

2. Inventory Accuracy, DFARS 252.242-7004(d)(5) – The contractor will establish and maintain adequate levels of record accuracy and included reconciliation of recorded inventory quantities to physical inventory by part number on a periodic basis. A 95 percent accuracy level is desirable. If systems have an accuracy level below 95 percent, the contractor shall provide adequate evidence that there is not harm to the Government due to lower accuracy levels and the costs to meet the accuracy goal is excessive in relations to the impact to the Government.

a. Determine if the contractor’s metric for reporting inventory accuracy reasonably measures whether inventory records correctly show the number and location of physical inventory. A meaningless or incorrect inventory metric will not significantly impact the ability of DOD officials to rely upon information produced by the system (DFARS 252.242-7004(a)(5)) if other contractor practices ensure the inventory records are accurate. However, the audit team should communicate the lack of a meaningful metric to the ACO.

b. Physically observe for the receipt, inspection and issuance of material to determine if they are adequate to ensure the following:

1. All material received is accounted for.
2. Only material meeting agreed-to quantity and quality specifications are accepted.
3. Material returns are properly controlled and accounted for (outside vendors).
4. All material received is transferred to inventory or otherwise accounted for.
5. Material issued to floor or returned to inventory are controlled.
and accounted for.

c. Evaluate the contractor's procedures for verifying the quantities of physical inventories. Determine whether the contractor tests all physical inventories including company owned stock/asset inventory plus contract project inventory. Procedures include reconciling the quantities recorded in the inventory books and records to the physical count of parts stored in warehouses or other inventory locations. Coordinate this portion of your audit closely with the Government property specialists as many of the normal reviews performed by them may be of use in your evaluation.

d. Document whether the contractor meets the goal of 95% accuracy in its reported inventory accuracy metric or by other processes that measure inventory accuracy. If accuracy levels fall below 95%, determine whether the contractor provided adequate evidence that (1) there is no material harm to the Government due to the lower accuracy levels and (2) that the cost to meet the accuracy goal is excessive in relation to the impact on the Government. If adequate evidence was not provided discuss with supervisory auditor and ACO responsible for MMAS.

e. Based on the results of the steps above, determine whether an independent inventory accuracy test by the auditor is warranted. Design and perform test of inventory accuracy and summarize conclusions.

3. **Commingled Inventory, DFARS 252.242-7004(d)(9)** — The contractor will have adequate controls to ensure that physically commingled inventories that may include material for which costs are charged or allocated to fixed-price, cost-reimbursement, and commercial contracts do not compromise system criteria 1 through 8 requirements of any of the system criteria in e)(1) through (8) of this clause. Government-furnished material shall not be physically commingled with other material or used on commercial work.

   a. Determine whether the contractor’s policies comply with DFARS 252.242.7004(d)(9) and verify the contractor’s actual practices comply with its written polices and procedure and/or departmental instructions.

   b. Ensure through physical observation (during plant visits and system demonstrations) and examination of material job cost records that Government Furnished Material (GFM) is controlled and is not physically commingled with contractor owned material or is being used on commercial work. Coordinate the validation of GFM closely with the Government property specialists as many of the Government property specialist reviews may be of use in your
4. **Inventory Monitoring and Exception Reports, DFARS 252.242.7004(d)(3)** - The contractor will provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as excess/residual inventory, as soon as known.

   - a. Determine if the exception reports used by the contractor monitor inventory accuracy (e.g., obsolete materials, excess materials and inventory with no demand).
   
   - b. Evaluate whether the contractor identifies, reports, and resolves system weaknesses and exceptions consistent with procedures (testing of the system) in a timely manner.
   
   - c. If the contractor has system reports that identify significant exceptions, evaluate the contractor's conclusions and/or corrective action plans.

5. **Audit Trail, DFARS 252.242.7004(d)(4)** – The contractor will provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired.

   - a. Determine the adequacy of the audit trail for allowing the evaluation of transactions/contractor actions for inventory accuracy.
   
   - b. Determine whether the contractor provided sufficient evidence through transaction testing to show its system is operating as desired and in compliance with DFARS.

6. **Periodic Internal Reviews, DFARS 252.242-7004(d)(10)** – The contractor’s MMAS should be subjected to periodic internal reviews to ensure compliance with established policies and procedures.

   - a. Determine if the contractor’s MMAS requires periodic internal reviews to monitor inventory accuracy to determine that controls are operating as intended and modified as appropriate.
   
   - b. Evaluate management reviews and other monitoring activities for
the period covered by the audit to determine if the contractor is performing reviews in accordance with periods and guidelines established in the policies and procedures. Determine if management conducts reviews periodically and makes corrections to the MMAS as indicated by the reviews. Determine the reasonableness of timeframes and guidelines of the periodic reviews given the complexity of the material system operation.

7. **Summarize Conclusions.**

   Summarize results of work performed and audit conclusions.

   a. Evaluate whether noncompliances with the DFARS criteria identified during the audit are significant deficiencies/material weaknesses or are less severe than significant deficiencies/material weaknesses, but important enough to merit the attention of the responsible contracting officer and contractor management officials.

   b. Identify the rough order magnitude (ROM) harm to Government contracts (e.g., over-billings, late contract delivery, excessive carry costs, pricing data). If unable to quantify the impact, provide a qualitative analysis to describe the material adverse impact to Government contracts.

8. **Supervisory/Management Discussions.**

   Discuss with supervisor and management the results of the fieldwork. If a deficiency is identified, determine if a Statement of Conditions and Recommendations (SOCAR) is warranted and provide a draft to management as soon as the deficiency is supported. [CAM Chapter 10 and GAGAS 5.11 define the elements of a finding.]

9. **Coordinate Result of Audit with Cognizant Government Officials.**

   Discuss the results with the DACO or other government official responsible for administration of surveillance of the MMAS.

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**F-1 Compliance with DFARS 252.242-7004 - Transfers**

**WP Reference**

**Version 10.9, dated June 2019**

In section F, the auditor will test key processes and controls to determine if the contractor’s MMAS complies with the system criteria in DFARS 252.242-7004. In addition to DFARS 252.242-7004(d)(6) and (7), the auditor will evaluate compliance with DFARS 252.242-7004(d)(1), (3), (4), and (10), as these criteria are an integral part of the evaluation of all
MMAS processes. Note that DFARS 252.242-7004(d)(10) – Internal Review - requirements can significantly overlap DFARS 252.242-7004(d)(3) – Monitoring. The contractor’s system evaluation processes may include, for example, management reviews, internal audits, or personnel performing duplicate checks and can be accomplished through ongoing activities built into the contractor’s normal recurring activities, separate evaluations, or a combination of the two. If noncompliances exist, determine which of the 2 criteria best fits the condition.

In some instances, the auditor may use the same sample to test multiple criteria. If auditors use sampling methods to test multiple criteria, ensure the sample is sufficient to cover all requirements being tested.

Consider the size and complexity of the company’s processes, operations, and accounting system. Tailor (add, line-out, or modify) the audit steps based upon your understanding of the contractor’s processes, related internal controls and the risk identified in the risk assessment.

Inquiry alone is not sufficient to test the contractor’s compliance with its MMAS system description or DFARS 252.242-7004 requirements

1. System Description, DFARS 252.242-7004(d)(1) - The contractor will have an adequate system description, including policies, procedures, and operating instructions compliant with Federal Acquisition Regulations and Defense FARS Supplement.

   a. For material transfers and costing of transfer material, determine whether the contractor’s system description, policies, procedures and operating instructions for manual and system-generated transfers provide sufficient information on how the system is intended to operate and that they comply with the FAR and DFARS.

   b. Verify (e.g., through testing, observation, re-performance of contractor tests of the system, inquiry) the contractor's actual practices comply with its system description. Evaluate whether the data used is complete and accurate, and supporting documentation is adequate.

      (Assess whether this step is warranted, if the audit team concludes the contractor’s described procedures are not compliant with the DFARS requirements (step 1a above).

2. Manual or System Generated Transfers, DFARS 252.242-7004(d)(6) – The contractor provide detailed descriptions of circumstances that will result in manual or system generated transfers
Determine that the contractor’s MMAS provides detailed descriptions of circumstances that result in manual or system generated transfers of parts.

3. **Costing Material Transfers, DFARS 252.242-7004(d)(7)** – Maintain a consistent, equitable, and unbiased logic for costing of material transactions as follows: ... 

   (iii) The system should transfer parts and associated costs within the same billing period. In the few instances where this may not be appropriate, the Contractor may accomplish the material transaction using a loan/pay-back technique. The “loan/pay-back technique” means that the physical part is moved temporarily from the contract, but the cost of the part remains on the contract. The procedures for the loan/pay-back technique must be approved by the ACO. When the technique is used, the Contractor shall have controls to ensure – a. parts are paid back expeditiously; b. procedures and controls are in place to correct any overbilling that might occur; c. monthly, at a minimum, identification of the borrowing contract and the date the part was borrowed; and d. cost of the replacement part is charged to the borrowing contract.

a. **For Manual Transfers (except Loan/Pay-back)** - Evaluate the contractor’s transfer costing methodology, to determine cost transfers are consistent, equitable, and unbiased. When establishing sampling plans to test transactions, consider the following attributes:

   - Are costs transferred with the physical movement of parts?
   - If costs are not transferred at the time of physical movement, are costs transferred within same billing cycle or reasonable time thereafter?
   - Does the contractor transfer all costs associated with the parts. For example, transferred fabricated parts include material, labor, and related indirect costs?
   - Are the contractor’s practices consistent with its stated costing methodology for initial charges and transfer charges to contracts?
   - Are costs transferred at standard or actual costs using one of the CAS 411.50(b) inventory valuation methods?
   - Does the system document a valid reason for the cost transfer?
   - Is the process for sampled transactions consistent with the
### b. For System-Generated Transfers

Evaluate the contractor’s transfer costing methodology, to determine cost transfers are consistent, equitable, and unbiased. When establishing sampling plans to test transactions, consider the following attributes:

- Are costs transferred with the physical movement of parts?
- If costs are not transferred at the time of physical movement, are costs transferred within same billing cycle or reasonable time thereafter?
- Does the contractor transfer all costs associated with the parts. For example, transferred fabricated parts include material, labor, and related indirect costs?
- Are the contractor's practices consistent with its stated costing methodology for initial charges and transfer charges to contracts?
- Are costs transferred at standard or actual costs using one of the CAS 411.50(b) inventory valuation methods?
- Is the process for sampled transactions consistent with the system description?
- Does the contractor document the audit trail?
- Does the system document a valid reason for the cost transfer? If the contractor uses an automated transfer program such as SAP’s Grouping Pegging & Distribution (GPD) Oracle’s Soft-Peg, the reason for the transfer is documented by the system logic.

### c. For Loan/Payback

Evaluate the contractor’s procedure for the loan/pay-back technique. Determine whether the ACO approved its loan/pay-back technique (DFARS 252.242-7004(d)(1) and (7)). When establishing sampling plans, consider the following attributes:

- Are the circumstances documented when a loan/payback occurs?
- Does the loan/payback aging report identify the borrowing contract and the date the parts were borrowed?
- Are the time periods for outstanding loans reasonable?
- Are overbillings corrected timely due to loan/payback.
### 4. Material Transfer Monitoring and Exception Reports, DFARS 252.242.7004(d)(3)

- The contractor will provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as excess/residual inventory, as soon as known.

   a. Determine if exception reports used by the contractor monitor material transfers, including excess material (e.g., reports that may show evidence of material transfers that are inconsistent with the MMAS detail descriptions, open loan/paybacks, etc.).

   b. Evaluate how the contractor identifies, reports, and resolves significant exceptions consistent with procedures, to include open loan/paybacks, in a timely manner.

   c. If the contractor reports identify significant exceptions, evaluate the contractor's conclusions and/or corrective action plans.

### 5. Audit Trail, DFARS 252.242.7004(d)(4)

- The contractor will provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired.

   a. Determine the adequacy of the audit trail for allowing the evaluation of transactions/contractor actions for material transfers.

   b. Determine whether the contractor provided sufficient evidence through transaction testing to show its system is operating as desired and in compliance with DFARS.

### 6. Periodic Internal Reviews, DFARS 252.242-7004(d)(10)

- The contractor’s MMAS should be subjected to periodic internal reviews to ensure compliance with established policies and procedures.

   a. Determine if the contractor’s MMAS requires periodic internal
reviews to monitor transfers to determine that controls are operating as intended and that they are modified as appropriate.

b. Evaluate management reviews and other monitoring activities for the period covered by the audit to determine if the contractor is performing reviews in accordance with periods and guidelines established in the policies and procedures. Determine if management conducts reviews periodically and makes corrections to the MMAS as indicated by the reviews. Determine the reasonableness of timeframes and guidelines of the periodic reviews given the complexity of the material system operation.

7. **Summarize Conclusions.**

Summarize results of work performed and audit conclusions.

a. Evaluate whether noncompliances with the DFARS criteria identified during the audit are significant deficiencies/material weaknesses or are less severe than significant deficiencies/material weaknesses, but important enough to merit the attention of the responsible contracting officer and contractor management officials.

b. Identify the rough order of magnitude (ROM) harm to Government contracts (e.g., over-billings, late contract delivery, excessive carry costs, pricing data). If unable to quantify the impact, provide a qualitative analysis to describe the material adverse impact to Government contracts.

8. **Supervisory/Management Discussions.**

Discuss with supervisor and management the results of the fieldwork. If a deficiency is identified, determine if a Statement of Conditions and Recommendations (SOCAR) is warranted and provide a draft to management as soon as the deficiency is supported. [CAM Chapter 10 and GAGAS 5.11 define the elements of a finding.]

9. **Coordinate Result of Audit with Cognizant Government Officials.**

Discuss the results with the DACO or other government official responsible for administration of surveillance of the MMAS.

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<tr>
<th>G-1</th>
<th>Compliance with DFARS 252.242-7004 – Material Allocations</th>
<th>WP Reference</th>
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<td>Version 10.9, dated June 2019</td>
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</table>
In section G, the auditor will test key processes and controls to determine if the contractor’s MMAS complies with the system criteria in DFARS 252.242-7004.

In addition to DFARS 252.242-7004(d)(8), the auditor will evaluate compliance with DFARS 252.242-7004(d)(1), (3), (4), and (10), as these criteria are an integral part of the evaluation of all MMAS processes. Note that DFARS 252.242-7004(d)(10) – Internal Review - requirements can significantly overlap DFARS 252.242-7004(d)(3) – Monitoring. The contractor’s system evaluation processes may include, for example, management reviews, internal audits, or personnel performing duplicate checks and can be accomplished through ongoing activities built into the contractor’s normal recurring activities, separate evaluations, or a combination of the two. If noncompliances exist, determine which of the 2 criteria best fits the condition.

In some instances, the auditor may use the same sample to test multiple criteria. If auditors use sampling methods to test multiple criteria, ensure the sample is sufficient to cover all requirements being tested.

Consider the size and complexity of the company’s processes, operations, and accounting system. Tailor (add, line-out, or modify) the audit steps based upon your understanding of the contractor’s processes, related internal controls and the risk identified in the risk assessment.

**Inquiry alone is not sufficient to test the contractor’s compliance with its MMAS system description or DFARS 252.242-7004 requirements.**

1. **System Description, DFARS 252.242-7004(d)(1) - The contractor will have an adequate system description, including policies, procedures, and operating instructions compliant with Federal Acquisition Regulations and Defense FARS Supplement.**

   a. For allocated material, determine whether the contractor’s system description, policies, procedures and operating instructions for allocating material pools to multiple cost objectives provide sufficient detailed information on how the system is intended to operate and that they comply with the FAR and DFARS.

   b. Verify (e.g., through testing, observation, re-performance of contractor processes, inquiry) the contractor's actual practices comply with its system description Evaluate whether the data used is complete and calculations are accurate.

   *(Assess whether this step is warranted, if the audit team concludes the contractor’s described procedures are not compliant with the*
**DFARS requirements (step 1a above).**

2. **Material Allocations, DFARS 252.242-7004(d)(8)** - *When allocations from common inventory accounts are used, have controls (in addition to system criteria 2 through 7) to ensure that (i) reallocations and any credit due are processed no less frequently than the routine billing cycle; (ii) Inventories retained for requirements that are not under contract are not allocated to contracts; and (iii) Algorithms are maintained based on valid and current data.*

Determine if the process for allocating material to multiple cost objectives complies with DFARS 252.242-7004(d)(8).

a. **Materiality.** Determine the magnitude of contractor cost allocations from common inventories to cost objectives.
   - Compare inventory allocations to overall material usage to determine materiality.
   - If common inventory allocations are immaterial, further effort may not be required, discuss need for any additional work with supervisory auditor.

**Note:** Common inventory represents parts that are required for use on more than one cost objective.

b. **Material Allocation Reallocations and Credits.** Determine if the contractor’s Material Allocations process ensures that reallocations and any credits due are processed no less frequently than the routine billing cycle.

c. **Material Allocation Timing.** Determine if the contractor ensures that inventories retained for required allocated material that are not under contract are not allocated to existing contracts (i.e., required for the contract and are based on valid time-phased requirements). Allocations should not be too far in advance of required production dates without sufficient justification, such as availability of quantity discounts, economic order quantities, and known or expected vendor problems.

d. **Material Allocation Algorithms.** Determine if the contractor maintains algorithms for Material Allocations based on valid and current data.

3. **Material Allocations Monitoring and Exception Reports, DFARS 252.242.7004(d)(3).** - *The contractor will provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as*
**Master Document – Audit Program**

<table>
<thead>
<tr>
<th><strong>excess/residual inventory, as soon as known.</strong></th>
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<tbody>
<tr>
<td>a. Determine if exception reports used by the contractor monitor indications of inaccurate material allocations.</td>
</tr>
<tr>
<td>b. Determine if the contractor identifies, reports, and resolves system weaknesses and exceptions in a timely manner.</td>
</tr>
<tr>
<td>c. If the contractor's system reports identify significant exceptions, evaluate the contractor's conclusions and/or corrective action plans.</td>
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</table>

4. **Audit Trail, DFARS 252.242.7004(d)(4)** – *The contractor will provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired.*

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<tbody>
<tr>
<td>a. Determine the adequacy of the audit trail for allowing the evaluation of transactions/contractor actions for allocated materials.</td>
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<tr>
<td>b. Determine whether the contractor provided sufficient evidence through transaction testing to show its system is operating as desired and in compliance with DFARS.</td>
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</table>

5. **Periodic Internal Reviews, DFARS 252.242-7004(d)(10)** – *The contractor’s MMAS should be subjected to periodic internal reviews to ensure compliance with established policies and procedures.*

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<table>
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<tbody>
<tr>
<td>a. Determine if the contractor’s MMAS requires periodic internal reviews to monitor allocated material to determine that controls are operating as intended and modified as appropriate.</td>
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<tr>
<td>b. Evaluate management reviews and other monitoring activities for the period covered by the audit to determine if the contractor is performing reviews in accordance with periods and guidelines established in its MMAS. Determine if management conducts reviews periodically and makes corrections to the MMAS as</td>
</tr>
</tbody>
</table>
indicated by the reviews. Determine the reasonableness of timeframes and guidelines of the periodic reviews given the complexity of the material system operation.

6. **Summarize Conclusions.**
   Summarize results of work performed and audit conclusions.
   
   a. Evaluate whether noncompliances with the DFARS criteria identified during the audit are significant deficiencies/material weaknesses or are less severe than significant deficiencies/material weaknesses, but important enough to merit the attention of the responsible contracting officer and contractor management officials.
   
   b. Identify the rough order of magnitude (ROM) harm to Government contracts (e.g., over-billings, late contract delivery, excessive carry costs, pricing data). If unable to quantify the impact, provide a qualitative analysis to describe the material adverse impact to Government contracts.

7. **Supervisory/Management Discussions.**
   Discuss with supervisor and management the results of the fieldwork. If a deficiency is identified, determine if a Statement of Conditions and Recommendations (SOCAR) is warranted and provide a draft to management as soon as the deficiency is supported. [CAM Chapter 10 and GAGAS 5.11 define the elements of a finding.]

8. **Coordinate Result of Audit with Cognizant Government Officials.**
   Discuss the results with the DACO or other government official responsible for administration of surveillance of the MMAS.

<table>
<thead>
<tr>
<th>H-1</th>
<th>Compliance with DFARS 252.242-7004 - Material Costing</th>
<th>WP Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version 10.9, dated June 2019</td>
<td>In section H, the auditor will test those key processes and controls to determine if the contractor’s MMAS complies with the system criteria in DFARS 252.242-7004. In addition to DFARS 252.242-7004(d)(7), the auditor will evaluate compliance with DFARS 252.242-7004(d)(1), (3), (4), and (10), as these criteria are an integral part of the evaluation of all MMAS processes. Note that DFARS 252.242-7004(d)(10) – Internal Review - requirements can significantly overlap DFARS 252.242-</td>
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</table>
7004(d)(3) – Monitoring. The contractor’s system evaluation processes may include, for example, management reviews, internal audits, or personnel performing duplicate checks and can be accomplished through ongoing activities built into the contractor’s normal recurring activities, separate evaluations, or a combination of the two. If noncompliances exist, determine which of the 2 criteria best fits the condition.

In some instances, the auditor may use the same sample to test multiple criteria. If auditors use sampling methods to test multiple criteria, ensure the sample is sufficient to cover all requirements being tested.

Consider the size and complexity of the company’s processes, operations, and accounting system. Tailor (add, line-out, or modify) the audit steps based upon your understanding of the contractor’s processes, related internal controls and the risk identified in the risk assessment.

Inquiry alone is not sufficient to test the contractor’s compliance with its MMAS system description or DFARS 252.242-7004 requirements.

<table>
<thead>
<tr>
<th>1. <strong>System Description, DFARS 252.242-7004(d)(1)</strong> – The contractor will have an adequate system description, including policies, procedures, and operating instructions compliant with Federal Acquisition Regulations and Defense FARS Supplement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. For initial material costing, determine whether the contractor’s system description, policies, procedures and operating instructions for initial costing of material provide sufficient information on how the system is intended to operate and that they comply with the FAR and DFARS.</td>
</tr>
</tbody>
</table>
| b. Verify (through testing, observation, re-performance of contractor process, inquiry) the contractor's actual practices comply with its system description.  
  
  **(Assess whether this step is warranted, if the audit team concludes the contractor’s described procedures are not compliant with the DFARS requirements (step 1a above).)** |

<table>
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<tr>
<th>2. <strong>Initial Costing of Material, DFARS 252.242-7004(d)(7)</strong> – Maintain a consistent, equitable, and unbiased logic for costing of material transactions as follows:</th>
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<tr>
<td>(i) The Contractor shall maintain and disclose written policies describing the transfer methodology and the loan/pay-back technique.</td>
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<tr>
<td>(ii) The costing methodology may be standard or actual cost, or any of the inventory costing methods in 48 CFR 9904.411-50(b). The Contractor shall maintain consistency across all contract and</td>
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customer types, and from accounting period to accounting period for initial charging and transfer charging.

<table>
<thead>
<tr>
<th>a.</th>
<th>Determine if the contractor’s actual process for initial costing of materials, including inter-organizational transfers, ensures initial costs are consistent, equitable, unbiased, and comply with CAS 411-50(b). NOTE: If there is a current CAS 411 compliance audit, the auditor should incorporate the results into this audit and consider whether further effort is required.</th>
</tr>
</thead>
</table>

| b. | Selectively evaluate material transactions (purchased and fabricated) to determine if the initial costing of materials comply with DFARS 252.242-7004(d)(7) requirements. (Note: Audit universe is typically material transactions during the most recent 12 months or the selected items used for testing BOM/MPS accuracy.) When establishing sampling plans consider the following attributes:  
  - Does the contractor consistently use the same costing method (i.e., standard costing or actual costing, etc...) from accounting period to accounting period?  
  - When materials are charged at actual costs directly to contract upon acquisition, is the contract charged identified on the purchase order, CAS 411-40(b)?  
  - When materials are charged directly to contract upon requisition from inventory (e.g., issued from company-owned inventory) does the contractor use one of the inventory costing methods described in CAS 411-50(b)? The costing methods used must be consistently followed.  
  - For fabricated material costings, ensure the accuracy of the number of labor hours and application of the labor rate.  
  - If material costing is at standard cost, ensure contractor complies with CAS 407. |

3. **Initial Material Costing Monitoring, Exception Reports and Residual/Excess Material, DFARS 252.242.7004(d)(3)** - The contractor will provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as excess/residual inventory, as soon as known.

   | a. | Determine if the contractor has exception reports to monitor initial material costing. |
b. Determine if the contractor identifies, reports, and resolves system weaknesses and exceptions in a timely manner.

c. If the contractor's system reports identify significant exceptions, evaluate the contractor's conclusions and corrective action plans.

4. **Audit Trail, DFARS 252.242.7004(d)(4)** – *The contractor will provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired.*

   a. Determine the adequacy of the audit trail for allowing the evaluation of transactions/contractor actions for material costing.

   b. Determine whether the contractor provided sufficient evidence through transaction testing to show its system is operating as desired and in compliance with DFARS.

5. **Periodic Internal Reviews, DFARS 252.242-7004(d)(10)** – *The contractor’s MMAS should be subjected to periodic internal reviews to ensure compliance with established policies and procedures.*

   a. Determine if the contractor’s MMAS requires periodic internal reviews to monitor initial material costing to determine that controls are operating as intended and modified as appropriate.

   b. Evaluate management reviews and other monitoring activities for the period covered by the audit to determine if the contractor is performing reviews in accordance with periods and guidelines established in its MMAS. Determine if management conducts reviews periodically and makes corrections to the MMAS as indicated by the reviews. Determine the reasonableness of timeframes and guidelines of the periodic reviews given the complexity of the material system operation.

6. **Summarize Conclusions.**

   Summarize results of work performed and audit conclusions.

   a. Evaluate whether noncompliances with the DFARS criteria identified during the audit are significant deficiencies/material weaknesses or are less severe than significant deficiencies/material
weaknesses, but important enough to merit the attention of the responsible contracting officer and contractor management officials.

b. Identify the rough order of magnitude (ROM) harm to Government contracts (e.g., over-billings, late contract delivery, excessive carry costs, pricing data). If unable to quantify the impact, provide a qualitative analysis to describe the material adverse impact to Government contracts.

7. **Supervisory/Management Discussions.**
   Discuss with supervisor and management the results of the fieldwork. If a deficiency is identified, determine if a Statement of Conditions and Recommendations (SOCAR) is warranted and provide a draft to management as soon as the deficiency is supported. [CAM Chapter 10 and GAGAS 5.11 define the elements of a finding.]

8. **Coordinating Result of Audit with Cognizant Government Officials.**
   Discuss the results with the DACO or other government official responsible for administration of surveillance of the MMAS.

<table>
<thead>
<tr>
<th>A-I</th>
<th>Concluding Steps</th>
<th>WP Reference</th>
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<tbody>
<tr>
<td></td>
<td><strong>Version 10.9, dated June 2019</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td><strong>Team discussion.</strong> Hold a meeting with the audit team (e.g. RAM, Manager, Supervisor, Technical Specialists and Auditors) and discuss the issues identified in the audit and the impact on the conclusions and opinion in the audit report. Summarize the deficiencies by the applicable DFARS material management and accounting system criteria. Distinguish between deficiencies that are considered a significant deficiency/material weakness and those that are less severe, but important enough to merit the attention of the responsible contracting officer and contractor management officials. In certain circumstances, including when the audit results only in less severe than significant deficiencies/material weaknesses, consider discussing withhold provisions under FAR 32.503-6 with the responsible contracting officer.</td>
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<td>2.</td>
<td><strong>Summarize results and draft the audit report.</strong> The draft audit report should include all significant deficiencies/material weaknesses, even those reported in deficiency reports issued on a real-time basis.</td>
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</table>
under a separate assignment number during the course of the audit. For any such deficiencies, note the deficiency report number and date and the status of the deficiencies in the condition statement.

If the audit disclosed deficiencies that are less severe than significant deficiencies/material weaknesses, but important enough to merit the attention of the responsible contractor management officials those should be included in a report Exhibit titled, “Deficiencies that Warrant Attention of the Contracting Officer”.

3. Obtain supervisory review of the working papers, and draft audit results section of the audit report before discussions with the contractor.

4. Auditors should document and communicate with the contracting officers upon the completion of our audit:
   a. Brief the contracting officer on significant deficiencies or other significant and/or complex findings/issues, and/or
   b. Coordinate with the contracting officer to find out and determine if inclusion of detailed explanatory notes in our report would serve a useful purpose when there are no findings.

5. After obtaining DCAA management approval, hold and document the exit conference in accordance with CAM 4-304. Obtain the contractor’s reaction regarding all deficiencies included in the report, including any that are less severe than significant deficiencies/material weaknesses.

6. Finalize the audit report and incorporate the contractor’s reaction and auditor’s response.

7. If unsatisfactory conditions are noted, follow the guidance in CAM 4-800.

8. Update the permanent file in accordance with CAM 4-405b. A copy of the documented understanding of the MMAS should be filed in the permanent file as well as a summary of the identified deficiencies.

9. Brief the FAO on findings and any effect on FAO future audits.