

A *udit*



R *eport*

VALUATION OF INVENTORIES IN THE DEFENSE LOGISTICS AGENCY
STANDARD AUTOMATED MATERIEL MANAGEMENT SYSTEM

Report No. D-2002-009

October 22, 2001

Office of the Inspector General
Department of Defense

Additional Copies

To obtain additional copies of this audit report, visit the Inspector General, DoD Home Page at www.dodig.osd.mil/audit/reports or contact the Secondary Reports Distribution Unit of the Audit Followup and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact the Audit Followup and Technical Support Directorate at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-4704

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@dodig.osd.mil; or by writing to the Defense Hotline, The Pentagon, Washington, DC 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

ACC	Acquisition Cost Code
DLA	Defense Logistics Agency
DORRA	DLA Operations Research and Resource Analysis
DSCC	Defense Supply Center Columbus
DSCP	Defense Supply Center Philadelphia
DSCR	Defense Supply Center Richmond
DSS	Distribution Standard System
ICP	Inventory Control Point
NIRF	National Inventory Record File
SAMMS	Standard Automated Materiel Management System
SPMF	Standard Pricing Master File



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

October 22, 2001

MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Audit Report on Valuation of Inventories in the Defense Logistics Agency
Standard Automated Materiel Management System
(Report No. D-2002-009)

We are providing this report for review and comment. We performed this audit in support of the requirements of the Chief Financial Officers Act of 1990, as amended by the requirements of the Federal Financial Management Act of 1994. We considered management comments on a draft of this report in preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The comments received from the Defense Logistics Agency were partially responsive. We request additional comments on Recommendation 4. and a completion date on the review of the potential monetary benefits. Therefore, we request that the Director provide additional comments by December 21, 2001.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. James L. Kornides at (614) 751-1400, extension 211 (jkornides@dodig.osd.mil) or Ms. Amy J. Frontz at (614) 751-1400, extension 213 (afrontz@dodig.osd.mil). See Appendix E for the report distribution. See the inside back cover for a list of audit team members.

Thomas F. Gimble
Acting
Deputy Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. D-2002-009

October 22, 2001

(Project No. D2000FJ-0067.006)

Valuation of Inventories in the Defense Logistics Agency Standard Automated Materiel Management System

Executive Summary

Introduction. We performed this audit in response to the Chief Financial Officers Act of 1990, as amended by the Federal Financial Management Act of 1994. Inventory and inventory-related transactions represent major portions of the total assets, obligations, revenue, and expenses reported on the DoD financial statements. Underlying the financial statements are management assertions on the valuation, ownership, existence, completeness, and presentation of inventories. Assertions regarding inventory valuation deal with whether inventories had been included in the financial statements at the appropriate dollar amounts and whether the basis of valuation is appropriate, properly applied, and consistent with previous periods. Inventory valuation data for many of the DoD consumable spare parts, medical supplies, and clothing and textile items are maintained in the Defense Logistics Agency (DLA) Standard Automated Materiel Management System (SAMMS). At the end of FY 2000, DLA reported inventories of approximately \$8.3 billion in SAMMS.

Objectives. The objective of the audit was to determine whether the values assigned to inventories (that DLA managed in SAMMS) were accurately computed in accordance with generally accepted accounting principles and were supported by contract data. We also evaluated applicable management controls. See Appendix A for a discussion of the scope and methodology, the management control program, and prior audit coverage.

Results. The values assigned to inventories in SAMMS were not always accurate. In addition, a significant portion of the inventory value was not supported by contract data. Using the DLA Inventory Valuation Statistical Sampling Plan to assess the \$9.1 billion inventory value that DLA reported in SAMMS at the end of FY 1999, we estimated that \$2.5 billion was fully supported by obligation history records that could be verified to original contract files. Another \$398 million was inaccurately valued. Additionally, \$476 million was not supported by obligation history records or contract files, and \$5.7 billion was supported by obligation history records that could not be verified to original contract files.

Projecting the net dollar impact of acquisition cost and quantity errors showed that the \$9.1 billion DLA inventory book value was materially misstated. We found no evidence that the conditions leading to the inaccurate and unsupported acquisition costs improved in FY 2000. The deficiencies leading to the inaccurate and unsupported acquisition costs were not corrected and fully disclosed. As a result, the values of the inventory items

maintained in the DLA SAMMS cannot be relied on to support the inventory amount on future DLA financial statements or to support the prices charged to customers. See the Finding section for a discussion of the audit results.

Correction of the inaccurate values assigned to the DLA inventory will result in a potential monetary benefit to DLA customers for on-hand inventories expected to be sold during the 6-year Future Years Defense Program. We estimate that approximately \$65.9 million of funds can be put to better use when the standard (sales) prices are reduced for the affected items. The full extent of the monetary benefits will be quantifiable after the DLA inventory control points correct all inaccurate acquisition costs.

Summary of Recommendations. We recommend that the Director, DLA, establish an oversight process to validate that inaccurate acquisition costs are identified and corrected at DLA inventory control points. Also, the oversight process should validate that a sound quality assurance program is implemented and maintained. We recommend that the Director develop interim procedures to validate cost data for items in the DLA Inventory Valuation Statistical Sampling Plan. We recommend tracing costs from the logistics feeder systems to the appropriate procurement records until the DLA inventory control points complete the required actions to correct inventory valuation data. We recommend that the Director modify the DLA Inventory Valuation Statistical Sampling Plan to obtain the appropriate cost data for items transferred among DLA inventory control points. We recommend that the Director, disclose the value of on-hand inventories where contract data do not support acquisition costs in the notes to the DLA financial statements. We also recommend that the Director ensure that the inventory valuation problems identified by this audit are referred to the DLA Business Systems Modernization Office for consideration during the development of the new DLA automated system.

Management Comments. The Director, DLA Logistics Operations, concurred or partially concurred with the finding, recommendations, and potential monetary benefits. Additionally, the Director agreed to include inventory valuation as a weakness in the FY 2001 DLA Annual Statement of Assurance. The Director stated that changes to current methodologies were expected to result from this review as well as recent Office of the Secretary of Defense and General Accounting Office reviews and business systems modernization planning. Also, DLA is evaluating inventory valuation in the context of Chief Financial Officer reporting to determine whether footnote disclosures are required for unsupported inventories. In addition, the Director requested the details of the audit calculations to estimate the full extent of potential monetary benefits and to determine whether the DLA inventory book value was materially misstated. See the Finding section of the report for a discussion of management comments and the Management Comments section of the report for complete text of the comment.

Audit Response. The Director's comments were partially responsive. We disagree that additional analysis is needed to determine whether an estimated \$6.2 billion of unsupported inventory value warrants footnote disclosure. We also request DLA provide a completion date on the review of the potential monetary benefits. We request that the Director provide additional comments on the final report by December 21, 2001.

Table of Contents

Executive Summary	i
Introduction	
Background	1
Objectives	2
Finding	
Accuracy and Support of Inventory Values	3
Appendixes	
A. Audit Process	
Scope	16
Methodology	17
Statistical Sampling Methodology	19
Management Control Program Review	21
Prior Coverage	22
B. Additional Information About the DLA Sampling Plan	23
C. DLA Inventory Valuation Process	28
D. Judgmental Sample Results	32
E. Report Distribution	33
Management Comments	
Defense Logistics Agency	35

Background

This report is the final in a series on the dollar value accuracy of inventories reported on the financial statements of the Defense Logistics Agency (DLA) Working Capital Fund. We previously reported that the DLA Inventory Valuation Statistical Sampling Plan (DLA Sampling Plan) did not include procedures to validate the inventory valuation data in the logistics feeder systems¹. We then issued separate reports highlighting inventory valuation problems at each of the non-fuel DLA Inventory Control Points (ICP)². This report focuses on the overall impact of the ICP inventory valuation problems and the potential impact on DLA achieving a favorable audit opinion on its financial statements.

DLA provides centralized management of consumable spare parts, subsistence items, bulk petroleum products, clothing and textiles and medical supplies through its ICPs. The Defense Energy Support Center is the DLA ICP that manages bulk petroleum products and is located in Alexandria, Virginia. The non-fuel ICPs are located at its Defense Supply Centers in Columbus Ohio (DSCC), Philadelphia Pennsylvania (DSCP), and Richmond Virginia (DSCR). The ICPs are responsible for maintaining accurate and reliable inventory values in accordance with generally accepted accounting principles (See Appendix C for details on inventory valuation policy). Inventory valuation data for hardware, medical, and clothing and textile items are maintained in the DLA Standard Automated Materiel Management System (SAMMS). At the end of FY 2000, DLA reported inventories of approximately \$8.3 billion in SAMMS.

DLA inventories are stored at its distribution depots located worldwide. The depots use the DLA Distribution Standard System (DSS) to maintain on-hand inventory record balances which are provided to SAMMS and valued for financial reporting purposes. In FY 1999, DLA developed a sampling plan to measure the dollar value accuracy of its inventories (see Appendix B for details on the DLA Sampling Plan). As part of its sampling plan, DLA selected a statistical sample of 3,153 items to assess the accuracy of the \$9.1 billion DSS inventory value at 18 distribution depots. The sample universe consisted of only DLA-managed items whose inventory values were maintained in SAMMS.

¹ Inspector General, DoD, Report No. D-2000-138, "Procedures Used to Test the Dollar Accuracy of the Defense Logistics Agency Inventory," June 1, 2000.

² Inspector General, DoD, Report No. D-2001-146, "Inventory Valuation at the Defense Supply Center Philadelphia," June 21, 2001, Inspector General, DoD, Report No. D-2001-079, "Inventory Valuation at the Defense Supply Center Richmond," March 14, 2001, and Inspector General, DoD, Report No. D-2001-078, "Inventory Valuation at the Defense Supply Center Columbus," March 14, 2001.

Objectives

The objective of the audit was to determine whether the values assigned to inventories (that DLA managed in SAMMS) were accurately computed in accordance with generally accepted accounting principles and were supported by contract data. We also evaluated applicable management controls. See Appendix A for a discussion of the scope and methodology, the management control program, and prior audit coverage.

Accuracy and Support of Inventory Values

The values assigned to inventories in the DLA SAMMS were not always accurate. In addition, a significant portion of the inventory value was not supported by contract data. Using the DLA Inventory Valuation Statistical Sampling Plan to assess the \$9.1 billion inventory value that DLA maintained in SAMMS at the end of FY 1999, we estimated the following:

- \$2.5 billion was fully supported by obligation history records that could be verified to original contract files,
- \$398 million was inaccurately valued,
- \$476 million was not supported by obligation history records or contract files, and
- \$5.7 billion was supported by obligation history records that could not be verified to original contract files.

Projecting the net dollar impact of acquisition cost and quantity errors showed that the \$9.1 billion DLA inventory book value was materially misstated. We found no evidence that the conditions leading to the inaccurate and unsupported acquisition costs improved in FY 2000. The inaccurate and unsupported inventory values existed because DLA had not established adequate procedures to ensure that its ICPs properly valued inventory items based on latest representative purchase price information. Additionally, DLA did not verify that its ICPs maintained accurate values through quality assurance programs. Further, procedures were not in place to retain supporting contract history data or disclose unsupported inventory values. As a result, the values of the inventory items maintained in the DLA SAMMS cannot be relied on to support the inventory amount on future DLA financial statements or to support the prices charged to customers.

DLA Statistical Sampling Plan

DLA relies on statistical sampling techniques to measure the accuracy of the inventory records for material stored at its distribution depots. In past years, DLA developed sampling plans that only measured record accuracy. However, the continued emphasis on producing accurate information to support the cost of inventories reported on the DoD financial statements caused DLA to devise a new statistical sampling plan in FY 1999. The sampling plan focused on the dollar accuracy of the depot records for DLA-owned material (see Appendix B for additional details about the DLA Sampling Plan).

The FY 1999 DLA Sampling Plan did not include procedures to test the unit cost data in the logistics feeder systems because DLA assumed that all data in the logistics feeder systems were correct. Therefore, the results of the DLA Sampling Plan only reflected quantity errors identified during physical inventories. We tested the accuracy of the acquisition costs used to value the 3,153 items that DLA selected as part of the DLA Sampling Plan. We projected the values of the items with inaccurate and unsupported acquisition costs using the same methodology DLA used to project the value of items with inventory quantity errors.

Accuracy of Inventory Values

Accurate Inventory Values. Of the 3,153 items from the DLA statistical sample, 1,012 were accurately valued based on the latest representative purchase prices. The items categorized as accurate were valued in accordance with generally accepted accounting principles and fully supported by the originating contract files. Projections of the inventory value for the 1,012 items to the \$9.1 billion FY 1999 DLA inventory showed that \$2.5 billion was accurate and supported.

Inaccurate Inventory Values. Of the 3,153 items from the DLA statistical sample, 468 were not accurately valued based on the latest representative purchase prices (See Appendix C for details on inventory valuation policy). Projecting the misstated inventory values for the 468 items showed that the \$9.1 billion FY 1999 DLA inventory was misstated (overstated and understated) by \$398 million. The net inventory value misstatement resulting from those errors was an estimated \$60.1 million (See Appendix A for details on the statistical sampling results). Those results only reflect the pricing errors. An additional \$6.2 billion of inventory was not supported by contract data and we could not determine its accuracy. As a result, those potential errors could further impact the accuracy of the inventory value reported on the financial statements in a material manner.

The inaccurate acquisition costs resulted from incorrect estimations, a FY 1992 valuation method conversion, pricing system errors, file interface problems, and various other causes. We provided details on the causes of the inaccurate acquisition costs and listed specific examples in our reports to DSCC, DSCP, and DSCR (See Appendix A for the prior audit coverage). In addition, we provided numerous recommendations for corrective action. However, we did not address the valuation problems relating to items transferred among each DLA ICP (Intra-DLA ICP transfers) in our reports because it is a DLA-wide issue addressed below.

Intra-DLA ICP Transfers. Of the 3,153 items, DSS identified the incorrect managing DLA ICP for 56 items. This occurred because DSS was not updated when item management responsibility had transferred to another DLA ICP. Of those 56 items, 15 had inaccurate acquisition costs as a result of problems associated with the transfer of item management responsibility among each DLA

ICP. As part of the 1995 Defense Base Realignment and Closure decision, DLA realigned more than 600,000 items among each ICP. DLA Manual 4140.2, volume II, part 1, "Defense Logistics Agency Supply Operations Manual," July 1, 1999, provides the policy for pricing items acquired during the logistics reassignment process. Specifically, the policy requires the gaining ICP to use contract history data that the losing ICP provided during the logistics reassignment process. The contract history data are required to be used to price all transferred inventory until additional procurement action takes place at the gaining ICP.

The DLA Sampling Plan included procedures to obtain the value for inventory from the managing DLA ICP because DSS only contained standard (selling) prices. However, the procedures did not include provisions for items transferred among DLA ICPs. DSS identified the "old" managing ICP for some of those items.

To illustrate, a hydraulic brake master cylinder (national stock number 1630-00-690-6097) was included in the physical inventory sample at the Defense Depot, Susquehanna, Pennsylvania. In August 1999, DSS identified DSCC as the managing DLA ICP. We visited DSCC to obtain the cost of the item and found that management of the item transferred to DSCR on November 1, 1998. The transfer was identified in SAMMS by a Key Code of "DZ" which indicated a logistical loss. The gaining ICP was identified by a Routing Identifier Code of "S9G," which identified DSCR. Although the DSCC SAMMS showed zero on-hand assets, it still contained an acquisition cost of \$1,705 based on the last DSCC contract for the item which was awarded prior to the management transfer to DSCR. The DSCC contract cost was used to value the on-hand inventory in the DLA Sampling Plan. However, the most recent acquisition cost for this item was \$1,088, which was reflected in the DSCR SAMMS. By using the acquisition cost from the "old" managing ICP, DLA overstated the acquisition cost of the item by \$617. The inventory value of the eight cylinders was overstated by \$4,936.

When DLA obtains acquisition cost data from the SAMMS for its sampling plan, it should also obtain the key code and gaining routing identifier code fields. Obtaining those codes will identify items transferred among each DLA ICP and ensure that the appropriate cost data are used to value all on-hand inventory.

A deficiency in SAMMS also resulted in additional acquisition cost errors for items logistically transferred among DLA ICPs. To illustrate, a valve assembly (national stock number 1660-00-731-5482) was included in the physical inventory sample at the Defense Depot, Susquehanna, Pennsylvania. In August 1999, DSS identified DSCC as the managing DLA ICP. We visited DSCC to obtain the cost of the item and found that management of the item transferred to DSCR on November 1, 1998. Although the DSCC SAMMS showed zero on-hand assets, it contained an acquisition cost of \$897. The cost resulted from a DSCC contract that was awarded one day after management responsibility for the item transferred to DSCR. The newly awarded contract price was never transferred to DSCR. DSCR was valuing 24 on-hand valve assemblies that had been transferred from DSCC at \$1,283, which was based on the second most

recent DSCC contract. The acquisition cost was overstated by \$386 and the total inventory value for the 24 valve assemblies was overstated by \$9,264.

We discussed the system deficiency with a SAMMS computer specialist at the DLA Systems Integration Office. The computer specialist informed us that the SAMMS process for items transferred among DLA ICPs did not allow for the acquisition costs for open contracts to be transferred from the losing ICP to the gaining ICP. A non-retroactive systems change was implemented in July 2000 to correct the problem. However, DLA realigned approximately 638,000 items among its ICPs from February 1996 to September 1999. DLA should verify that each ICP identify and correct all acquisition costs for items logistically gained from another DLA ICP that were not based on the most recent contract unit cost.

Support for Inventory Values

Of the 3,153 items from the DLA statistical sample, obligation history records were not available to support the values for 252 items. In addition, the values for 1,421 items were supported by obligation history records that could not be verified to originating contract files. Projecting the total inventory value for those items to the DLA Sampling Plan showed that inventories valued at \$476 million would exist in the universe of DLA items that were not supported by obligation history data. Another \$5.7 billion of inventories were supported by obligation history records that likely could not be verified to originating contract files (see Appendix A for details on the statistical sampling results).

Lack of Supporting Obligation History Records. Sample estimates indicated that inventories valued at \$476 million were not supported by obligation history records. Those inventories were not supported by the SAMMS contract history files or the Haystack procurement history database (See Appendix C for details on the DLA inventory valuation process). The obligation history records were not available because they were not obtained during the logistics reassignment process or were purged from the contract history files. Without supporting obligation history records, we were unable to determine the accuracy of the assigned acquisition costs. We provided details on the causes of the unsupported acquisition costs and listed specific examples in our reports to DSCC, DSCP, and DSCR (See Appendix A for prior audit coverage). In addition, we provided recommendations for corrective action.

Lack of Supporting Contract Files. Sample estimates indicated that \$5.7 billion of inventories were valued using acquisition costs that were supported by obligation history records that could not be verified to originating contract files (See Appendix C for details on the DLA inventory valuation process and the DLA contract file retention criteria). For those items, the acquisition cost was supported by obligation history records in the purchase trailer of the Pricing System or other obligation history databases. However, the originating contract files were not available to support the limited information provided on the obligation history record. The supporting contract

files were not available because they were not obtained during the logistics reassignment process, were destroyed because their age exceeded DLA contract file retention requirements, or were lost. We provided details on the causes of the unsupported acquisition costs and listed specific examples in our reports to DSCC, DSCP, and DSCR (see Appendix A for prior audit coverage). In addition, we provided recommendations for corrective action.

Financial Statement Disclosures. DLA did not disclose the significant amount of unsupported inventories in the FY 2000 Consolidated Financial Statements of the DLA Working Capital Fund. DLA had not disclosed in the footnotes to its financial statements the amount of their inventories that were not supported by obligation history records. Also, DLA had not disclosed the amount of their inventories that were supported by obligation history records that could not be verified to originating contract data.

The identification of unsupported inventory values for disclosure purposes could be performed using automated methods. SAMMS contains data fields such as the “date of last procurement” and “type of logistics gain” fields that could be used to identify values for items with acquisition costs based on obligation history records that were more than 6 years old. Also, SAMMS could be used to identify values for items that were provided electronically by the Military Departments during the logistics reassignment process. DLA should use automated methods to identify the inventory values for items with unsupported acquisition costs for financial statement disclosure.

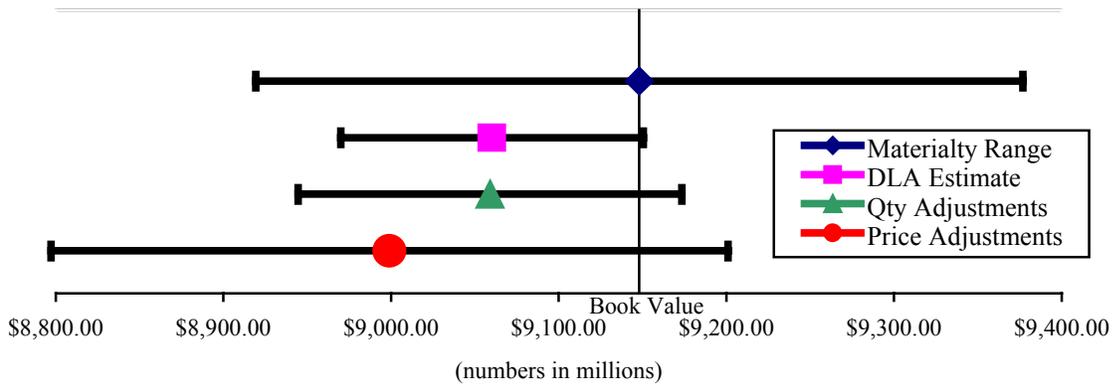
Projection of Valuation and Quantity Variances

Projecting the net dollar impact of acquisition cost and quantity errors showed that the \$9.1 billion DLA inventory book value was materially misstated. Initial sample estimates showed an \$89 million projected net inventory value misstatement resulting from quantity errors identified during physical inventories. Additional sample estimates showed a \$60 million projected net inventory value misstatement resulting from the inaccurate acquisition costs. The combined projected net inventory value misstatement resulting from quantity and acquisition cost errors was \$149 million.

DLA calculated its initial sample estimate based on the quantity errors identified during physical inventories. The sample estimate showed that the \$9.1 billion FY 1999 DLA inventory book value was overstated by \$88 million (see DLA Estimate line in the chart below). This initial estimate was within the acceptable DoD materiality range of book value plus or minus 2.5 percent. In Inspector General, DoD, Report No. D-2000-138, “Procedures Used to Test the Dollar Accuracy of the Defense Logistics Agency Inventory,” June 1, 2000, we adjusted the DLA estimate for the additional quantity errors identified by our review and to increase the confidence level from 90 to 95 percent. This slightly changed the sample estimate to show that the DLA inventory book value was overstated by \$89 million and is depicted on the Quantity Adjustments line in

the following chart. However, the adjusted estimate still fell within the DoD materiality range.

A sample estimate incorporating the quantity and acquisition costs errors showed that the \$9.1 billion DLA inventory book value was overstated by \$149 million, with an error bound of (plus or minus) \$202 million, as shown on the Price Adjustment line listed below. We combined the \$60 million projected net inventory value misstatement (resulting from the pricing errors) with the \$89 million projected inventory value misstatement (resulting from the quantity errors) identified during physical inventories. The lower bound of the adjusted estimate falls outside the 2.5 percent materiality range. Those results only reflect the quantity and valuation errors. An additional \$6.2 billion of inventory was not supported by contract data and we could not determine its accuracy. As a result, those potential errors could further impact the accuracy of the inventory value reported on the financial statements in a material manner.



Impact of Pricing Errors on Sample Estimates

Status of Inventory Valuation Issues in FY 2000

We found no evidence that the conditions leading to the inaccurate and unsupported acquisition costs improved in FY 2000. As part of our overall project, we issued three separate site reports in March 2001 to address the inventory valuation problems at DSCC, DSCR, and DSCP. In response to our recommendations, the Director of DLA Logistics Operations agreed to take action to correct inaccurate and unsupported inventory values. However, the corrective actions were not scheduled to be completed until September 28, 2001. The DLA Systems Integration Office processed programming changes to the SAMMS Pricing System to correct some of the deficiencies identified by our audit. However, none of the programming changes were retroactive.

Quality Assurance Program for Inventory Prices. The inaccurate acquisition costs identified by this audit had not been previously detected because the DLA ICPs had not established quality assurance programs to validate the accuracy of

inventory prices. Efforts were focused on validating the accuracy of prices recommended by the SAMMS Pricing System for fast-moving (active) items before their release because of limited resources. For example, at DSCC there were two pricing analysts who were responsible for maintaining the accuracy of prices for more than 2 million items. However, many of the items that we found with inaccurate acquisition costs had little sales and procurement activity (were inactive) and were not reviewed. Some of the inaccurate acquisition costs that we identified had resided in SAMMS since FY 1992. For DLA to ensure continued accuracy of all of its prices, a sound quality assurance program for the inventory prices must be established and maintained at each ICP. As part of this program, each ICP should perform scheduled reviews on inactive items as well as test the accuracy of prices for active items.

In response to our reports on inventory valuation problems at DSCC, DSCP and DSCR, the Director of DLA Logistics Operations agreed that the DLA Supply Centers would coordinate to develop a sampling program. The sampling program would test the accuracy of unit prices with emphasis given to the date of last procurement activity. This action is scheduled to be completed in September 2001. DLA needs to provide adequate oversight to validate that sound quality assurance programs are implemented and maintained at each ICP.

Analysis of FY 2000 Year-End SAMMS Inventories. We analyzed the FY 2000 SAMMS inventories and found significant potential for the inventory valuation problems identified during the audit to exist in material amounts. There were primarily two reasons for the majority of inaccurate acquisition costs, inaccurate estimations and a FY 1992 DLA inventory valuation method conversion. Of the 468 inaccurately valued items, 340 items fell into the following two categories:

- 212 items contained acquisition costs that were incorrectly estimated, and
- 128 items contained acquisition costs that were inaccurately computed during a FY 1992 valuation method conversion.

There were 920,408 items with on-hand assets valued at \$2.7 billion in the FY 2000 DSCC, DSCP, and DSCR national inventory record files (NIRF) that were valued using acquisition costs that were estimated and computed during the FY 1992 valuation method conversion (see table C-2 for details).

Reliability Of SAMMS Inventory Valuation Data

We were unable to rely on the inventory valuation data in SAMMS because DLA could not provide assurance that the data was complete, accurate, and reliable. DLA had not performed the necessary reviews to ensure that SAMMS complied with federal financial management system requirements. The Federal requirements for compliant financial management and feeder systems are described in Public Law 104-208, the “Federal Financial Management

Improvement Act of 1996,” September 30, 1996; Office of Management and budget Circular No. A-127, “Financial Management Systems,” July 23, 1993. Also, Federal requirements are described in a series of Federal Financial Management System Requirements published by the Joint Financial Management Improvement Program. Additionally, we previously reported that insufficient information was available to adequately describe the current system environment. Also, DLA did not adequately reflect the effect that the system related control deficiencies had on its ability to produce reliable financial statements³.

DLA has established a business systems modernization working group to replace critical DLA financial feeder legacy systems, including SAMMS. The business systems modernization initiative will replace the DLA integrated logistics financial legacy systems with an Enterprise Resource Planning solution. DLA stated that all of its critical financial feeder systems are to undergo a “Y2K-like process” to ensure that they meet federal financial management requirements.

In order for DLA to provide assurance that their automated systems contain reliable inventory valuation data, it must show that the inventory systems comply with all applicable federal financial management system requirements. Specific requirements for the initial valuation and financial categorization of inventory are provided in the Joint Financial Management Improvement Program’s Federal Financial Management System Requirements Number 7, “Inventory System Requirements,” June 1995. A reliable system must provide the capability for financial managers to control and account for inventory in accordance with generally accepted accounting principles (See Appendix C for details on inventory valuation policy). At a minimum, an inventory system must fulfill the following requirements.

- Establish methods or formulas to be used in valuing and accounting for inventory based on cost. Costs to be considered for inventory held for sale include all appropriate purchase, transportation, and production costs incurred to bring the items to their current condition and location.
- Establish appropriate cost methods that apply to the various types of inventories held by an agency. Different methods might be needed for inventory held for sale based on the type of item, such as: medical supplies, perishable goods, and hazardous materials.
- Distinguish between the unit cost of an inventory item and its selling price and provide information needed to support reconciliation between the inventory system’s records and other system’s records.
- Maintain the documentation supporting inventory transaction until audited for accuracy and approved by external financial auditors in accordance with applicable regulations and legal requirements.

³ Inspector General, DoD, Report No. 00-027, “Automated Systems Used to Prepare the Defense Logistics Agency Working Capital Fund Financial Statements,” October 28, 1999.

DLA must provide assurance that its automated systems provide reliable inventory valuation data. To provide the assurance, DLA needs to ensure that its business systems modernization initiative considers all applicable federal financial systems requirements concerning inventory valuation.

DLA also needs to verify that its business systems modernization office is provided all of the inventory valuation deficiencies to ensure that they will not occur in the new DLA automated system. Details on the inventory valuation deficiencies were provided in our reports for DSCC, DSCP, and DSCR (See Appendix A for prior audit coverage). In addition, DLA management expressed concerns regarding current system limitations. For example, in response to our site report to DSCP, the Director of DLA Logistics Operations cited specific concerns regarding the capability of SAMMS to retain acquisition cost data for deployable medical systems.

Deployable medical systems are managed by the DSCP medical commodity and are standardized modular field hospitals that can be pre-positioned in the event of contingency, national emergency, or war operations. The components are purchased under individual national stock numbers and assembled into a deployable medical system's national stock number. SAMMS automatically priced the deployable medical systems at a standard price and the acquisition cost was calculated by removing the surcharge from the current standard price. Each year, SAMMS calculated the standard price for the deployable medical systems based on the market value for each individual component and the acquisition cost was adjusted annually to reflect the change in market value. SAMMS did not retain data supporting the original completion of the deployable medical systems. According to the Director of DLA Logistics Operations, capturing acquisition cost data at the assembly level would require wholesale re-programming of SAMMS requirements and financial needs. The DLA business systems modernization effort should consider all current systems limitations for valuing inventory during the development of the new DLA automated system.

Potential Monetary Benefits

DLA sample estimates showed that inaccurate acquisition costs caused the \$9.1 billion inventory value to be misstated (overstated and understated) by \$398 million. The net dollar value misstatement resulting from those errors was an estimated \$60.1 million overstatement of inventory values (see Appendix A for the statistical sampling results). Correction of the inaccurate inventory values assigned to the DLA inventory will result in a potential monetary benefit to DLA customers because the cost of inventory serves as a basis for the standard (sales) price. The standard (sales) price for DLA-managed items consists of the cost of the item plus the applicable cost recovery rate or surcharge. The average DLA surcharge rate for FY 1999 was 29 percent. We estimate that approximately \$77.4 million (\$60.1 million plus the \$17.3 million surcharge) of funds can be put to better use by DLA customers when the standard (sales) prices are reduced for the items with overstated prices. However, we reported to DSCC and DSCR that reduction of inaccurately

overstated prices resulted in an \$11.5 million potential monetary gain to DLA customers. Therefore, the remaining estimated potential monetary benefit is \$65.9 million (\$77.4 million projected less the \$11.5 million previously claimed). The full extent of the monetary benefits will be quantifiable after each DLA ICP corrects all inaccurate acquisition costs.

Management Comments on the Finding and Audit Response

Management Comments. The Director, DLA Logistics Operations, partially concurred and agreed to report inventory valuation as a weakness in DLA's Annual Statement of Assurance for FY 2001. Additionally, the Director concurred in principle in the use of DLA's FY 1999 Inventory Valuation Statistical Sampling Plan as a basis for extrapolating audit results. The Director has requested the details of the audit calculations in order to estimate the full extent of potential monetary benefits and to take a position concerning the audit conclusion that the DLA inventory book value was materially misstated. The Director indicated that the projected \$60.1 million net overstatement of the inventory value was well within the DoD materiality range for book value of plus or minus 2.5 percent sampling error.

Audit Response. We consider the Director's comments to the finding to be partially responsive. During audit fieldwork, we provided our detailed results to each DLA ICP who took action to correct the acquisition costs that were determined to be significantly inaccurate. However, we will also provide our detailed results to DLA Headquarters for further analysis.

DLA executed its FY 1999 Inventory Valuation Statistical Sampling Plan without establishing that its inventory values were accurate and reliable. However, the DLA Sampling Plan only considered inventory quantity errors. Based on quantity errors alone, DLA projected that the \$9.1 billion inventory value was accurately stated within the DoD materiality range of plus or minus 2.5 percent. The projected \$60.1 net inventory value overstatement alone did not cause the \$9.1 billion inventory book value to be materially misstated. When combined with the quantity errors resulting from physical inventories, the inventory valuation errors caused the \$9.1 billion inventory book value to be materially misstated. A statistical sampling plan designed for assessing the accuracy of financial statement inventory must consist of values and on-hand quantities that are accurate and reliable. The DLA sampling results do not include the inaccurate valuation of its inventory. Additionally, a projected \$6.2 billion of the \$9.1 billion inventory value could not be verified to source documentation. This significantly impacts DLA's ability to attain an unqualified audit opinion on its financial statements.

Recommendations, Management Comments and Audit Response

We recommend that the Director, Defense Logistics Agency:

1. Establish an oversight process to validate that Defense Logistics Agency inventory control points identify and correct inaccurate acquisition costs residing in the national inventory record file including items transferred among Defense Logistics Agency inventory control points. Also, the oversight process should ensure that a sound quality assurance program is implemented and maintained.

Management Comments. DLA partially concurred and stated that changes to their current methodologies are expected to result from this review as well as recent Office of the Secretary of Defense and General Accounting Office reviews and business systems modernization planning by DLA and the Services. DLA indicated that action was ongoing and expected to be completed by March 31, 2002.

Audit Response. Although DLA partially concurred, the proposed actions satisfy the intent of the recommendation.

2. Develop interim procedures to validate cost data for items in the Defense Logistics Agency Inventory Valuation Sampling Plan by tracing costs from the logistics feeder systems to the appropriate procurement records. The interim procedures should continue until the Defense Logistics Agency inventory control points complete the required actions to correct inventory valuation data.

Management Comments. DLA partially concurred and stated that they identified and corrected several deficiencies in their pricing system. Also, DLA has locally-initiated efforts underway to correct individual pricing errors identified. DLA stated that the corrective actions resulting from the audits are paying dividends in improving reliability and inventory accuracy. Additionally, DLA stated it has initiated a pricing validation review of the 3,723 items reviewed by the audit as well as 150,000 items selected for base-lining inventory valuation upon forthcoming conversion to use of the business systems modernization product. DLA indicated that manual corrective efforts of discrepancies would be necessary by each ICP, which are constrained by existing local standard pricing specialist resources. DLA indicated that action was ongoing and expected to be completed by March 31, 2002.

Audit Response. We consider the comments to be responsive and request that DLA provide the results of its pricing validation review upon completion.

3. Modify the Defense Logistics Agency Inventory Valuation Statistical Sampling Plan to obtain the appropriate cost data for items transferred among Defense Logistics Agency inventory control points.

Management Comments. DLA partially concurred and agreed to evaluate the FY 2001 sample results and determine the need for further refinement. DLA indicated that action was ongoing and expected to be completed by March 31, 2002.

Audit Response. Although DLA partially concurred, we consider the comments to be responsive.

4. Disclose the value of on-hand inventories where contract data do not support acquisition costs in the inventory note to the Financial Statements. The disclosure should include the total inventory value for items with acquisition costs not supported by obligation history records. Additionally, the disclosure should provide the total inventory value for items with acquisition costs based on obligation history records provided by the previous managing inventory control point for logistics gain items. The disclosure should also provide the inventory value for acquisition costs based on obligation history records that exceed Defense Logistics Agency contract file retention requirements.

Management Comments. DLA partially concurred and stated that changes to their current methodologies are expected to result from this review. Also, changes are expected to result from recent Office of the Secretary of Defense and General Accounting Office reviews and business systems modernization planning by DLA and the Services. Additionally, DLA stated that they are evaluating inventory valuation in the context of Chief Financial Officer reporting. DLA will also determine whether any additional footnote disclosures are required or would be beneficial given the rather substantial personnel and computer resources required for such footnotes. DLA indicated that action was ongoing and expected to be completed by March 31, 2002.

Audit Response. We consider the DLA comments to be partially responsive. DLA indicates that it is evaluating inventory valuation and will determine whether any additional footnote disclosures would be beneficial. A statistical sampling plan designed for assessing the accuracy of financial statement inventory must consist of both values and on-hand quantities that are accurate and reliable. Until DLA corrects the inventory valuation deficiencies identified by this review, it should not present the results of its inventory valuation statistical sampling plan on the financial statements. DLA must project the inaccurate and unsupported inventory values or provide adequate disclosures. We believe that a footnote disclosure is necessary due to the significant amount of unsupported inventory values. A projected \$6.2 billion of the \$9.1 billion inventory value could not be verified to source documentation. This significantly impacts DLA's ability to attain an unqualified audit opinion on its financial statements. We request DLA to reconsider its comment on footnote disclosure.

5. Provide to the Defense Logistics Agency Business Systems Modernization Office inventory valuation problems identified for correction during the development of the new automated systems.

Management Comments. DLA concurred and agreed to task each ICP, Defense Distribution Center, and DLA Operations Research and Resource Analysis group (DORRA) to identify all inventory valuation problems and solutions identified as a result of the audit. The tasks should include corrective actions and quality assurance procedures. DLA will pass along the requested information to the office overseeing their ongoing Business Systems Modernization efforts. DLA indicated that action was ongoing and expected to be completed by March 31, 2002.

Management Comments on the Potential Monetary Benefits

Management Comments. DLA partially concurred with the potential monetary benefits and concurred in principle that the full extent of the monetary benefits will only be quantifiable after each DLA ICP corrects all inaccurate acquisition costs. DLA stated that it is pulling all available acquisition cost history in an effort to determine any inventory value discrepancies for the 3,153 items reported to be the basis for the potential savings calculations. DLA has also requested the audit calculations and clarification regarding the reported DLA 29 percent surcharge rate. DLA noted that their FY 2001 Non-energy rate is 24.7 percent and is expected to decline in the future. DLA stated that their DORRA group will estimate the extent of any potential monetary benefits that would accrue from the portion of the remaining items inventory likely to be requisitioned, if repriced as a result of any required price adjustments.

Audit Response. We consider the comments to be responsive and request that DLA provide an estimated completion date. We also request that DLA provide the results upon completion.

Appendix A. Audit Process

Scope

We performed this audit as part of the requirements of Public Law 101-576, the “Chief Financial Officers Act of 1990,” November 15, 1990, as amended by Public Law 103-356, the “Federal Financial Management Act of 1994,” October 13, 1994. For this part of the audit, we limited the scope of our review to verifying the accuracy of inventory valuation information in the DLA SAMMS.

Work Performed. We performed the audit at DLA headquarters, DSCC, DSCP, DSCR, and the DLA Systems Integration Office. We analyzed the acquisition costs for 3,723 items maintained in the DLA SAMMS to determine whether the acquisition costs were calculated in accordance with Federal accounting policy. Our analysis included verifying the acquisition costs to the originating detailed transaction data (the contract). As part of our audit, we reviewed numerous inventory-related documents, to include the following:

- Generally Accepted Accounting Principles, DoD financial management regulations, and DLA procedures and policies on valuing and reporting inventories,
- file interrogation reports for each applicable item from the SAMMS Standard Pricing Master File (SPMF), National Inventory Record File (NIRF), logistics reassignment data file, and the contracting technical data file contract history buy data listing,
- DLA Systems Integration Office documents describing the SAMMS Pricing System,
- procurement history reports from the Information Handling Service’s Haystack Windows Online Service for each applicable item,
- DD Form 1155, “Order for Supplies or Services,” and related contracting documents supporting obligation records used in calculating the acquisition cost for each applicable item, and
- SAMMS transaction history file reports (for the maximum 24-month period) for items that were found to be inaccurately priced.

We verified the acquisition cost for each item by obtaining contract data at the managing ICP because the acquisition cost in DLA is updated when a contract is awarded and not upon the receipt of goods.

Limitations to Audit Scope. Our audit work was limited to determining whether the acquisition costs used to value DLA SAMMS inventory were based

on generally accepted accounting principles and supported by contract data. We did not assess the reasonableness of the price paid for the items or the reasonableness of the DLA surcharge rates.

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of the Financial Management and Inventory Management high-risk areas.

Methodology

We reviewed generally accepted accounting principles and DoD and DLA policies and procedures for valuing inventories. We also interviewed various DLA personnel involved in the inventory valuation process, including procurement specialists and pricing analysts. In addition, we interviewed computer specialists at the DLA Systems Integration Office who were responsible for supporting the SAMMS Pricing System.

We performed a review of the acquisition costs used to value 3,723 DLA-managed items on the SAMMS NIRF, which serves as the source file for the on-hand inventory value on the DSCC, DSCP, and DSCR Stock Fund trial balances. We reviewed the SAMMS SPMF for each item to determine the methodology used to calculate the acquisition cost. We also reviewed the purchase trailer data section of the SAMMS Pricing System to determine whether obligation history records supported the acquisition cost. In addition, we reviewed procurement history reports from the Information Handling Service's Haystack Windows Online Service (the Haystack) for each item to determine whether obligation history records supported the acquisition cost. The Haystack is a commercial on-line parts research and logistics management system. The Haystack procurement history file contains procurement data obtained on a quarterly basis from the Military Departments and DLA through the Freedom of Information Act. We tested the reliability of the Haystack data because it was a non-government source. We found the obligation data from the Haystack procurement history database to be reliable. Haystack procurement history reports were available for 998 items that were valued with acquisition costs that were supported by originating contract files. The pricing information from the contract files for 992 items matched the pricing information from the Haystack procurement history file.

We reviewed the SAMMS logistics reassignment data file and the SAMMS contracting technical data file for each item. For items with obligation records that supported the acquisition cost, we requested the contract folder from the appropriate ICP organization. We reviewed the contract folder for each item to determine whether the obligation data maintained in the SPMF were complete and accurate. We determined whether it reflected the last representative invoice price as defined by generally accepted accounting principles. Additionally, we

obtained the DLA ICP surcharge rates for FYs 1999 and 2000 in order to calculate the impact that the inaccurate acquisition costs had on the standard price.

Universe and Sample. Of the 3,723 items that we reviewed, 3,153 items were part of a statistical sample. Those items were part of a sampling plan that DLA executed to assess the accuracy of its FY 1999 financial statement inventory value (see Appendix B for details about the DLA Sampling Plan). In June 1999, DLA fielded a sampling plan to test the accuracy of the portion of its inventory stored at 18 DLA distribution depots operating under DSS. As part of that effort, DLA used a two-stage, stratified, random sampling procedure to select a sample of 3,153 records from the DSS operating files at 11 DLA distribution depots for the period ending June 30, 1999. National stock number by location (all condition codes) served as the unit of analysis or sample record. Inventory values for the 3,153 records were determined using the acquisition cost from the SAMMS operating files at each managing DLA ICP.

In our review of the DLA Sampling Plan, we reported that the plan did not include procedures to test the accuracy of the unit prices in the SAMMS operating files at each managing DLA ICP. We attempted to test the accuracy of the 3,153 records in SAMMS. During our review, we found that for 56 of the items, management responsibility had transferred to a different DLA ICP than was identified in the Distribution Depot's DSS. We performed our review at the gaining DLA ICP.

In addition to the 3,153 items, we selected a judgmental sample of 570 items from the SAMMS NIRF, which serves as the source file for the inventory amounts reported on the financial statements. The results of the judgmental sample are provided in Appendix D. Those items were selected as part of our initial survey effort at DSCC and during the audit. As part of their sampling plan, DLA categorized the items stored at the 13 sites into 7 categories, or strata (see Appendix B for a listing of the stratification categories that DLA used for its sampling plan). The stratification levels were based on the item's acquisition cost as well as its total extended inventory value. The lowest value strata (strata 2) contained all items with an acquisition cost greater than zero and less than or equal to \$500. In addition, the highest strata (strata 7) contained all items with an acquisition cost greater than \$50,000. Further analysis of the DLA sample revealed that only a maximum of five records were selected from the high value strata at each site. Because we wanted to verify full coverage of both the significantly low and high value items, we requested that the DLA Systems Integration Office provide us with a file containing all items with an acquisition cost less than or equal to zero and greater than \$50,000. We also requested a file containing all items without an ACC in the NIRF showing how the acquisition cost was developed. See Appendix C for a definition of an ACC. We did not project the results from the 570 items.

Use of Computer-Processed Data. To achieve the audit objective, we relied on computer-processed data from the DLA SAMMS. We did not test the general and application controls in SAMMS. Specifically, we analyzed the acquisition costs and obligation history data in the NIRF and the SPMF.

Of the 3,723 items that we reviewed, we determined that the computer-processed acquisition cost data were unreliable for 656 items in the NIRF. We were not able to determine the reliability of the computer-processed acquisition cost data in the SPMF for 1,997 items because each DLA ICP could not provide the obligation history records (361 items) or the originating contract files (1,636 items). The computer-processed acquisition cost and supporting obligation history data in the SPMF were reliable for the remaining items we reviewed because we were able to verify the accuracy of the information to source documents. The computer-processed acquisition cost and supporting obligation history data in the SPMF were reliable for 1,070 items that we reviewed because we were able to verify the accuracy of the information to source documents.

Use of Technical Assistance. The Inspector General, DoD, Quantitative Methods Division reviewed the statistical projections that were calculated using the DLA Sampling Plan.

Audit Type, Dates, and Standards. We performed this financial-related audit from November 1999 through June 2001 in accordance with generally accepted government auditing standards except that we were unable to obtain an opinion on our system of quality control. The most recent external quality control review was withdrawn on March 15, 2001, and we will undergo a new review.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Statistical Sampling Methodology

Sampling Design. We relied on the FY 1999 DLA Sampling Plan for this audit (see Appendix B for details on the design of the DLA Sampling Plan). The DLA Sampling Plan projected the dollar value impact of inventory quantity errors that existed between the DLA DSS record balance and the actual quantity observed during physical inventory. The dollar value impact for an item was determined by multiplying the inventory quantity variance by the item's acquisition cost, which was maintained in SAMMS at the managing DLA ICP.

For purposes of our review, we determined whether the SAMMS acquisition costs used to value the items selected as part of the DLA Sampling Plan were accurately computed. We also determined whether the acquisition costs were based on the latest representative purchase price and were supported by the originating contract file. For those items where the acquisition cost was determined to be inaccurate, we computed the variance between the DLA acquisition cost and the latest representative purchase cost. We then multiplied the acquisition cost variance by the inventory balance determined during physical inventory. The result was the dollar value error for a sampled item.

For the acquisition costs that were not supported by obligation history records, we multiplied the unsupported acquisition cost by the inventory balance determined during physical inventory. The result was the extended dollar value not supported by obligation history records. For the acquisition costs that were supported by automated obligation history records that could not be supported by originating contract files, we multiplied the unsupported acquisition cost by the inventory balance determined during physical inventory. The result was the extended dollar value not supported by originating contract files.

Sample Results. Using the FY 1999 DLA Sampling Plan, we derived statistical estimates of record and dollar value misstatements from our sample data. As detailed in the following table, we are 95 percent confident that the total net dollar misstatement of the inventory records reviewed in our sampling frame is from \$110.0 million understated to \$230.2 million overstated. The \$60.1 million point estimate of the net inventory value misstatement indicates that the \$9.1 billion DLA inventory book value, or inventory cost data, was overstated. The \$60.1 million serves as a basis for our potential monetary benefit calculation. The standard (sales) price for DLA-managed items consists of the cost of the item plus the applicable cost recovery rate or surcharge. The average DLA surcharge rate for FY 1999 was 29 percent. Therefore, we estimated that approximately \$77.4 million (\$60.1 million plus the \$17.3 million surcharge) of funds could be put to better use by DLA customers when the standard (sales) prices were reduced for the items with overstated prices.

Additionally, we are 95 percent confident that the total gross dollar misstatement of the inventory records reviewed in our sampling frame is from \$243.0 million to \$552.1 million. We are 95 percent confident that the total net dollar misstatement (resulting from both quantity and price errors) of the inventory records reviewed in our sampling frame is from \$52.9 million understated to \$350.9 million overstated. We are 95 percent confident that the total dollar value of the inventory records reviewed in our sampling frame (not supported by obligation history records) is from \$213.6 million to \$738.6 million. We are 95 percent confident that the total dollar value of the inventory records reviewed in our sampling frame (supported by obligation history records that could not be verified to the originating contract files) is from \$903.9 million to \$10,550.3 million. Each of the individual estimates is projected at the 95 percent confidence level. However, the cumulative effect of all five estimates being simultaneously correct is less than 95 percent.

Statistical Estimates

<u>Dollar Value (millions)</u>	<u>95 Percent Confidence Intervals</u>		
	Lower	Point	
	<u>Bound</u>	<u>Estimate</u>	<u>Bound</u>
<u>Upper</u>			
 <u>Inaccurate Acquisition Costs</u>			
Total net misstatement ⁴	(\$230.2)	(\$ 60.1)	\$110.0
Total gross misstatement	243.0	397.5	552.1
Net price and quantity errors	(350.9)	(149.1)	52.9
 <u>Unsupported Acquisition Costs</u>			
No obligation history records	213.6	476.1	738.6
No supporting contract files	903.9	5,727.1	10,550.3

Management Control Program Review

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of the Review of the Management Control Program. We reviewed the FY 2000 Annual Statement of Assurance issued by DLA to determine whether the issues addressed in this report had been reported as material management control weaknesses.

Adequacy of Management Controls. We identified material management control weaknesses, as defined by DoD Instruction 5010.40, related to the valuation of DLA SAMMS inventory. The details of the management control weaknesses are provided in detail in the Finding section of this report. All of the recommendations in this report, if implemented, will improve the accuracy and reliability of DLA SAMMS inventory values. A copy of the report will be provided to the senior official responsible for management controls at DLA.

⁴ Positive misstatements represent understated values and negative misstatements represent overstated values because the misstatements represent a variance from the original inventory book value. For example, the negative total net inventory value misstatement point estimate indicates that the DLA inventory book value was overstated and the estimated book value was \$60.1 million less.

Adequacy of Management's Self-Evaluation. The FY 2000 DLA Annual Statement of Assurance did not identify any material control weakness related to the valuation of SAMMS inventory.

Prior Coverage

Inspector General, DoD

Inspector General, DoD, Report No. D-2001-146, "Inventory Valuation at the Defense Supply Center Philadelphia," June 21, 2001.

Inspector General, DoD, Report No. D-2001-079, "Inventory Valuation at the Defense Supply Center Richmond," March 14, 2001.

Inspector General, DoD, Report No. D-2001-078, "Inventory Valuation at the Defense Supply Center Columbus," March 14, 2001.

Inspector General, DoD, Report No. D-2000-138, "Procedures Used to Test the Dollar Accuracy of the Defense Logistics Agency Inventory," June 1, 2000.

Inspector General, DoD, Report No. 00-027, "Automated Systems Used to Prepare the Defense Logistics Agency Working Capital Fund Financial Statements," October 28, 1999.

Appendix B. Additional Information About the DLA Sampling Plan

This appendix provides additional information about the sampling plan that DLA developed in FY 1999 to measure the dollar value accuracy of its inventories. It provides a general description of distribution depot operations, explains the objectives and scope of the plan, and provides other relevant information about the sampling plan.

DLA Distribution Depot Operations. At the end of FY 1999, DLA operated 24 distribution depots. DoD organizations buy large amounts of material and store it at the distribution depots. The DLA distribution depots comprise the largest concentration of DoD material for which a single DoD entity, DLA, maintains the accountable records.

The depots receive newly procured items, make redistributions (move material among depots), receive items returned from field organizations. The depots also issue material to customers, and provide for the care, preservation, and quality control of items in storage. DLA maintains ownership of most consumable items, and the Military Departments own most repairable items. The DLA-owned material stored at the depots included spare and repair parts and other items classified into construction, electronics, industrial, general, clothing and textile, and subsistence (food) commodity groups.

DLA implemented DSS at its distribution depots. DSS is a perpetual inventory system that maintains a continuous record about the location, quantity, and condition of each item stored. The DSS increases the on-hand inventory balances when stock is received and decreases inventory balances when stock is issued. The DSS also adjusts balances based on the results of physical inventory counts and material redistributions. Information in the DSS records updates SAMMS and the Defense Integrated Subsistence Management System (logistics feeder systems), which are maintained by each DLA ICP and used to prepare the DLA financial statements. DLA relies on statistical sampling techniques to measure the accuracy of information in the DSS perpetual inventory records.

Objectives of the DLA Sampling Plan. As of September 30, 1999, the DLA Sampling Plan was designed to measure the dollar value accuracy of the portion of DLA-owned inventories stored at the 18 distribution depots that used DSS. DLA excluded procedures to validate the unit price data in the logistics feeder systems. Therefore, the DLA Sampling Plan only measured the effect that quantity discrepancies in the DSS records had on the total dollar value of material stored at the 18 depots.

DLA personnel consulted with auditors and statisticians from the Office of Inspector General, DoD, and the General Accounting Office in FY 1999 to design its sampling plan. DLA wanted a plan that was statistically valid, cost-effective to implement, and would provide enough time to allow auditors to observe the inventory counts.

DLA determined that to meet those goals, the sampling plan should be executed over a 3-month period starting from the date that items were categorized and selected to year-end.

By design, the sample universe excluded all Military Department-owned material stored at the 24 depots. The sample universe also excluded the DLA-owned portion of the material stored at 6 depots that were not using DSS. The plan also intentionally excluded DLA-owned material and fuels stored outside the depots, in-transit material, and other types of inventories not recorded on the DSS records. The excluded material represented approximately 30 percent of total DLA inventories. At year-end, the depot records showed 2.7 million items, valued at approximately \$11.8 billion (standard price), of DLA-owned material stored at the 18 depots.

Revaluation of the Universe. In designing the sampling plan, DLA attempted to relate the sample universe to the information used for financial statement purposes. Although DSS had standard pricing data for material stored at the depots, the pricing data exceeded the historic cost of the material because it included a surcharge for cost recovery purposes. The pricing data used to value the inventory in the financial statements are maintained by each DLA ICP in the Defense Integrated Subsistence Management System for subsistence items and in SAMMS (logistics feeder systems) for all other non-fuel items. To properly value the inventory, DLA obtained pricing data from SAMMS and revalued the universe. The 2.7 million items were valued at approximately \$9.1 billion at latest acquisition cost. The sampling plan did not include any tests to validate the accuracy of the information in the logistics feeder systems, and the plan assumed that the pricing data were accurate.

Sample Criteria. DLA designed the initial sampling plan to achieve a confidence level of 90 percent and a precision of plus or minus 2.5 percent based on the criteria established in DoD Regulation 7000.14-R, the "DoD Financial Management Regulation," December 1994. This means that, at 90 percent confidence level, the sample estimate plus or minus the achieved precision level must reside within the book value of plus or minus 2.5 percent, which is the materiality range set by DoD.

Sampling Process. For sampling purposes, DLA considered the 18 depots included in the sample universe to have 20 separate sites. Although DLA considered Defense Depot San Joaquin, California, and Defense Depot Susquehanna, Pennsylvania, as single depots, each had two separate sites. Defense Depot San Joaquin, California, had sites located in Sharpe and Tracy, California. Defense Depot Susquehanna, Pennsylvania, had sites located in Mechanicsburg and New Cumberland, Pennsylvania. All four sites were treated as separate sites for sampling purposes.

DLA used a two-stage, stratified statistical sample to select its sample from the June 30, 1999, universe. The first stage was the selection of depots, and the second stage was the selection of items.

First Stage. For the first stage of the sample, DLA used probability

proportional to size with replacement to select the 20 sites where depot personnel were to perform the physical counts. In other words, the chance of a site being selected was in direct proportion to the amount of DLA-owned material stored at that site as of June 30, 1999. After a site was selected it was placed back in the pool for possible selection again. Accordingly, the selection method that DLA used in the first stage allowed for sites with a greater inventory value to have a greater likelihood of being selected and for any site to be selected more than once or not at all.

To perform the first stage of the sample, DLA collected information on all DLA-owned material stored at the 18 depots (20 sites) as of June 30, 1999. The DLA-owned portion of the material stored at the depots comprised approximately 65 percent of the items and approximately 13 percent of the total value of the inventories stored at the 18 depots. The value of the DLA-owned inventories was based on prices in the DLA logistics feeder systems. The depots selected in their order of selection are depicted in Table B-1.

Table B-1. Selected Depots

Distribution Depot	Order of Selection
Defense Depot Richmond, Virginia	1 and 5
Defense Depot Norfolk, Virginia	2 and 15
Defense Depot San Joaquin, California-Sharpe	3 and 12
Defense Depot San Diego, California	4, 16, and 18
Defense Depot Warner Robins, Georgia	6
Defense Depot Cherry Point, North Carolina	7
Defense Depot Susquehanna, Pennsylvania-Mechanicsburg	8
Defense Depot Red River, Texas	9
Defense Depot Susquehanna, Pennsylvania-New Cumberland	10, 11, 19
Defense Depot Barstow, California	13
Defense Depot Albany, Georgia	14
Defense Depot Oklahoma City, Oklahoma	17
Defense Depot San Joaquin, California-Tracy	20

Second Stage. In the second stage of the sample, DLA categorized the items stored at the 13 sites into 7 categories, or strata. The stratification categories that DLA used are depicted in Table B-2.

Table B-2. Stratification Categories of Stored Items

Strata	Type	Unit Price	Extended Value
1	Measurables	_____	_____
2	Countables	Greater than or equal to \$0 and less than \$500	Less than or equal to \$2,000
3	Countables	Greater than or equal to \$0 and less than \$500	Greater than \$2,000
4	Countables	Greater than or equal to \$500 and less than \$1,000	Less than or equal to \$10,000
5	Countables	Greater than or equal to \$500 and less than \$1,000	Greater than \$10,000
6	Countables	Greater than or equal to \$1,000 and less than \$50,000	_____
7	Countables	Greater than or equal to \$50,000	_____

The unit of measure for the sampling plan was an item (the net total number of items at all individual storage locations) at a particular depot regardless of condition. All DLA-owned items stored at the 13 sites (excluding items transferred to the Defense Reutilization and Marketing Service) were included in the sample universe. Based on past experience, DLA determined that the minimum sample size should be 3,000 items or 150 items per site selected in the first stage of the sample.

The DLA-owned items stored at the 13 sites were allocated among the stratum using Neyman's allocation. Neyman's Allocation is an efficient sample apportionment algorithm that allocates a larger portion of the sample to strata with large variances and a smaller portion to strata with small variances. A stratum's sample size at any given site was determined by the size of the stratum and its estimated variance (error rate). Because DLA had only limited information from prior samples when it designed the FY 1999 sample, error rates had to be estimated and averaged. DLA required that at least 5 items be included from each stratum for each site selected in stage one of the sample.

DLA assigned all items in the June 30, 1999, universe to the appropriate stratum. To keep the sample statistically valid, DLA had to keep characteristics

of the universe that were established as of June 30 constant. Items remained in their stratum originally assigned regardless of where they would have been assigned had the universe been stratified again on September 30, 1999. DLA designed the sampling plan to provide an estimate of dollar accuracy at year-end balance. Therefore, the plan assumed that the characteristics of each stratum did not change significantly during the interim period.

Sample Size. To achieve the sampling objectives, the DLA Sampling Plan required that depot personnel count 3,177 items. The sample size per site ranged from 153 items to 168 items. Because 24 of the sample items were selected more than once, the sampling plan required that depot personnel actually physically count 3,153 individual items. The depots stored 637 of the 3,153 items at multiple warehouse locations (ranging from 2 to 18 locations per item). Consequently, to validate the sample, depot personnel had to physically count 4,255 separate warehouse locations at the 13 sample sites selected in the first stage of the sample. Depot personnel began their counts on August 2, 1999, and finished them all during September 1999. Because all of the counts were not done on September 30, the plan assumed that variances observed before year-end remained valid for up to 2 months. The DLA Sampling Plan did not include any roll-back procedures to cover the interim period from the count dates and June 30 (date of universe selection). Also, the DLA Sampling Plan did not include any roll-forward procedures to cover the interim period from the universe selection and count dates to year-end.

Summary Process. Results for each of the 3,153 items were established through physical counts. DLA netted at the item level the observed variances for items with multiple locations so that each sample item had only one result. The reported results were that the DSS record was either correct, overstated by the observed variance, or understated by the observed variance. For projection purposes, DLA used the observed variances at the dates of the counts and the characteristics of the universe as of June 30 to estimate dollar accuracy as of September 30. Consequently, the sampling plan had an assumption that variances observed up to approximately 2 months before year-end would have been the same as the variances that would have been observed had all items been counted on September 30.

Reported Deficiencies. In Inspector General, DoD, Report No. D-2000-138, "Procedures Used to Test the Dollar Accuracy of the Defense Logistics Agency Inventory," June 1, 2000, we reported that the DLA Sampling Plan was missing some essential procedures to verify that it covered the complete universe of DLA-owned inventories at the 18 depots. Specifically, the sample universe included approximately \$1.3 billion of Military-Department-owned material because DLA did not use the ownership purpose codes in SAMMS. Further, we reported that the DLA Sampling Plan was not fully reliable or efficient because it was completed too far from year-end, did not document and provide for oversight of the sample selection process, used less than a 95-percent confidence level, and ineffectively stratified the universe and estimated errors. We also reported that the plan also did not test the accuracy of the unit price data in the logistics feeder systems.

Appendix C. DLA Inventory Valuation Process

Generally Accepted Accounting Principles for Inventory Valuation.

Generally accepted accounting principles for valuing inventory are provided in the Federal Accounting Standards Advisory Board's Statement of Federal Financial Accounting Standards No. 3, "Accounting for Inventory and Related Property," October 27, 1993. Inventories are required to be valued on the financial statements at historic cost or latest acquisition cost adjusted to estimate historic cost. The cost of an item should include all appropriate purchase, transportation, and production costs incurred to bring an item to its current condition and location. Any abnormal costs such as excessive handling or rework costs are to be charged to operations of the period. Additionally, the latest acquisition cost method requires that the last representative purchase price be applied to all like items, including those items acquired through donation or non-monetary exchange.

DoD Inventory Valuation Policy. The DoD policy for inventory valuation is established in DoD Regulation 7000.14-R, the "DoD Financial Management Regulation," volume 11B, "Reimbursable Operations, Policy, and Procedures for the Defense Business Operations Fund," December 1994. DoD policy requires inventories to be reported on the financial statements at their latest acquisition cost in accordance with generally accepted accounting principles. DoD policy states that for items without a procurement history, an acquisition cost can be estimated based upon current manufacturer's price listings or market price quotations.

DLA Inventory Valuation Policy. The DLA policy for pricing inventory is established in DLA Manual 7000.2, volume II, part 1, "Standard Automated Materiel Management System (SAMMS) Financial Subsystem Operating Procedures," July 1, 1999. DLA policy requires the price for each national stock number to be based on the latest procurement costs. Specifically, acquisition costs for stocked items are mechanically calculated by the SAMMS Standard Pricing Application (Pricing System). The items are calculated using an average of all stock replenishment buys awarded during the past 6 months, plus all other stock replenishment buys that occurred within 45 days of the latest stock buy. The quantity of the buys used must also be at least equal to 1 month's demand based on historical data. All mechanically recommended price changes are held in suspense for at least 7 days to enable the Pricing Activity to review, revise, or delete as applicable.

According to DLA policy, the Pricing Activity at each ICP is the only organization authorized to initiate a revision to an established price. The policy states that each item may be scheduled for review as required to ensure that the price is based on the latest procurement cost and provides instructions on performing the scheduled reviews. However, the policy does not specifically require scheduled pricing reviews and does not provide guidelines on the types of items that should be included in the reviews.

Each item that is assigned an acquisition cost has a corresponding acquisition cost date and acquisition cost code (ACC). The acquisition cost date is the Julian date on which the acquisition cost became effective and should always be the first of the month. The ACC is a one-position field describing how the acquisition cost was developed. The ACCs are defined in table C-1.

Table C-1. Definitions of Acquisition Cost Codes

<u>ACC</u>	<u>Definition</u>
A	Acquisition cost was computer generated based on obligation transactions in the SPMF. The transactions may result from a DLA award or from obligation transactions provided by the previous inventory manager if the item was a logistics gain.
C	Acquisition cost was computed during a DLA-wide conversion from standard price to latest acquisition cost in July 1992, and no procurement action took place since the initial conversion.
E	Acquisition cost was estimated.
G	Acquisition cost was based on the standard price provided by the previous manager upon transfer of management responsibility to DLA.

The SAMMS Pricing System contains a purchase trailer section in its SPMF to store current and historical procurement (obligation) records used in the acquisition cost calculation process. The Pricing System uses obligation transactions received from the SAMMS procurement subsystem to establish and update a purchase record resulting from DLA procurement. A purchase record can also be established and updated by obligation transactions received from the SAMMS distribution subsystem. The record can be established if the transaction is the result of contract history data that another DoD ICP provided for an item that a DLA ICP acquired through the logistics reassignment process (a logistics gain).

Each obligation transaction in the purchase trailer of the SAMMS Pricing System contains the following data: obligation document number, quantity, purchase cost per unit, total obligation amount, Government-furnished material unit cost, funds classification code, award date, and modification date. When multiple lines for a given national stock number are procured on one contract, all lines are consolidated. The purchase trailer has the capability to store a maximum of 25 purchase records, including the latest three direct delivery purchase records, for each stocked item. The number of obligation trailers stored on each SPMF record varies according to the age of the trailer and the type of item. If the item is a logistics gain that has not had any activity, the system should keep trailers that are up to 5 years old. For other items, the system should keep trailers that are up to 3 years old based on the contract modification date provided in the obligation transaction.

ICP Inventory Pricing. DLA inventory values are assigned and maintained by each ICP. The ICPs use SAMMS to manage all inventories excluding bulk petroleum products and subsistence items. SAMMS consists of five operational subsystems: technical, requirements, distribution, procurement, and financial. Inventory prices are calculated within the SAMMS financial subsystem by the Pricing System. The Pricing System computes an acquisition cost for each item based on obligation history records stored in the SPMF and provides the acquisition cost to inventory files in the other four subsystems. The acquisition cost is used to value on-hand inventories in the financial statements and is updated monthly. Additionally, the Pricing System calculates a standard price for each item that consists of the item's acquisition cost plus a cost recovery factor or surcharge. The standard price is the sales price charged to customers and is updated annually at the beginning of each fiscal year.

The Pricing Activities at each ICP operated under the Office of the Comptroller and consisted of pricing analysts responsible for verifying the accuracy of the prices for more than 4 million different items. Each ICP had no local procedures concerning the establishment and maintenance of acquisition costs. The Pricing Activities relied on the procedures established in DLA Manual 7000.2 as well as a functional description of the SAMMS Pricing System (written by a computer specialist) at the DLA Systems Integration Office, which was the DLA organization responsible for maintaining SAMMS.

DLA Financial Inventory Reporting. Within the SAMMS distribution subsystem, the NIRF contains the total on-hand asset balance for each national stock number that each ICP managed. In addition, the NIRF contains each item's acquisition cost that should be derived from the SAMMS Pricing System. At the end of each reporting period, the total DLA-owned assets are multiplied by the acquisition cost to arrive at the extended inventory value for each item. The extended inventory value for all DLA-managed items are combined to arrive at the total NIRF inventory value (See table C-2 for the FY 2000 year-end SAMMS NIRF inventory). The NIRF is the source file for the inventory amounts reported on the ICP's Defense Stock Fund Trial Balance. The Defense Finance and Accounting Service relies on the Defense Stock Fund Trial Balance to prepare the DLA financial statements. Each ICP is responsible for verifying that inventory amounts provided in the NIRF and the Defense Stock Fund Trial Balance are complete, accurate, and reliable.

<u>Acquisition Cost Code</u>	<u>Items With On-Hand Assets</u>	<u>Percent of Total Items</u>	<u>Total On-Hand Inventory Value</u>	<u>Percent of Total Value</u>
A	855,083	48.1	\$5,552,722,194	66.8
C	519,329	29.2	761,526,942	9.2
E	401,079	22.6	1,977,974,621	23.8
Other	<u>2,299</u>	<u>0.1</u>	<u>24,010,094</u>	<u>0.2</u>
Total	1,777,790⁵	100.0	\$8,316,233,851	100.0

⁵ DLA manages more than 5 million items. However, only 1,777,790 had on-hand assets on September

DLA Contract File Retention Requirements. The DLA policy for retaining contract files is established in DLA Instruction 5015.1, “DLA Records Management Procedures and Records Schedule,” March 1, 2000. DLA based its policy on the Federal Acquisition Regulation, which defines contracts as individual and subcontract case files accumulated from the administration of individual contracts consisting of: purchase orders, contracts, comparable instruments, and other applicable documentation. According to DLA policy, contracts for more than \$25,000 are to be retained for 6 years and 3 months after final payment. Contracts for \$25,000 or less are to be retained for 3 years after final payment. The retention criteria are based on the timeframes established in the Defense Federal Acquisition Regulation Supplement.

ICP Contract Retention Procedures. Each DLA ICP did not have local procedures specifying the time period for retaining contract files. The ICP organizations that we visited to obtain contract files informed us that they relied on DLA policy and the Defense Federal Acquisition Regulation Supplement. Personnel from the ICP records holding organizations informed us those contract files more than 6 years and 3 months old were generally destroyed unless specific justification was provided for their retention.

30, 2000. As a result of DoD inventory reduction initiatives, DLA manages many items as non-stocked where inventories are shipped directly to DoD customers from contractor facilities.

Appendix D. Judgmental Sample Results

We judgmentally sampled 570 items from the FY 1999 SAMMS NIRF at the Defense Supply Centers in Columbus, Philadelphia, and Richmond because we wanted to provide full coverage of both the significantly low and high value items (see Appendix A for details on the sample selection). The judgmental sample items were not used for any of the statistical projections provided in this report.

The DLA Systems Integration Office provided us with a file containing all items with an acquisition cost less than or equal to zero and greater than \$50,000. Those sampled items were not used in any projections. Of the 570 judgmentally sampled items, 512 were inaccurate or unsupported.

Of the 512 inaccurate and unsupported items, 188 had acquisition costs that were not accurately based on the latest representative purchase prices. Our analysis revealed that the high value items were significantly overstated. The acquisition costs for 45 items with acquisition costs greater than \$50,000 were overstated by an average of 23 percent and the average net dollar overstatement for those items was approximately \$15,000. Those results are based on a judgment sample and do not generalize to the universe. In addition, 16 items with on-hand inventory were assigned an acquisition cost of zero. Further, 109 items had acquisition costs that were not supported by obligation history records. Also, 215 items had acquisition costs that were supported by obligation history records that could not be verified to originating contract files. The reasons for the inaccurate and unsupported acquisition costs were generally the same as those relating to the items from the statistical sample.

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Logistics Agency

Non-Defense Federal Organizations and Individuals

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform
House Subcommittee on Technology and Procurement Policy, Committee on Government Reform

Defense Logistics Agency Comments



DEFENSE LOGISTICS AGENCY
HEADQUARTERS
8725 JOHN J. KINGMAN ROAD, SUITE 2533
FORT BELVOIR, VIRGINIA 22060-6221

IN REPLY
REFER TO J-3

SEP -6 2001

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING
DEPARTMENT OF DEFENSE

SUBJECT: Draft Audit Report on Valuation of Inventories in the Defense Logistics
Agency Standard Automated Materiel Management System, July 5, 2001,
Project No. D2000FJ-0067.006

Attached are comments to the finding and recommendations of the subject draft report.

We appreciate the opportunity to comment on the final report. Questions may be referred to
Mr. Jerry Gilbert, Procurement Integrity and Pricing Division, 703-767-1350 or Ms. Annell
Williams, Internal Review Office, 703-767-6274.

A handwritten signature in black ink, appearing to read "H. Proctor".

HAWTHORNE L. PROCTOR
Major General, USA
Director
Logistics Operations

Attachment

Subject: Valuation of Inventories in the Defense Logistics Agency Standard Automated Materiel Management System (Project No. D2000FJ-0067.006)

Finding: The values assigned to inventories in SAMMS were not always accurate. A significant portion of the inventory value was not supported by contract. In addition, a significant portion of the inventory value was not supported by contract data. Using the DLA Inventory Valuation Statistical Sampling Plan to assess the \$9.1 billion inventory value that DLA maintained in SAMMS at the end of FY 1999, the DoD-IG estimated the following:

- \$2.5 billion was fully supported by obligation history records that could be verified to original contract files,
- \$398 million was inaccurately valued,
- \$476 million was not supported by obligation history records or contract files, and
- \$5.7 billion was supported by obligation history records that could not be verified to original contract files.

Projecting the net dollar impact of acquisition cost and quantity errors showed that the \$9.1 billion DLA inventory book value was materially misstated. The DoD-IG found no evidence that the conditions leading to the inaccurate and unsupported acquisition costs improved in FY 2000. The DoD-IG stated that the inaccurate and unsupported inventory values existed because DLA did not verify that its ICPs maintained accurate values through quality assurance programs. Further, procedures were not in place to retain supporting contract history data or disclose unsupported inventory values. As a result, the DoD-IG concluded that the values of the inventory items maintained in the DLA SAMMS cannot be relied on to support the inventory amount on future DLA financial statements or to support the prices charged to customers. (See page 3 of report.)

DLA Comments: Partially Concur. Concur in principle in the use by the DoD-IG of DLA's FY 99 Inventory Valuation Statistical Sampling Plan as a basis for extrapolating audit results. We have requested the details of the DoD-IG's calculation. We will have our DLA Operations Research and Resource Analysis (DORRA) office estimate the extent of any potential monetary benefits that would accrue from the portion of the remaining items inventory likely to be requisitioned, if repriced as a result of any required price adjustments. When completed, we will be able to take a position concerning the audit conclusion that our inventory book value was materially misstated. In the interim, we note that the issue of materiality stems only from the DoD-IG's extrapolation of unit pricing errors in the sample items that produced a net overstatement of inventory value by 0.60 percent (\$60.1 million out of a total valuation of \$9.1 billion). This is well within

Subject: Valuation of Inventories in the Defense Logistics Agency Standard Automated Materiel Management System (Project No. D2000FJ-0067.006)

DoD's materiality range for book value, which specifies a plus or minus 2.5 percent sampling error.

Internal Management Control Weakness: Provided in detail in the Finding section. If all the recommendations are implemented this will improve the accuracy and reliability of DLA SAMMS inventory values. (See pages 3 and 18 of report.)

DLA Response: Concur; weakness will be reported in DLA's Annual Statement of Assurance for FY 01.

Recommendation No. 1: Establish an oversight process to validate that Defense Logistics Agency inventory control points identify and correct inaccurate acquisition costs residing in the national inventory record file including items transferred among DLA inventory control points. Also, the oversight process should ensure that a sound quality assurance program is implemented and maintained.

DLA Comments: Partially concur. Recommendations 1.b, 1.c, 1.d, and 2 in the individual audit reports of inventory valuation at DSCC and DSCR (and A.1.b, A.1.c., A.1.d., and A2 of the DSCP report) dealt with these matters (identifying and correcting inaccurate acquisition costs and maintaining local quality assurance programs). In our recent responses, we advised that changes to our current methodology are expected to result from current OSD, GAO, and DoD IG reviews and business system modernization planning by DLA and the Services in the near future. At the time the decisions are made, we should be in a position to assess the extent to which such prices have already been updated, and the feasibility and utility of further corrective actions (including institutionalizing oversight of local corrective processes and quality assurance programs).

Disposition: Action is ongoing. ECD: March 31, 2002.

Recommendation No. 2: Develop interim procedures to validate cost data for items in the DLA Inventory Valuation Sampling Plan by tracing costs from the logistics feeder systems to the appropriate procurement records. The interim procedures should continue until the DLA inventory control points complete the required actions to correct inventory valuation data.

Subject: Valuation of Inventories in the Defense Logistics Agency Standard Automated Materiel Management System (Project No. D2000FJ-0067.006)

DLA Comments: Partially concur. As a result of identifying several deficiencies in our Standard Automated Materiel Management System (SAMMS) which we have corrected, and locally-initiated efforts underway to correct individual pricing errors identified, the audits are already paying dividends in terms of improved reliability and inventory accuracy. We have now initiated a pricing validation review of 3,153 items from the DLA FY 1999 statistical sampling plan and the 570 judgmentally-selected items reviewed by the audit, plus the 150,000 items selected for base-lining inventory valuation upon our forthcoming conversion to use of the business system modernization product. Manual corrective efforts of discrepancies identified will be necessary by the cognizant inventory control points (ICPs). Efforts to manually effect any corrections identified are constrained by existing local standard pricing specialist resourcing. Accordingly, we are reluctant to commit at this time to an additional review, which would add to the manual review backlog at the ICPs, until DLA has been able to complete these current commitments.

Disposition: Action is ongoing. ECD: March 31, 2002.

Recommendation No. 3: Modify the DLA Inventory Valuation Statistical Sampling Plan to obtain the appropriate cost data for items transferred among DLA inventory control points.

DLA Comments: Partially concur. We will evaluate the FY 01 sample results and determine the need for further refinements once it is complete.

Disposition: Action is ongoing. ECD: August 30, 2002.

Recommendation No. 4: Disclose the value of on-hand inventories where contract data do not support acquisition costs in the inventory note to the Financial Statements. The disclosure should include the total inventory value for items with acquisition costs not supported by obligation history records. Additionally, the disclosure should provide the total inventory value for items with acquisition costs based on obligation history records provided by the previous managing inventory control point for logistics gain items. The disclosure should also provide the inventory value for acquisition costs based on obligation history records that exceed DLA contract file retention requirements.

Subject: Valuation of Inventories in the Defense Logistics Agency Standard Automated Materiel Management System (Project No. D2000FJ-0067.006)

DLA Comments: Partially concur. This is essentially the same recommendation as Recommendation 3 in the individual final audit reports of inventory valuation at DSCC and DSCR (and A.3. of the DSCP report). As explained in our recent responses to these reports, as well as in Recommendation 1 above, action is being deferred pending decisions resulting from other, on-going reviews. We are also presently evaluating inventory valuation in the context of Chief Financial Officer reporting. As part of that review, we will determine whether any additional footnote disclosures are required or would be beneficial given the rather substantial personnel and computer resources required to enable such footnotes to our FY 01 financial statements, which will be completed in February 2002.

Disposition: Action is ongoing. ECD: March 31, 2002.

Recommendation No. 5: Provide to the DLA Business Systems Modernization Office inventory valuation problems identified for correction during the development of the new automated systems.

DLA Comments: Concur. We will request the ICPs, the Defense Distribution Center, DORRA and our Headquarters personnel to identify any inventory valuation problems and solutions identified as a result of the audit, including any corrective actions or quality assurance procedures. We will pass along this information to the office overseeing our ongoing Business Systems Modernization efforts, to help assure that appropriate safeguards are incorporated into our new system.

Disposition: Action is ongoing. ECD: March 31, 2002.

Potential Monetary Benefits: The DoD-IG reported that DLA sample estimates showed that inaccurate acquisition costs caused the \$9.1 billion inventory value to be misstated (overstated and understated) by \$398 million. The net dollar value misstatement resulting from those errors was an estimated \$60.1 million overstatement of inventory values (See Appendix A for the statistical sampling results). Correction of the inaccurate inventory values assigned to the DLA inventory will result in a potential monetary benefit to DLA customers because the cost of inventory serves as a basis for the standard (sales) price. The standard (sales) price for DLA-managed items consists of the cost of the item plus the applicable cost recovery rate or surcharge. The average DLA surcharge rate for FY 1999 was 29 percent. The DoD-IG estimated that approximately \$77.4 million (\$60.1 million

Subject: Valuation of Inventories in the Defense Logistics Agency Standard Automated Materiel Management System (Project No. D2000FJ-0067.006)

plus the \$17.3 million surcharge) of funds can be put to better use by DLA customers when the standard (sales) prices are reduced for the items with overstated prices. However, the DoD-IG reported to DSCC and DSCR that reduction of inaccurately overstated prices resulted in an \$11.5 million potential monetary gain to DLA customers. Therefore, the remaining estimated potential monetary benefit is \$65.9 million (\$77.4 million projected less the \$11.5 million previously claimed). The full extent of the monetary benefits will be quantifiable after the DLA ICPs correct all inaccurate acquisition costs. (See page 11 of report.)

DLA Comments: Partially Concur. Concur in the audit conclusion, i.e., that the full extent of the monetary benefits will only be quantifiable after the DLA ICPs correct all inaccurate acquisition costs. DORRA is presently pulling all available acquisition cost history in an effort to determine any inventory value discrepancies for the 3,153 items reported to be the basis for the audit potential savings calculations. We have also requested the audit calculations and for clarification regarding the reported DLA 29 percent surcharge rate. We note that our FY 01 DLA Non-Energy rate is 24.7 and expect declines in future years. When received and reviewed, DORRA will estimate the extent of any potential monetary benefits that would accrue from the portion of the remaining items inventory likely to be requisitioned, if repriced as a result of any required price adjustments.

Audit Team Members

The Finance and Accounting Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report. Personnel of the Office of the Inspector, DoD, who contributed to the report are listed below.

Paul J. Granetto
Richard Bird
James L. Kornides
Amy J. Frontz
Kevin C. Currier
Jean M. Jackson-Herrin
Barry N. Harle
Anthony C. Hans
Stephen Wynne