

Audit



Report

OFFICE OF THE INSPECTOR GENERAL

**ACCOUNTABILITY AND CONTROL OF MATERIELS
AT THE SAN ANTONIO AND WARNER ROBINS
AIR LOGISTICS CENTERS**

Report No. 95-261

June 29, 1995

Department of Defense

Additional Copies

Copies of the report can be obtained from the Secondary Reports Distribution Unit, Audit Planning 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 Planning and Coordination Branch, Audit Planning and Technical Support Directorate, at (703) 604-8939 (DSN 664-8939) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

Inspector General, Department of Defense
OAIG-AUD (ATTN: APTS Audit Suggestions)
400 Army Navy Drive (Room 801)
Arlington, Virginia 22202-2884

DoD Hotline

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

Acronyms

AFMCR	Air Force Materiel Command Regulation
ALC	Air Logistics Center
DMSC	Depot Maintenance Support Center
EPS	Exchangeable Production System

June 29, 1995

**MEMORANDUM FOR ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
MEMORANDUM FOR ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)**

SUBJECT: Audit Report on Accountability and Control of Materiels at the San Antonio and Warner Robins Air Logistics Centers (Report No. 95-261)

We are providing this audit report for your review and comments.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. Because the Air Force did not comment on a draft of this report, we request that the Air Force provide comments on the final report by August 28, 1995.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. John A. Gannon, Audit Program Director, at (703) 604-9427 (DSN 664-9427) or Mr. Joseph M. Austin, Audit Project Manager, at (703) 604-9424 (DSN 664-9424). See Appendix E for report distribution. The audit team members are listed on the inside back cover.



**Robert J. Lieberman
Assistant Inspector General
for Auditing**

Office of the Inspector General, DoD

Report No. 95-261
(Project No. 4LB-0064)

June 29, 1995

Accountability and Control of Materiels at the San Antonio and Warner Robins Air Logistics Centers

Executive Summary

Introduction. The Air Force budget for organic depot maintenance was about \$2.8 billion for the operation of five air logistics centers in FY 1994. For the two air logistics centers visited during the audit, about \$312 million (\$173 million for San Antonio and \$139 million for Warner Robins) was expended for materiels used in the aircraft repair and overhaul processes.

The longstanding problem of accountability and control of materiels has been repeatedly addressed in audit reports over the last five years. This problem continues to be a concern of DoD officials, especially with the current emphases on accurately determining inventory requirements, improving inventory controls, and reducing depot maintenance costs. The General Accounting Office designated the management of the Defense inventory as 1 of 18 high-risk areas within the Federal Government because accountability and cost-effective management were lacking. Accountability and control of materiels continues to be one of the areas in which little or no progress toward improvement has been made.

Audit Objectives. The objective was to evaluate the effectiveness of internal control policies and procedures used to account for and control materiels used by air logistics centers. We also evaluated the management controls related to the objective.

Audit Results. The San Antonio and Warner Robins Air Logistics Centers had materiels on hand that were not recorded on accountable records. We were unable to quantify the extent of the problem, but there is undue risk of material impact on financial statements, job costing, and prices charged to customers. Given the history of problems with accountability and control of materiels at the two ALCs, the probability is strong that similar problems exist at the other three ALCs.

o The San Antonio and Warner Robins Air Logistics Centers were maintaining unrecorded materiels, even though the Air Force's guidance required that all materiels be recorded on inventory records. As a result, the two air logistics centers used funds to buy new materiels to meet requirements that could have been satisfied with unrecorded materiels (Finding A).

o The San Antonio and Warner Robins Air Logistics Centers had bench stocks on hand that were infrequently used and that exceeded the intended dollar thresholds (unit prices). As a result, the two air logistics centers could be buying new items when excesses of the same items were on hand (Finding B).

Summary of Recommendations. We recommend that the Commander, Air Force Materiel Command, issue Air Force Materiel Command Regulation 66-53 in its final form and create an integrated process team to ensure that the Pacer Integrate Program is properly implemented. We also recommend that the Commanders, San Antonio and Warner Robins Air Logistics Centers, direct management personnel to promptly issue local procedures for managing maintenance materiel and identify all unrecorded materiel for the purpose of turning them over to depot maintenance support center personnel to manage. Additionally, we recommend that the management control of bench stocks be turned over to the depot maintenance support centers, usage of bench stock items be reviewed, and dollar thresholds for bench stock items be established.

Management Comments. As of June 23, 1995, the Air Force had not commented on a draft of this report. Therefore, we request that the Air Force provide comments on the final report by August 28, 1995.

Table of Contents

Executive Summary	i
Part I - Audit Results	
Audit Background	2
Audit Objectives	3
Finding A. Storage of Unrecorded Materials	4
Finding B. Limiting Bench Stocks	15
Part II - Additional Information	
Appendix A. Scope and Methodology	22
Appendix B. Summary of Prior Audits	25
Appendix C. Summary of Potential Benefits Resulting From Audit	29
Appendix D. Organizations Visited or Contacted	31
Appendix E. Report Distribution	32

Part I - Audit Results

Audit Background

The DoD FY 1994 budget for organic depot maintenance was about \$8.8 billion. The Air Force's portion of the budget was about \$2.8 billion, for the operation of five air logistics centers (ALCs). For the two ALCs visited during the audit, about \$312 million (\$173 million for San Antonio ALC, Kelly Air Force Base, Texas and \$139 million for Warner Robins ALC, Robins Air Force Base, Georgia) was expended for materiel used in the aircraft repair and overhaul processes. These ALCs are Defense Business Operations Fund activities.

San Antonio ALC. The San Antonio ALC is primarily responsible for the repair and overhaul of the C-5 and T-38 aircraft and the F-117, F-100, TF-39, and T-56 aircraft engines. The aircraft, propulsion (engine), and technology and industrial support directorates are responsible for the repair and overhaul of those airframes and engines.

Warner Robins ALC. The Warner Robins ALC is primarily responsible for the repair and overhaul of the C-130, C-141, and F-15 aircraft and major components. The C-130, C-141, F-15, avionics, electronic warfare, and technology and industrial support directorates are responsible for the repair and overhaul of the aircraft.

Classification of Materiel. Materiel used at the maintenance depots are generally classified as consumables or reparable. Consumables are supplies consumed in use, such as repair parts and fabrication materiel. Reparables are secondary items or assemblies that can be restored to serviceable condition.

Obtainability and Accountability of Repair Parts and Materiel. Repair parts and materiel used in support of the ALCs are generally obtained through the DoD supply system. Common parts with recurring needs are stocked in the supply system while other parts are purchased as requirements are identified. DoD Regulation 4140.1-R, "DoD Materiel Management Regulation," January 25, 1993, states that DoD Components that have custody of materiel are required to periodically inventory the materiel to ensure that information on the location, status, and quantity of supplies is accurate. The regulation also states that DoD Components having custody of materiel are required to conduct functional reviews of the physical inventory control program to ensure compliance with DoD and Component policies and procedures. Additionally, the reviews are to establish physical inventory control as a mandatory element to be addressed in the annual internal management control assessment required by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. Parts and materiel are accounted for in official accountable records

while they are in the supply system and are reported in the annual financial statement of the activity having custody of the inventory. Materiels are expensed in the fiscal year that they are issued from supply functions to maintenance operations.

Materiels at Depot Maintenance Facilities. The longstanding problem of accountability and control of materiels has been repeatedly addressed in audit reports during the last five years. This continues to be a concern of DoD officials, especially with the current emphases on accurately determining inventory requirements, improving inventory controls, and reducing depot maintenance costs. In his June 30, 1990, memorandum, "Strengthening Depot Maintenance Activities," the then Deputy Secretary of Defense directed the Military Departments to identify \$3.9 billion in depot maintenance savings over the 5-year period from FY 1991 through FY 1995 through increased efficiencies and cost reductions. The "Defense Depot Maintenance Council Corporate Business Plan for FYs 1992-1997" further directed the Military Departments to increase the cumulative total savings to approximately \$6.3 billion from FY 1991 through FY 1997. Better visibility of assets by DoD inventory managers will help accomplish this objective. Through improved visibility of assets and the control of materiels, DoD inventory managers will be better able to determine the exact requirements for materiels, determine the location of materiels, control excess materiels, improve the budget process, and provide maximum return on investments.

Management of Inventory. The General Accounting Office designated management of the Defense inventory as 1 of 18 high-risk areas within the Federal Government because of a lack of accountability and a lack of cost-effective management. During the last 4 years, eight reports (four by the General Accounting Office, two by the Inspector General, DoD, and two by the Army Audit Agency) addressing the accountability and control of Defense inventory were issued. According to the General Accounting Office, accountability and control of materiels continues to be one of the areas in which little or no progress has been made toward improvement.

Audit Objectives

The overall objective was to evaluate the effectiveness of internal control policies and procedures used to account for and control materiels used by the Air Force ALCs. We also evaluated the management controls related to the objective. For a discussion of the scope, methodology, and management control program, see Appendix A.

Finding A. Storage of Unrecorded Materiels

The San Antonio and Warner Robins ALCs were maintaining unrecorded materiels, even though the Air Force's guidance required that all materiels be recorded on inventory records. The condition occurred because production personnel did not return unused materiels from completed jobs to supply, as required, but instead maintained the materiels in the maintenance areas for possible future use. The lack of local procedures for supplementing Air Force Materiel Command Regulation 66-53 and for implementing the Pacer Integrate Program contributed to the accumulation of unrecorded materiels. Unrecorded materiels also accumulated because the supply system did not always give credit for turned-in materiels, senior managers at the ALCs did not take followup measures to ensure that materiels were turned in, and production personnel did not properly use courtesy storage for holding materiels. As a result, the ALCs used funds to buy new materiels to meet requirements that could have been satisfied with unrecorded materiels. Additionally, the ALCs distorted job costs and understated the inventory on the financial statements.

Procedures for Acquiring and Storing Materiels

Both the San Antonio and Warner Robins ALCs are required to use depot maintenance support centers (DMSCs) for storing and accounting for materiels used at the ALCs. DMSCs are mini supply centers located in the product directorates to store and issue planned and prepositioned materiel in support of production maintenance work loads. Direct expense materiel stored in the DMSCs is owned by the Air Force Stock Fund and charged to specific job order numbers at the point of issue. Indirect expense materiel is materiel that cannot be identified to a specific product (bolts, nuts, paint, washers, etc.). It is billed to the Industrial Fund when issued to maintenance personnel for use.

Air Force Materiel Control Regulation. Air Force Materiel Command Regulation (AFMCR) 66-53 (Draft), "Maintenance Materiel Control," September 30, 1993, states that personnel within DMSCs are tasked with acquiring, storing, and issuing materiels. All materiel requests must be reviewed to ensure that the requested materiels apply to the production items

Finding A. Storage of Unrecorded Materiel

being repaired and that the requested quantities do not exceed the requirements. The regulation also states that personnel within the DMSCs are responsible for accurate recordkeeping and for assisting in the resolution of problems impacting depot maintenance production.

Provisions of the AFMCR 66-53. The AFMCR 66-53 (draft) prohibits the accumulation of unrecorded materiel. The following are reasons why unrecorded materiel should not be allowed to accumulate.

- o Unrecorded materiel are not visible to item managers; therefore, the item managers could purchase materiel to meet requirements that could be met with unrecorded materiel.

- o Official inventory records are not maintained; therefore, controls to protect unrecorded materiel from loss, obsolescence, or theft are not in place.

- o The existence and use of unrecorded materiel hinder efforts to collect accurate usage data on materiel.

- o Unrecorded materiel distort cost accounting data because the materiel are not used on the repair jobs to which they are charged. Additionally, no cost accounting transactions are recorded when the materiel are used to complete other repair jobs.

- o Financial statements are understated when unrecorded materiel are not reported as assets and when unrecorded materiel are later used and not properly charged to repair jobs.

Although AFMCR 66-53 is still in draft, efforts are being made by the two ALCs to comply with it. We were advised by management personnel at the Air Force Materiel Command that the regulation is still in draft form because the regulation is being changed to an instruction.

Accountable System. The DO35K wholesale and retail receiving and shipping system is the primary data system that the Air Force uses to provide materiel support for depot level operations. It is used to process receipts from vendors and other suppliers and materiel turned in from base activities, such as maintenance. The DO35K system also directs the movement of materiel into and out of storage and keeps track of where the materiel is located during those processes. Additionally, it computes requirements and processes retail customer requests and related transactions in support of maintenance. The DO35K system maintains the official Air Force accountable records and ensures that audit trails are provided.

Finding A. Storage of Unrecorded Materiels

Establishment of the Pacer Integrate Program. In January 1989, the Air Force established the Pacer Integrate Program to improve the distribution support to depot maintenance at the five ALCs. The objectives of the program were to:

- o increase responsiveness to maintenance requirements by shortening pipeline time,
- o eliminate duplicative functions between supply and maintenance,
- o provide for more efficient use of manpower and dollars, and
- o improve asset visibility and accountability.

Under the Pacer Integrate Program, the Air Force converted maintenance inventory centers to DMSCs. Maintenance inventory centers were storage areas under the control of the maintenance directorate. Maintenance personnel stored materiels in the maintenance inventory centers until ready for use. Materiels stored in maintenance inventory centers were not visible to item managers. However, materiel stored in DMSCs retain visibility in the supply system. Materiels are not charged to jobs until they are issued out of DMSCs.

The conversion from maintenance inventory centers to DMSCs entailed the transfer of assets from the depot maintenance Industrial Fund to the Air Force Stock Fund. As a result of the conversion, materiels in the DMSCs are owned by the Air Force Stock Fund and are managed by supply distribution personnel. The accountability for the materiel is carried on the detailed records within the DO35K system. The DO35K system provides the stockage balances of materiels stored in the DMSCs and the retail and wholesale stockage balances of materiels stored in the Defense Logistics Agency managed warehouses.

Maintaining Unrecorded Materiels

The San Antonio and Warner Robins ALCs were maintaining unrecorded materiels on the maintenance shop floor or in storage facilities because production personnel did not return unused materiels from completed jobs to DMSCs as required, but instead maintained the materiels in maintenance areas for possible future uses. The materiels were stored in areas other than DMSCs. Our analyses at the San Antonio and Warner Robins ALCs showed that the ALCs had unrecorded materiels on hand that were not needed to satisfy ongoing requirements.

Unrecorded materiels are those materiels that are not recorded on the accountable records and not reported on the ALC financial statements. Materiels are included on the stock fund (supply) inventory records until they are issued to maintenance personnel for use on specific jobs. After issuance to maintenance personnel, the materiels are deleted from the stock fund inventory

Finding A. Storage of Unrecorded Materiels

records and the costs are charged to specific jobs. If the materiels are not used, no official records are maintained on the materiels because the materiels are considered consumed when issued to maintenance personnel.

Unrecorded materiel has long been a problem at the ALCs. Several reports have been issued on the subject (see Appendix B). For example, Inspector General, DoD, Report No. 91-304, "Accountability and Control of Materiels at Depot Maintenance facilities," January 29, 1991, identified \$314.9 million (\$81.9 million for Oklahoma City ALC, Tinker Air Force Base, Oklahoma and \$233 million for San Antonio ALC, Kelly Air Force Base, Texas) of unrecorded materiels at the Oklahoma City and San Antonio ALCs. The Air Force undertook action to correct the problem and identified and added \$293 million (\$81 million for Oklahoma City ALC and \$212 million for San Antonio ALC) of materiels onto the accountable records. However, continued management attention is needed at the San Antonio and Warner Robins ALCs to ensure that the problem is fully corrected. We did not attempt to quantify the dollar value of unrecorded materiels because other reports have done so in the past. Unrecorded materiels continues to be a significant problem.

Storage of Materiels at the San Antonio ALC. The San Antonio ALC was storing materiels that were not recorded on accountable records. The San Antonio ALC reported about \$81.2 million of inventory in its financial statement as of July 1994. The \$81.2 million included about \$67.6 million of work-in-progress, \$11.7 million of floating stocks, \$1.5 million of materiel-in-transit, and \$400,000 of materiels in DMSCs. The financial statement did not include the unrecorded materiels that were on shop floors or in storage areas because the materiels were considered consumed and not recorded on any accountable records. Our limited tests of materiels maintained in storage areas within the aircraft, propulsion, and technology and industrial support directorates in December 1994 identified materiel that was neither recorded on accountable records nor charged to maintenance jobs. We were not able to quantify the amount of unrecorded materiels because of inadequate records. The FY 1994 financial statement was understated by the value of the unrecorded materiels.

Aircraft Directorate. The aircraft directorate used a room (room 50) within the directorate for storing parts for aircraft being overhauled. The directorate maintained a list of the parts; however, the list was inaccurate because many parts stored in the room were not recorded on the list. None of the parts were recorded on official inventory records because the parts were considered consumed. About 3,575 items appeared on the list without the associated cost data.

- o 2,035 of the 3,575 items had dummy job order numbers (no designated project or job).

- o 1,080 of the 3,575 items had job order numbers for aircraft that had been overhauled and were no longer at the ALC.

- o 460 of the 3,575 items had job order numbers for aircraft being overhauled. Those items would be classified as work-in-process.

Finding A. Storage of Unrecorded Materials

We judgmentally selected 11 locations from the inventory list (record-to-floor) to determine the accuracy of the list. Each of the 11 locations contained fewer quantities of materiel than shown on the inventory list. Additionally, 3 of the 11 locations contained materiel that was not listed on the inventory list.

In a floor-to-record sample of 50 national stock numbers, 35 of the 50 national stock numbers were not on the inventory list. We separately determined that materiel not on the inventory list was valued at \$368,714.

Since December 1994, maintenance personnel have taken action to inventory materiel stored in room 50 and to make them visible to item managers. As of December 29, 1994, maintenance personnel had inventoried 1,418 items, valued at about \$456,000, and turned them over to DMSC personnel to be recorded onto accountable records.

Propulsion Directorate. The propulsion directorate used the STACKER for storing maintenance materiel. The STACKER is a 5,000-bin storage structure with 400 bins designated for storing serviceable materiel (ready for issue). We statistically selected 50 of the 400 bins for review. Materiel were stored in only 43 of the 50 bins and were valued at about \$4.4 million. We estimated that the 400 bins contained about \$33.6 million of serviceable materiel. The serviceable materiel included some work-in-process; however, an unknown quantity of the items stored in the STACKER were unrecorded materiel. We could not determine the exact amount of work-in-process materiel or the exact amount of unrecorded materiel stored in the STACKER because the materiel were not identified to specific job order numbers. Materiel stored in 16 of the 43 bins were stored before December 1992.

The DMSC was designed to eliminate the problem of accumulating unrecorded materiel. Under the DMSC concept, the STACKER should be used only to store reparables and work-in-process materiel. Consumable materiel not assigned to ongoing jobs should not be stored in the STACKER. Those materiel are not on accountable records, thus, should be stored in the DMSC.

Technology and Industrial Support Directorate. The technology and industrial support directorate maintained an outside storage area for raw materiel, such as aluminum sheets and rods, sheet metal, sheets of stainless steel, and steel bars. The raw materiel were not maintained and controlled by DMSC personnel, as required by AFMCR 66-53. All raw materiel stored in the outside storage area were owned by maintenance and none were recorded on accountable records or were visible to item managers.

We were unable to determine the value of the materiel in the outside storage area; however, production personnel told us that between \$3 million and \$5 million was spent on such materiel about 5 years ago. One large section of the outside storage area contained 50 bins of items, such as 3 feet by 12 feet sheets of flat aluminum and 4 feet by 12 feet sheets of stainless steel. Personnel within the directorate maintained a partial inventory listing that showed 877 items of raw materiel stored in the outside area. We judgmentally selected 51 items of raw materiel for review to determine the accuracy of the listing.

Finding A. Storage of Unrecorded Materiel

The inventory listing was generally accurate. However, none of the materiel stored in the 50 bins in the outside storage was recorded on the inventory listing. We were able to determine the value of only a few of the items stored in the area because records were not maintained that identified the items to national stock numbers. Personnel within the directorate researched and determined national stock numbers for 32 of the 51 sample items. They could determine unit prices for only 8 of the 32 items with national stock numbers. For example, location number 6B2 contained six flat sheets of aluminum (3 feet by 12 feet). The sheets of aluminum (national stock number 9535-01-117-1658) were valued at \$14,254 (\$2,375 per sheet). Some of the materiel had never been used.

Storage of Materiel at the Warner Robins ALC. The Warner Robins ALC was storing materiel that were not recorded on accountable records. Warner Robins reported about \$118.5 million of inventory in its depot maintenance industrial fund financial statement for FY 1994. The \$118.5 million reported in the financial statement included \$24.2 million of work-in-process, \$78.8 million of floating stocks, and \$15.5 million of components awaiting parts. The financial statement was understated, because Warner Robins had unrecorded materiel on hand that were stored in locations not controlled by DMSC personnel. For example, the technology and industrial support directorate provided us with an inventory listing that showed about \$1.7 million of unrecorded materiel on hand as of September 1993. In October 1994, the directorate began the process of turning in the unrecorded materiel to the DMSC. At the end of December 1994, about \$1 million of the materiel had been turned in to supply. The remaining materiel were being reviewed for turn in.

Another example of unrecorded materiel that was not included on accountable records was honey comb materiel stored in the DMSC. Honey comb materiel is a lightweight core materiel used to bond metal sheets, which results in lighter and stronger parts. The honey comb materiel is used in the manufacture and repair of equipment such as aircraft panels and landing gear doors. Honeycomb materiel valued at about \$172,925 was not assigned to ongoing or scheduled jobs and was not included in the financial statement as inventory. Despite being stored in the DMSC, DMSC personnel did not manage the materiel and the materiel was not reflected on accountable records.

In addition to the previously described unrecorded materiel being stored in the technology and industrial support directorate, materiel that were not assigned to ongoing jobs were stored in small quantities in mechanics' stations throughout the directorate. The directorate had not identified the types and quantities of those materiel, but had tasked the shop supervisors and mechanics to identify all materiel that were not assigned to specific jobs and to return those items to supply.

Finding A. Storage of Unrecorded Materiels

Reasons for Unrecorded Materiels

The San Antonio and Warner Robins ALCs accumulated unrecorded materiels because materiels were not turned in to supply at the completion of jobs, and because of the lack of local guidance concerning the management of maintenance materiels. AFMCR 66-53 (draft) requires that all materiels on hand be dedicated to production items being repaired and that quantities do not exceed the requirements. The regulation prohibits the accumulation of unrecorded materiels at the ALCs. However, the accumulation of unrecorded materiels has been a problem at the ALCs because of the lack of local procedures for supplementing AFMCR 66-53 and implementing the Pacer Integrate Program. Additionally, the supply system did not always give credit for turned-in materiels, senior managers at the ALCs did not take followup measures to ensure that materiels were turned in, and production personnel did not properly use courtesy storage for maintaining materiels.

Turn In of Materiels. Production personnel did not turn in to the DMSCs unused materiels when jobs were completed, but instead maintained the materiels for uncertain future uses. By ordering materiels that were not needed for aircraft repairs, ALCs wasted funds and distorted repair costs because customers were charged for materiels that were not used. In most cases, costs can be minimized when ALCs return the unused materiels to supply to be used elsewhere. AFMCR 66-53 stipulates that if ALCs accumulate materiels that they cannot use, the excess should be returned to supply or sent for disposal.

Local Procedures. The lack of local procedures to supplement AFMCR 66-53 at the San Antonio and Warner Robins ALCs contributed to the accumulation of unused and unrecorded materiels. Local guidance was not issued because management personnel did not make it a priority. Without local procedures, production personnel at the San Antonio and the Warner Robins ALCs had no guidance to effectively manage maintenance materiels, and controls did not exist to prevent further materiel accumulation. Additionally, the lack of local procedures for implementing the Pacer Integrate Program contributed to the continued accumulation of unrecorded materiels. Both ALCs had numerous storage areas that continued to be maintained by maintenance personnel to store unrecorded materiels. Those materiels were neither on official accountable records nor visible to item managers.

Incentive for Turning in Materiels. Personnel at the San Antonio and Warner Robins ALCs did not turn in materiels when jobs were completed because no incentives were in place to effectively manage maintenance materiels. To implement the Pacer Integrate Program, the ALCs were required by the then Air Force Logistics Command in its Pacer Integrate Implementation Guide, March 1989, to inventory all materiels maintained within storage areas and work centers and to reduce the stockage levels of on-hand materiels. After 1 year, the remaining materiels were to be turned over to DMSC personnel to manage. The program was to be implemented at all five ALCs by August 1991. The Pacer Integrate Program has not been fully implemented at the San Antonio and Warner Robins ALCs. Continuous management attention is needed at the San Antonio and Warner Robins ALCs to ensure that the Pacer

Finding A. Storage of Unrecorded Materiels

Integrate Program is fully implemented. The creation of an integrated process team to determine how to better handle the implementation of the Pacer Integrate Program would help prevent the accumulation of unrecorded materiels.

San Antonio ALC. The accumulation of unrecorded materiels at the San Antonio ALC predated the implementation of the Pacer Integrate Program. Unrecorded materiels accumulate because of excess parts from canceled and revised job orders, and from locally purchased and manufactured items that were overordered. Additionally, all materiels on hand were not used or turned in to DMSC personnel by May 1992, as required by the then Air Force Logistics Command in its implementation guide for the Pacer Integrate Program. The San Antonio ALC had 1 year to inventory all on-hand materiels and to reduce the stockage level of the materiels. All materiels on hand after 1 year were to be turned over to DMSC personnel to manage. That did not occur. Other storage areas continued to be used.

The ALC management stated that personnel had no incentive for turning in unrecorded materiels from completed or canceled jobs. Personnel believed that the supply system would not always give credit for turn-ins and that it was better to keep the materiels that had already been paid for. For example, from October 1, 1993, through August 31, 1994, the San Antonio ALC turned in \$2.6 million of materiels to supply. The ALC received only \$627,000 of credit for the materiels. Additionally, maintenance personnel kept materiel after jobs were completed because they did not believe that supply would have the materiels on hand when needed to meet future production schedules. Contrary to that belief, supply personnel at the San Antonio ALC stated that 82 percent of the time they could provide materiel from off the shelf to maintenance personnel within 1 day of a request, if the requested materiel had usage history of at least three demands in the supply system data base. They also stated that 76 percent of the time they could provide materiel from off the shelf to maintenance personnel within 1 day of a request whether or not usage history was available.

Warner Robins ALC. The accumulation of unrecorded materiels at the Warner Robins ALC predated the implementation of the Pacer Integrate Program. Unrecorded materiels accumulated because of excess parts from canceled or revised job orders, and from locally purchased and manufactured items that were overordered. Additionally, all materiels on hand were not used or turned in to DMSC personnel by September 1992, as required by the then Air Force Logistics Command in its implementation guide for the Pacer Integrate Program. The Warner Robins ALC had 1 year to inventory all on-hand materiels and to reduce the stockage level of the materiels. All materiels on hand after 1 year were to be turned over to DMSC personnel to manage. That did not occur. Other storage areas continued to be used.

Management stated that personnel had no incentive to turn in unrecorded materiels to supply at the completion of jobs because the supply system would not always give credit for the materiel turned in. For example, from October 1 through December 12, 1994, the Warner Robins ALC turned in about \$1 million of materiels to supply. The ALC did not receive credit for any of the materiels. Management also stated that it was necessary to keep unrecorded

Finding A. Storage of Unrecorded Materiels

materiels to meet future production schedules. That belief persisted despite supply personnel's claim that 83 percent of the time they could provide materiel from off the shelf to maintenance personnel within 1 day of the request, if the requested materiel had usage history of at least three demands in the supply system data base. They also stated that 76 percent of the time they could provide materiel from off the shelf to maintenance personnel within 1 day of a request whether or not usage history was available.

Followup Actions by Managers. Managers at the San Antonio and Warner Robins ALCs did not take followup measures to ensure that unneeded materiels were turned in when jobs were completed, because of the lack of attention to the problem. Management personnel did not make visits to shops to identify unneeded materiels. Further, managers were not evaluated against their performance standards to determine how well they managed maintenance materiels left over from completed jobs.

Courtesy Storage. Production personnel at the San Antonio and Warner Robins ALCs did not use courtesy storage for storing materiels that were not needed for ongoing jobs. Courtesy storage was not used because maintenance personnel were not aware of all of the advantages of using it. AFMCR 66-53 provides for the use of courtesy storage as an alternative to turning in materiels to supply at the completion of repair jobs. Courtesy storage refers to temporary holding areas within the DMSC that can be provided to the production function to accommodate maintenance-owned materiels for which an immediate requirement does not exist. Although the materiels would remain maintenance-owned, the DMSC would provide management of the items.

Advantages of Using Courtesy Storage. Placing materiels in courtesy storage would have several advantages over maintaining unrecorded materiels on the shop floors. Courtesy storage would allow maintenance functions to retain ownership and the materiels would be recorded on the financial statement of an ALC, which would provide accountability. The controls placed on the materiels would reduce the risk of loss, obsolescence, theft, and unintentional misuse. Materiels placed in courtesy storage would be recorded on accountable records, which provide visibility on the DO35K system. The materiels would also be available to meet other immediate requirements. If the materiels were needed by supply to satisfy other requirements, the ALC would be given credit for the materiels. Additionally, job costing would be more accurate because the jobs that were originally charged for the materiels would be credited at turn in of items to courtesy storage.

Issuance of Materiels From Courtesy Storage. Upon issuance of materiels from courtesy storage, charges would be made to the new job on which the items would be used. However, an ALC would have to implement internal controls that would prevent the accumulation of large amounts of materiels over extended periods. An effective control would be to review the demand for materiels that are maintained in courtesy storage at 6-month intervals. If no demands are made for materiels within 6 months, the continued storage of the materiels should be evaluated for turn in to the supply function. Maintenance and supply personnel would need to coordinate and establish workable courtesy storage operating policies and procedures.

The creation of an integrated process team to determine how to better handle the issues of courtesy storage and turning in materiel to supply would help prevent the recurring problem of unrecorded materiel. The integrated process team could also work with supply personnel to come up with better ways of how to handle credits for materiel turned in to supply.

Buying Materiel When Unrecorded Materiel are On Hand

The San Antonio and Warner Robins ALCs were using funds to buy materiel when unrecorded materiel were already on hand. The condition occurred because materiel issued to maintenance personnel were considered consumed and lost their visibility to item managers. For example, the San Antonio ALC had 21 gears (national stock number 3020-00-884-7361) for the T-56 engine stored in the STACKER. The gears, valued at \$7,479 (\$356 each), were stored in the STACKER on October 12, 1993. However, the item manager purchased 108 gears on April 1, 1994. If the unrecorded gears had been visible to the item manager, the purchase could have been reduced by the 21 gears.

Summary

Unrecorded materiel have long been a problem at the ALCs. The lack of local procedures contributed to the accumulation of unrecorded materiel at the two ALCs reviewed during this audit. Maintenance managers did not return materiel to the DMSCs at the completion of maintenance jobs because they did not believe that the supply system would give full credit for materiel that had already been paid for and they did not believe that the materiel would be available when needed at future dates. However, the use of courtesy storage would add an incentive for turning in materiel when jobs are completed because the maintenance activity would retain ownership of the materiel. The longstanding problem of accountability and control of materiel has been repeatedly addressed in audit reports over the last five years. This continues to be a concern of DoD officials, especially with the current emphases on accurately determining inventory requirements, improving inventory controls, and reducing depot maintenance costs. Given the history of problems with accountability and control of materiel at the two ALCs, the probability is strong that similar problems exist at the other three ALCs.

Finding A. Storage of Unrecorded Materiels

Recommendations for Corrective Action

A.1. We recommend that the Commander, Air Force Materiel Command:

a. Issue Air Force Materiel Command Regulation 66-53, "Maintenance Materiel Control," in its final form, either as a regulation or instruction.

b. Create an integrated process team to ensure that the Pacer Integrate Program is properly implemented and to determine how to better handle the issue of courtesy storage at the air logistics centers. Emphases should be placed on ensuring that adequate local procedures and incentives are in place to prevent the accumulation of unrecorded materiels.

A.2. We recommend that the Commanders, San Antonio and Warner Robins Air Logistics Centers, direct senior management personnel to:

a. Promptly issue local procedures for supplementing Air Force Materiel Command Regulation 66-53 and for implementing the Pacer Integrate Program. The issuance of local procedures should be a coordinated effort between maintenance and supply personnel. The procedures should provide guidance for managing maintenance materiels and should address the usage of courtesy storage.

b. Identify all on-hand unrecorded materiels and maintain only the amount needed for ongoing production requirements. Other unrecorded materiels should be turned over to the Depot Maintenance Support Center personnel to be put in courtesy storage, turned in to supply, or disposed of.

c. Periodically check for unrecorded materiels to help prevent future accumulation of unrecorded inventories.

d. Hold supervisory maintenance personnel responsible for the accountability and control of materiels that have been issued to maintenance. Performance appraisals for maintenance supervisors should reflect how well materiels are managed, including at the completion of jobs.

Management Comments

The Air Force did not comment on a draft of this report. Therefore, we request that the Air Force provide comments in its response to the final report.

Finding B. Limiting Bench Stocks

The San Antonio and Warner Robins ALCs did not effectively limit bench stocks to frequently used, low cost items, as required by Air Force regulation. Additionally, those ALCs had excess bench stocks on hand. The conditions existed because those ALCs did not establish local procedures to implement AFMCR 66-53 and did not comply with existing Air Force guidance. The conditions also existed because of a lack of reviews to determine amounts and kinds of materiel being stored in bench stocks. Additionally, those ALCs did not establish dollar thresholds for materiel held in bench stocks. As a result, those ALCs could be buying new items when excesses of the same items are sitting in bench stocks.

Procedures for Managing Bench Stocks

Air Force Manual (AFM) 67-1, "U.S. Air Force Supply Manual," volume II, part 2, chapter 25, "Bench Stock Support," January 1, 1991, defines bench stocks as a group of items used regularly by maintenance activities. Bench stocks are low cost, high use, consumable items used by maintenance personnel at an unpredictable rate. They are consumed in the maintenance process, but cannot be identified to a specific product. Bench stocks include consumable items such as bolts, nuts, screws, solder, tape, and wire.

To make the frequently used items readily available, supply moves the items from the supply warehouse to a storage area within the maintenance production area where they will be used. Maintenance personnel within the production shops have free access to the bench stock items to ensure an uninterrupted work flow of repair work loads. The items are issued to shops before they are actually needed so that they will be on hand for immediate use.

The AFMCR 66-53 (draft) requires that local procedures be established to periodically review amounts and kinds of materiel being held in bench stocks. When the DMSC identifies inactive bench stocks, joint action between maintenance and supply should be taken to correct any problems found. The using activity will be solely responsible for ensuring that the retained or requested quantities of any bench stock items are the minimum essential quantities needed to support the mission and future production.

Finding B. Limiting Bench Stocks

Establishing Bench Stock Levels

Bench stock levels are established by managers within the production directorates at ALCs. However, ALCs are not required to maintain records of on hand balances of bench stocks, because items issued to bench stocks are considered consumed. AFMCR 66-53 requires that the DMSC maintain data concerning authorized levels of bench stocks on the G402A Exchangeable Production System (EPS). EPS, an on-line system used by materiel support; scheduling; and DMSC personnel, provides data update capability for requirements; issues; turn-ins; and transaction corrections. EPS also maintains data that show when bench stocks are issued from the supply system to the maintenance activity. Personnel at the San Antonio and Warner Robins ALCs provided us data showing that as of March 1995, the San Antonio ALC was authorized 18,410 bench stock items and the Warner Robins ALC was authorized 33,913 bench stock items.

During FY 1994, the San Antonio ALC expended \$10.9 million and the Warner Robins ALC expended \$11 million on bench stocks. Because bench stocks are provided for anticipated needs, instead of in response to actual needs, those stocks are paid for before use by the Air Force Industrial Fund.

Inactive Bench Stocks

The San Antonio and Warner Robins ALCs did not effectively limit bench stocks to frequently used items as required, because managers at the ALCs did not establish local procedures to implement AFMCR 66-53 and did not comply with existing guidance.

Criteria for Managing Bench Stocks. The AFMCR 66-53 requires that DMSC personnel manage the bench stocks at ALCs. DMSC personnel maintain bins located near the maintenance floors, and perform inventories and restock the bench stocks as necessary. Idle or unused bench stocks are required to be identified by DMSC personnel as potential candidates for turn-ins to supply. DMSC personnel manage bench stocks with the use of EPS. In addition to the bench stocks managed by DMSC personnel, maintenance personnel maintain unauthorized quantities of bench stocks in cabinets near the maintenance shop floors. In accordance with AFMCR 66-53, maintenance personnel should maintain only a 2- or 3-day supply of bench stocks at their work stations. Bench stocks maintained by maintenance personnel are not subject to the same controls as DMSC managed bench stocks. DMSC personnel cannot determine whether maintenance-managed bench stocks are being used or whether high dollar items are being maintained in bench stocks.

San Antonio ALC. The DMSC personnel at the San Antonio ALC did not perform reviews to identify idle or unused bench stocks. We attributed this,

in part, to nonissuance of local implementing procedures, as required by AFMCR 66-53. Additionally, reviews were not performed because of a lack of personnel and because management did not make the reviews a priority. Data provided by production personnel showed that as of March 1995, the ALC had about 5,900 bench stock items (valued at \$1.1 million) that had not been used during the last 6 months. If those items had been reviewed as required, many of them could have been returned to supply.

Warner Robins ALC. The DMSC personnel at the Warner Robins ALC did not perform reviews in all of the production directorates to identify idle or unused bench stocks. The lack of reviews was attributed to the nonissuance of local procedures as required by AFMCR 66-53 and idle or unused bench stocks. The lack of reviews was attributed to the nonissuance of local procedures as required by AFMCR 66-53 and noncompliance with existing guidance on bench stocks utilization. Additionally, management did not perform the reviews because they believed the reviews were too time consuming. Limited reviews had been performed in the C-130 and F-15 directorates, which proved that even partial reviews were effective in eliminating inactive bench stocks. For example, the F-15 directorate performed reviews and eliminated 171 inactive items from bench stocks. The C-130 directorate performed reviews and identified 320 inactive bench stock items. However, documentation could not be located to show how many items had been deleted from the C-130 bench stocks because of the reviews. In contrast, the C-141 directorate had not performed reviews for several years. As of March 1995, EPS data showed 929 bench stock items (valued at \$149,790) that had not been used during the last 6 months. We concluded that had the required reviews been performed, many of the 929 items could have been removed from bench stocks.

Reviews at other directorates could not be performed because of noncompliance with existing guidance on updating the EPS. DMSC personnel were not able to provide accurate EPS data to show the number of bench stock items that had not been used during the last 6 months for the avionics, electronics warfare, and technology and industrial support directorates. Accurate bench stock data were not available because the EPS data were not updated when jobs were completed or canceled. Because the data were not available, reviews were not performed to determine whether bench stock items were being used and should be maintained.

High Dollar Value Bench Stocks

The San Antonio and Warner Robins ALCs did not limit bench stocks to low cost items as required by AFMCR 66-53. Bench stocks included high dollar items because the Air Force did not establish dollar thresholds to limit bench stocks to low cost items. Additionally, reviews were not performed to ensure that bench stocks were limited to low cost items. Although bench stocks are generally low cost, frequently used items, the San Antonio and Warner Robins ALCs maintained a combined total of 567 high cost items (over \$150 each) in stock. We used the \$150 criteria as a threshold for the unit price of materials in bench stocks because that was the threshold being used by the Navy.

Finding B. Limiting Bench Stocks

The Air Force has not established a bench stock threshold. The General Accounting Office Report No. GAO/NSIAD 94-8 (OSD Case No. 9542), "Base Maintenance Inventories Can Be Reduced," December 15, 1993 (see Appendix B), stated that the Air Force had not effectively managed bench stocks and that bench stocks included many infrequently used and high cost items. In July 1994, the Deputy Under Secretary of Defense (Logistics) directed the Air Force to establish stockage policies for bench stocks by September 30, 1994. Instead of establishing an Air Force-wide threshold, the Air Force Materiel Command directed the ALCs to establish dollar thresholds to limit bench stocks to low cost items. However, as of December 1994, the thresholds had not been fully established, and neither the Air Force Materiel Command nor the ALCs had established deadlines for completing followup to ensure that the dollar thresholds were established or reasonable.

San Antonio ALC. As of March 1995, the San Antonio ALC identified 391 bench stock items with unit prices that exceeded \$150. The unit price for many of the 391 items exceeded \$500. For one of the items, tube assembly, (national stock number 1560-00-676-145LG), the unit price was \$1,226. Five of the items were on hand. The total value of the items with unit prices exceeding \$150 was \$873,243. The primary reason for the high dollar items in bench stocks is that the Air Force has no policy limiting the dollar threshold of items maintained in bench stocks. Also, reviews were not performed to ensure that high cost items were not being maintained in bench stocks. On October 1, 1994, the AFMC directed the five ALCs to establish a dollar threshold for unit prices of bench stock items. As of February 2, 1995, the San Antonio ALC had not established a dollar threshold for unit prices of bench stocks.

Warner Robins ALC. As of March 1995, the Warner Robins ALC identified 178 bench stock items with unit prices that exceeded \$150. The total value of the items with unit prices exceeding \$150 was \$205,708. The primary reason for the high dollar items in bench stocks is that the Air Force has no policy limiting the dollar threshold of items maintained in bench stocks. Also, reviews were not performed to ensure that high cost items were not being maintained in bench stocks. On October 1, 1994, the AFMC directed the five ALCs to establish a dollar threshold for unit prices of bench stock items. As of January 11, 1995, the Warner Robins ALC had set dollar thresholds for bench stock unit prices for four of the six directorates. The thresholds for the four directorates ranged from \$20 to \$100.

Excess Bench Stocks

Personnel at the San Antonio and Warner Robins ALCs were maintaining bench stocks that exceeded authorized stockage levels. Excessive bench stocks were on hand because DMSC personnel did not perform reviews to determine whether bench stock items exceeded authorized stockage levels. Additionally, maintenance mechanics maintained bench stocks that were in addition to those authorized to be maintained by DMSC personnel.

DMSC personnel maintained authorized bench stocks in storage areas that were located near maintenance work centers. However, maintenance mechanics also maintained bench stocks and the items were in excess of those authorized by AFMCR 66-53. AFMCR 66-53 authorizes maintenance personnel to maintain only enough bench stock materials required to perform their daily duty assignments (not to exceed 2 to 3 days). Mechanics on the shop floors are authorized to maintain items such as bolts, cotter pins, nuts, tape, and wire. Items such as solder, tape, and wire are generally limited to one roll. However, bench stocks maintained by other than DMSC personnel did not appear in the EPS system records that showed authorized stockage levels and usage data. The lack of controls over the bench stock items contributed to the accumulation of bench stocks on the shop floors.

San Antonio ALC. Within the aircraft directorate, we identified 123 bins maintained by the DMSC that were labeled as containing excess bench stocks. Although the bins were labeled excess, the bench stock items had not been reviewed by DMSC personnel to determine whether the items were being used or were actually needed. The items stored in the bins were items that had been returned from the maintenance shop floors. We judgmentally selected 24 of the 123 bins to determine whether they contained excess bench stocks. We determined that 15 of the 24 bins contained bench stock items that exceeded the authorized stockage levels.

Warner Robins ALC. Mechanics maintained their own bench stock bins at the ALC, thereby making the materials nonvisible to DMSC personnel. The mechanics did not have inventories of the materials and did not know the amount of materials on hand. For example, within the technology and industrial support directorate at the Warner Robins ALC, DMSC personnel maintained 6 authorized bench stock storage bins and maintenance mechanics maintained 45 additional unofficial storage bins. The bench stocks maintained by maintenance personnel did not appear in the EPS system records.

Purchasing Items That are Already On Hand

The San Antonio and Warner Robins ALCs could purchase new bench stock items when excess quantities of the same items are already available. For example, at the San Antonio ALC, a propulsion directorate DMSC was authorized to maintain five engine probes (national stock number 6635-01-113-3084), with a unit price of \$504. The DMSC had four probes on hand. However, the work center also had nine of the probes on hand. The DMSC had no way of knowing that the work center had the nine additional probes on hand because the DMSC maintains no visibility over bench stock items held by maintenance personnel. Under current procedures, the DMSC could purchase an additional probe to meet the authorized level.

Problems with bench stocks have been persistent and were also addressed in several audit reports during the last five years. Problems associated with the management of bench stocks are pressing concerns of DoD officials.

Finding B. Limiting Bench Stocks

Inadequate reviews of bench stocks contribute to distorted inventory requirements, excessive maintenance costs, and weakened inventory controls. Given the history of problems associated with bench stocks, the probability exists that similar problems exist at the other three ALCs.

Recommendations for Corrective Action

We recommend that the Commanders, San Antonio and Warner Robins Air Logistics Centers, direct senior management personnel to:

B.1. Issue local procedures to implement the bench stocks provisions of Air Force Materiel Command Regulation 66-53. The local procedures should address the requirement to perform reviews to determine the amounts and kinds of materials being stored in bench stocks. Additionally, local procedures should include controls to ensure input of accurate data concerning bench stock usage into the G402A Exchangeable Production System.

B.2. Turn over management control of all bench stocks to the depot maintenance support centers.

B.3. Review bench stock usage to determine whether items in bench stocks should be retained. The reviews should be made every 6 months, and any bench stock items that have not been used for 6 months or that are no longer needed should be turned in to the Depot Maintenance Support Center.

B.4. Establish dollar thresholds for items held in bench stocks and return to supply those items exceeding the established thresholds.

Management Comments

The Air Force did not comment on a draft of this report. Therefore, we request that the Air Force provide comments in its response to the final report.

Part II - Additional Information

Appendix A. Scope and Methodology

Scope and Methodology

The audit was performed at the San Antonio and Warner Robins ALCs. Our audit covered records as of September 1994 at both the San Antonio and Warner Robins ALCs. We concentrated on accountability and control of consumable materiel that had been issued to maintenance personnel at the two ALCs. At the time of our audit, the financial statements of the two ALCs showed inventory balances of \$199.7 million (\$81.2 million San Antonio ALC and \$118.5 million Warner Robins ALC).

We interviewed Air Force maintenance and supply managers and obtained and reviewed financial data from both ALCs. Additionally, we reviewed DoD guidance and Air Force regulations concerning policies, responsibilities, and procedures for managing repair parts and consumable materiel at ALCs, including bench stocks.

To determine whether consumable materiel were accurately accounted for and controlled on property records, we performed limited inventories of materiel on hand at the two ALCs using the most current available records. We assessed whether the ALCs were complying with the draft Air Force regulation in force, which prohibited the accumulation of unrecorded materiel, and we assessed the efforts of the ALCs to ensure that materiel were properly recorded. We discussed the status of unrecorded materiel and factors contributing to the accumulation of unrecorded inventories. We considered materiel unrecorded if it was not required for any ongoing job, in ready-for-issue condition, and not on the ALC inventory records.

San Antonio ALC. Within the aircraft directorate, we performed limited physical inventories to determine the accuracy of the inventory listing. We judgmentally selected inventory in 11 locations from the inventory listing (record-to-floor) to determine whether the materiel were in the noted locations. Additionally, we selected 50 national stock numbers that included 125 items from storage location (floor-to-record) to determine whether materiel were recorded on the inventory listing. The storage area contained about 3,575 items. However, we could not determine the value of those items because cost data were not available.

Within the propulsion directorate, we statistically selected for review 50 of 400 storage bins containing serviceable materiel located in the STACKER. Those materiel had a value of \$4.4 million. We determined how long the materiel had been stored in the STACKER and whether the materiel were being stored for ongoing jobs. We considered materiel stored in the STACKER to be unrecorded if they were not required for ongoing jobs and were in ready-for-issue condition.

Within the technology and industrial support directorate, personnel maintained a partial inventory listing that showed 877 items of raw materiel stored in an outside storage area. We judgmentally selected 51 items of raw materiel for

review to determine the accuracy of the listing. The total value of the materiel could not be determined because cost data were not readily available for many items.

Warner Robins ALC. The technology and industrial support directorate maintained a storage room that contained about \$1 million of unrecorded materiel. We did not inventory those materiel, because during our audit, personnel at the ALC began the process of inventorying the materiel for turn in to supply. Additionally, about \$173,000 of honey comb materiel was being unofficially stored in the DMSC for unknown future requirements.

We reviewed bench stocks located in the larger production directorates at both San Antonio and Warner Robins ALCs. The two ALCs spent a total of \$21.9 million (San Antonio \$10.9 million and Warner Robins \$11 million) for indirect materiel from October 1, 1993, through September 30, 1994. At each ALC, we reviewed bench stocks to determine whether they were low dollar frequently used items, as intended. We also assessed whether sufficient quantities of bench stocks were being used to justify stockage levels. We concentrated on items with high unit prices (over \$150).

Use of Computer-Processed Data. We performed limited tests on the reliability of computer-processed data provided to us by the two ALCs audited. We performed limited physical inventories to determine the accuracy of inventory records. Our review of system controls and the results of data tests showed an error rate that cast doubt on the validity of the computer-processed data. The accuracy of the inventory records is discussed in Part I of this report.

Audit Period, Standards, and Locations. We performed this economy and efficiency audit from August 1994 through March 1995 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included such tests of management controls as were considered necessary. Appendix D lists the organizations we visited or contacted.

Management Control Program

We reviewed the FYs 1993 and 1994 internal control certifications required by the DoD Internal Management Control Program that were submitted by the ALCs. We reviewed the certifications to determine whether maintenance managers were identifying and reporting material weaknesses concerning the stockage and the accountability and control of maintenance materiel. We also followed up on the implementation of recommendations from prior audit reports.

Controls Assessed. We evaluated the Air Force's controls for ensuring that materiel at ALCs did not exceed authorized stockage levels and that materiel were adequately accounted for and controlled. We also reviewed the implementation of the DoD Internal Management Control Program.

Appendix A. Scope and Methodology

Adequacy of Management Controls. The audit identified material internal control weaknesses as defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. No material weaknesses were reported in the ALCs certifications because inventory accountability was not an assessable internal control unit at the two ALCs. We identified internal control weaknesses in the accountability and control of materiel and in the identification and reporting of material weaknesses to appropriate Air Force management levels. All recommendations in this report, if implemented, will correct those weaknesses. In addition, the Air Force should address inventory accountability at maintenance depots in its management control reviews. Potential monetary benefits are associated with Recommendation A.2.b.; however, the monetary benefits were not quantifiable (see Appendix C). A copy of the report will be provided to senior officials responsible for management controls within the Office of the Secretary of Defense and the Department of the Air Force.

Appendix B. Summary of Prior Audits

Prior Audit Coverage

In the last 5 years, eight audits focused on accountability and control of Defense inventory. The audits are summarized below.

General Accounting Office (GAO) Report No. GAO/HR-95-5, "Defense Inventory Management," February 1995, provides an update on inventory management, one of 18 high-risk areas identified by GAO in December 1992 as especially vulnerable to waste, fraud, abuse and mismanagement. Specifically, the report states that \$36.3 billion of the \$77.5 billion of inventory that the DoD had on hand as of September 1993 was not needed to support DoD's war reserve or current operating equipment. The problem resulted from DoD's culture that believed it was better to overbuy items than to manage with just the amount of stock needed. The report also stated that DoD had recognized that it must reduce the size and cost of its inventory. However, in spite of a \$15 billion inventory reduction, DoD has yet to achieve effective and efficient inventory management. DoD does not have adequate oversight of its inventory, financial accountability remains weak, requirements continue to be overstated, and DoD can be more aggressive in implementing modern commercial practices. Also, DoD has yet to realize the benefits of initiatives such as the Defense Business Operations Fund and the Corporate Information Management System. The report made no recommendations.

GAO Report No. GAO/NSIAD 94-8 (OSD Case No. 9542), "Base Maintenance Inventories Can Be Reduced," December 15, 1993, stated that the Air Force had not effectively managed bench stocks. Despite the concept that bench stocks should contain frequently used, low cost items, GAO found that about 26 percent of the items in bench stocks at five bases were infrequently used in the last year and about 30 percent of the remaining bench stocks were high cost items. Inventory managers did not know how many of those items were in bench stocks at any one time and as a result, the Air Force was possibly buying new items when excessive items were sitting in bench stocks. GAO recommended that the Air Force establish stockage policies to eliminate bench stock authorizations for items that had no demand during the last year, set a unit price ceiling for adding items to bench stocks, and require, where feasible, the return of existing unused and high cost bench stocks to base supply. DoD agreed with the recommendations and directed the Air Force to take appropriate actions. As of December 9, 1994, actions had not been taken to fully implement the recommendations.

Appendix B. Summary of Prior Audits

GAO Report No. GAO/AFMD-93-8 (OSD Case No. 8674-LL), "Financial Management: Poor Internal Control Has Led to Increased Maintenance Costs and Deterioration of Equipment," January 25, 1993, stated that the internal controls did not always adequately safeguard millions of dollars of weapons and equipment during the maintenance process. Physical inventories were not performed to account for reparable at depots and the Standard Depot System's cost accounting system did not accurately record and report maintenance costs for specific job orders. GAO recommended that the Secretary of the Army direct commanders of major commands to enforce DoD and Army regulations for packaging reparable shipped to maintenance depots and to improve the accuracy of actual costs by job order in the cost accounting system. GAO also recommended that the Director, Defense Logistics Agency, take actions to protect reparable from exposure to the elements and minimize the risk of theft and to upgrade the data and procedures used to ensure accountability for depot inventory. DoD concurred with the GAO recommendations and took actions to correct the deficiencies.

GAO Report No. GAO/NSIAD-92-216 (OSD Case No. 9079), "Excess Inventory Held at Navy Aviation Depots," July 22, 1992, stated that contrary to Navy guidance, the depots had generated and retained large inventories of excess materiel for many years. For FYs 1987 to 1991, annual excess inventory balances ranged from \$40.1 million to \$53.6 million. The large balances remained even though \$138 million of excess materiel had been eliminated from depot records through write-offs during those years. The report also stated that unrecorded materiel was a long-standing problem and that three depots had over \$3 million in usable materiel that was not shown on any inventory records. The report recommended that the Secretary of the Navy direct the Commander, Naval Air Systems Command, to take steps to ensure that unrecorded materiel is identified, returned to inventory control, and not permitted to accumulate. The DoD agreed with the findings and recommendations and stated that the Navy was undertaking several corrective actions to improve depot materiel management. Actions included implementation of initiatives to prevent overordering of materiel and issuing an instruction that would require periodic checks to identify and turn in any unrecorded materiel.

Inspector General, DoD, Report No. 94-117, "Accountability and Control of Materiel at Army Depots," June 3, 1994, stated that Army depot maintenance facilities were maintaining inventory levels that exceeded authorized stockage levels. The depot maintenance facilities had about \$45.4 million of inventory on hand that exceeded requirements. We recommended that revised guidance concerning the stockage level of materiel at maintenance facilities be issued. We also recommended that physical inventories of materiel stored in automated storage and retrieval systems be performed. Additionally, we recommended that policy be issued requiring the depots to submit quarterly reports concerning

the stockage of materiels. The Army agreed with the recommendations and pending publication of revised Army Regulation 750-2, "Army Materiel Maintenance Wholesale Operations," the Army issued a message on October 15, 1994, providing guidance for the procurement of fabrication materiels.

Inspector General, DoD, Report No. 91-034, "Accountability and Control of Materiels at Depot Maintenance Facilities," January 29, 1991, stated that the Military Departments did not adequately account for and control materiels within depot maintenance facilities. Depot maintenance facilities were holding about \$319 million (Army \$2.7 million, Navy \$1.9 million, and Air Force \$314 million) in unrecorded materiels. We recommended that the Military Departments develop plans to inventory materiels at depot maintenance facilities. The Army concurred with the recommendation and the monetary benefits. The Navy nonconcurred with the recommendation and stated that the Navy already had proper controls in place. The Navy concurred with the monetary benefits. The Air Force concurred with the intent of the recommendation but took exception to the sampling method used to compute the value of the unrecorded materiels. During the mediation process, the Air Force agreed to perform a wall-to-wall inventory of the air logistics centers. The Air Force June 26, 1992, followup memorandum, stated that the total cost avoidance realized from the wall-to-wall inventories was \$293 million.

Army Audit Agency Report No. NR 93-453, "Defense Business Operations Fund, Depot Maintenance, Army FY 1992 Financial Statement, Tobyhanna Army Depot," February 11, 1993, stated that the depot's system of internal controls did not provide reasonable assurance that its financial information could be used to prepare financial statements free of material misstatements. Accounting records did not accurately reflect equipment data. In January 1993, instructions were issued to personnel reemphasizing the need to comply with materiel costing requirements to include identifying materiel to applicable job orders. Other agreed upon actions to be taken to strengthen controls were revising shop supervisor performance standards, to include parts management responsibilities; canceling outstanding requisitions before job close-out to minimize residual materiel; and monitoring shop accountability procedures over materiel used on multiple programs.

The Army Audit Agency Report No. NE 89-6, "Automated Storage and Retrieval System," March 24, 1989, stated that materiel stored in the automated storage and retrieval system by the depots was not adequately controlled. Large inventories estimated at as much as \$120 million were not formally accounted for. The lack of accountability also contributed to the accumulation of about \$5.8 million in excess materiels. The Army Audit Agency recommended that the Army review shop stock policies and procedures in Army Regulation 710-2, "Inventory Management," particularly the one involving a 15-day supply level, to determine whether the policies and procedures needed to be changed for maintenance depots with the automated storage and retrieval system. The Deputy Chief of Staff, Department of the Army, agreed with the recommendation and directed the Army Materiel Command to develop a

Appendix B. Summary of Prior Audits

draft new policy for the management of shop stock at depot maintenance activities. The Deputy Chief of Staff also stated that the guidance would be issued in Army Regulation 750-2 by the third quarter of FY 1989 and would address management of shop stock as it pertained to depot fabrication programs. This issue is being addressed in revisions to Army Regulation 750-2.

Appendix C. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
A.1.a.	Management Control. Air Force Materiel Command will issue policies and procedures for procuring and storing maintenance materiel.	Nonmonetary.
A.1.b.	Management Control. Air Force Materiel Command will create an integrated process team to ensure that the Pacer Integrate Program is implemented and that courtesy storage is properly managed.	Nonmonetary.
A.2.a.	Management Control. The ALCs will issue local procedures to comply with Air Force guidance and for implementing the Pacer Integrate Program.	Nonmonetary.
A.2.b.	Economy and Efficiency. The ALCs will be able to reduce the cost of storing materiel by making assets available to item managers to satisfy other known requirements.	Funds put to better use. Monetary benefits cannot be quantified until the ALCs identify materiel to be turned in.
A.2.c.	Management Control. The ALCs will implement management controls to comply with Air Force guidance for controlling unrecorded materiel.	Nonmonetary.
A.2.d.	Management Control. The ALCs will implement management controls to ensure that supervisory personnel are held responsible for managing maintenance materiel.	Nonmonetary.

Appendix C. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
B.1.	Management Control. The ALCs will issue local procedures to comply with Air Force guidance for managing bench stocks.	Nonmonetary.
B.2.	Management Control. The ALCs will implement management controls by turning over the management of bench stocks to depot maintenance support centers.	Nonmonetary.
B.3.	Management Control. The ALCs will implement management controls by reviewing the need to retain items in bench stocks.	Nonmonetary.
B.4.	Management Control. The ALCs will issue policy concerning dollar thresholds for items in bench stocks.	Nonmonetary.

Appendix D. Organizations Visited or Contacted

Office of the Secretary of Defense

Under Secretary of Defense (Acquisition and Technology), Washington, DC

Department of the Air Force

Office of the Air Force Deputy Chief of Staff, Logistics and Engineering,
Washington, DC

Air Force Materiel Command, Wright-Patterson Air Force Base, OH

Sacramento Air Logistics Center, McClellan Air Force Base, CA

San Antonio Air Logistics Center, Kelly Air Force Base, TX

Warner Robins Air Logistics Center, Robins Air Force Base, GA

Defense Agency

Defense Logistics Agency, Alexandria, VA

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense (Acquisition and Technology)
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Under Secretary of Defense (Logistics)
Assistant to the Secretary of Defense (Public Affairs)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

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

Department of the Air Force

Secretary 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 Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, National Security Agency

Non-Defense Federal Organizations

Office of Management and Budget

U.S. General Accounting Office

National Security and International Affairs Division, Technical Information Center

National Security and International Affairs Division, Defense and National

Aeronautics and Space Administration Management Issues

National Security and International Affairs Division, Military Operations and

Capabilities Issues

Chairman and Ranking Minority Member of Each of the Following Congressional
Committees and Subcommittees:

Senate Committee on Appropriations

Senate Committee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on National Security, Committee on Appropriations

House Committee on Government Reform and Oversight

House Subcommittee on National Security, International Affairs, and Criminal
Justices, Committee on Government Reform and Oversight

House Committee on National Security

Audit Team Members

This report was prepared by the Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, Department of Defense.

**Shelton R. Young
John A. Gannon
Joseph M. Austin
John L. Koch
Elizabeth A. Lucas**