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FINANCIAL MANAGEMENT

Internal Control Weaknesses Impede Air Force's Budgeting for Repairable Items



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**Accounting and Financial
Management Division**

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August 26, 1992

The Honorable Donald B. Rice
The Secretary of the Air Force

Dear Mr. Secretary:

This report presents the results of our review of the Air Force's systems for repairable items, which comprise about \$31 billion of Air Force inventories. This review is part of our work in the areas of government that have a high risk of fraud, waste, and mismanagement.

The design of the Air Force's inventory and related financial management systems and the way they are being operated result in high error rates that impede effective budgeting for and purchasing of repairable items. This report discusses these weaknesses, which, in turn, can adversely affect Air Force stock fund and Defense Business Operations Fund operations.

This report contains recommendations to you. As you are aware, the head of a federal agency is required by 31 U.S.C. 720 to submit a written statement on actions taken on these recommendations. You should send the statement to the Senate Committee on Governmental Affairs and the House Committee on Government Operations no later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made over 60 days after the date of the report.

We are sending copies of this report to the Secretary of Defense, the Director of the Office of Management and Budget, interested congressional committees, and other interested parties. Copies will be made available to others upon request.

This report was prepared under the direction of David M. Connor, Director, Defense Financial Audits, who may be reached on (202) 275-7095 if you or your staff have any questions. Other major contributors are listed in appendix II.

Sincerely yours,

Donald H. Chapin
Assistant Comptroller General

Executive Summary

Purpose

According to Department of Defense reports, as of September 30, 1990, repairable items represented about \$31 billion—or 76 percent—of the \$41 billion of Air Force inventories. Repairable items include spare parts, such as aircraft landing gear assemblies, engine parts, and radar sets. This report assesses (1) the accuracy of the Air Force's inventory data used in developing budget estimates and making purchase decisions for repairables and (2) Air Force actions to correct previously reported weaknesses.

Background

The Air Force Logistics Command provides logistics support to other commands through its five Air Logistics Centers. Item managers at the Centers are responsible for the worldwide management of repairable items. Repairables inventory data from bases, depots, maintenance activities, and contractors are reported by a number of automated systems and consolidated in the Recoverable Consumption Items Requirements System, which is used for making budget estimates and purchase decisions. To help ensure data accuracy, item managers are required to reconcile differences between these system-generated balances and manual records that show total quantities purchased, lost, installed, or disposed of since an item initially entered inventory.

Results in Brief

The Air Force's key financial management systems do not generate reliable inventory balances needed to make sound budget estimates and purchase decisions for repairable items. Item managers could not explain \$182 million in differences between the automated and manual records for 82 of the 104 items GAO reviewed. These discrepancies are equivalent to approximately 20 percent of the total dollar value of the 104 items. GAO also found that the item managers made \$134 million in errors and inappropriate adjustments to the manual records. The continued use of inaccurate inventory data could jeopardize two relatively recent Defense-wide financial management improvement initiatives—the financing of repairables through the stock fund and the Defense Business Operations Fund.

The Air Force lacks an overall strategy to reduce inconsistencies between the manual and automated inventory balances. Planned system enhancements will not provide item managers the data needed to resolve differences between two sets of records. In addition, the Air Force's annual reports to Defense pursuant to the Federal Managers' Financial

Integrity Act reports have not disclosed problems in budgeting for repairables so that the problems could receive top management attention.

Principal Findings

Automated and Manual Records Are Unreliable

Item managers could not resolve \$182 million in discrepancies between automated and manual records for 82 of the 104 items GAO reviewed because the systems did not provide the data needed for reconciliation. Although physical counts could have helped to verify the accuracy of the inventory balances, item managers usually did not request that they be performed. According to Air Force reports, many discrepancies occurred because the automated systems lacked controls to ensure that data were properly processed and transmitted.

Item managers failed to correctly record \$82 million of inventory gains or losses in the Air Force's manual records for 54 items of the 104 items GAO reviewed. Inadequate guidance on and supervisory reviews of the manual records resulted in these errors going undetected. In addition, the item managers made unsupported adjustments totaling \$52 million to the manual record balances for 37 items.

Success of Defense Initiatives Depends on Accurate Data

Continuing system problems and inaccurate data will impede implementation of the financing of repairables through the stock fund and the Defense Business Operations Fund—two major Defense-wide initiatives aimed at improving financial management. The existing weaknesses could result in the Air Force stock fund purchasing a mix and quantity of items that do not meet or are in excess of Air Force needs and that also jeopardize the efficient operations of the Defense Business Operations Fund. The Air Force stock fund constitutes 31 percent, or \$17 billion, of the Fund's fiscal year 1992 estimated operating costs of \$54 billion.

Problems Not Adequately Addressed

Air Force efforts to identify causes and correct the systems problems have been fragmented and incomplete. Although the Air Force is planning to automate the manual records and make \$1 billion in automated system enhancements, this will not solve the basic problem of maintaining two sets of worldwide inventory records that cannot be reconciled. Problems will continue because the systems do not provide item managers detailed

data needed to resolve discrepancies between the two sets of records. Private sector airline officials told GAO that they successfully use single, centralized inventory systems to account for, control, and make budget and purchase decisions for repairable items.

FMFLA Report Does Not Disclose Weaknesses

The Air Force's Federal Managers' Financial Integrity Act reports have not disclosed system and internal control weaknesses identified in the budgeting for repairable items. Disclosing known problems is an important means for informing top managers of control weaknesses and allowing managers to monitor corrective actions.

Recommendations

GAO is making recommendations to the Secretary of the Air Force for improving the financial management and internal control systems used to develop budget estimates and make purchase decisions for repairable items. The recommendations focus on (1) implementing controls to help ensure the reliability of inventory data, (2) providing item managers the data needed to perform reconciliations, (3) internal reporting to improve the Air Force Logistics Command's oversight of Air Logistics Centers' reconciliation efforts, (4) revising procedures to eliminate unsupported adjustments and improve management oversight, and (5) reporting the system and internal control weaknesses in the annual Financial Integrity Act report until corrected.

Agency Comments

Defense agreed with some aspects of GAO's findings and recommendations and disagreed with others. Overall, Defense stated that because of system enhancements, the accuracy of the inventory data has improved since GAO's review. Defense also cited system enhancements to be operational in December 1993 to improve the Air Force Logistics Command's ability to oversee the Air Logistics Centers. As a result, Defense believes that internal reporting on the results of the reconciliations and including the weaknesses GAO identified in the Air Force's Financial Integrity Act report are not needed.

Defense did not provide information on specific enhancements and the degree to which completed enhancements have improved the reliability of the data. Defense acknowledged that systems problems continue and the manual and automated records cannot be completely reconciled. For these reasons, GAO believes that the weaknesses discussed in the report are significant enough to be reported in the Air Force's Financial Integrity

Act report. Further, until the planned system enhancement becomes operational, the Air Logistic Centers should report significant unreconciled differences to the Air Force Logistics Command.

Contents

Executive Summary		2
Chapter 1		8
Introduction	Item Managers Have Important Role in Budget Process	8
	Objectives, Scope, and Methodology	11
Chapter 2		14
Inaccurate Inventory Data Used in Budget Requests and Purchase Decisions	Discrepancies Between Automated and Manual Records Are Not Resolved	14
	Automated Records Are Poorly Controlled	18
	Unreliable Manual Records Are Used to Determine Budgets	19
	Unresolved Problems Will Hinder Implementation of Defense Initiatives	22
	Conclusions	24
	Recommendations	24
	Agency Comments and Our Evaluation	25
Chapter 3		28
Actions Insufficient to Ensure Reliable Inventory Data for Budgets and Purchases	Efforts to Improve Inventory Records Have Been Fragmented and Incomplete	28
	Automation of Manual Records Will Not Correct Problems	29
	Air Force's Financial Integrity Act Report Does Not Disclose Weaknesses	32
	Conclusions	32
	Recommendations	33
	Agency Comments and Our Evaluation	33
Appendixes	Appendix I: Comments From the Assistant Secretary of Defense	36
	Appendix II: Major Contributors to This Report	65
Tables	Table 2.1: Differences Between Manual and Automated Records	15
	Table 2.2: Balances in Supporting Systems for the Same Item	17
Figure	Figure 1.1: Repairable Inventory Item Data Flow	10

Abbreviations

AFLC	Air Force Logistics Command
AFLCR	Air Force Logistics Command Regulation
ALC	Air Logistics Center
CFO	Chief Financial Officer
FMFIA	Federal Managers' Financial Integrity Act
GAO	General Accounting Office
LMS	Logistics Management System
OMB	Office of Management and Budget

Introduction

This report addresses the reliability of the Air Force's systems, controls, and procedures for developing its budgets for repairable¹ inventory items, such as landing gear assemblies for aircraft, radar sets, and aircraft engine parts. According to Defense reports, repairable items represented about 76 percent of the \$41 billion of Air Force inventories as of September 30, 1990. In recent years, the Air Force's budget for the replacement of repairable items has exceeded \$1 billion annually. However, at the end of fiscal year 1990, the Air Force determined that \$8 billion of its repairables inventory was not required. We undertook this review as part of our efforts to assess the Department of Defense's inventory management, an area in the federal government that we and the Office of Management and Budget have identified as having a high risk of mismanagement, fraud, and waste.

Item Managers Have Important Role in Budget Process

The Air Force Logistics Command (AFLC) provides worldwide supply support to other Air Force commands and prepares annual repairable item inventory budgets. The five Air Logistics Centers (ALC) under AFLC have each been assigned to centrally manage and prepare budgets for certain categories of repairable inventory items. Item managers at the ALCs are responsible for estimating repair requirements, preparing budgets for each item, and ensuring the reliability and accuracy of the supporting data. Item managers also are responsible for determining the quantity of each item that should be purchased, initiating procurement actions, deciding if items should be disposed of, and controlling the distribution of items.

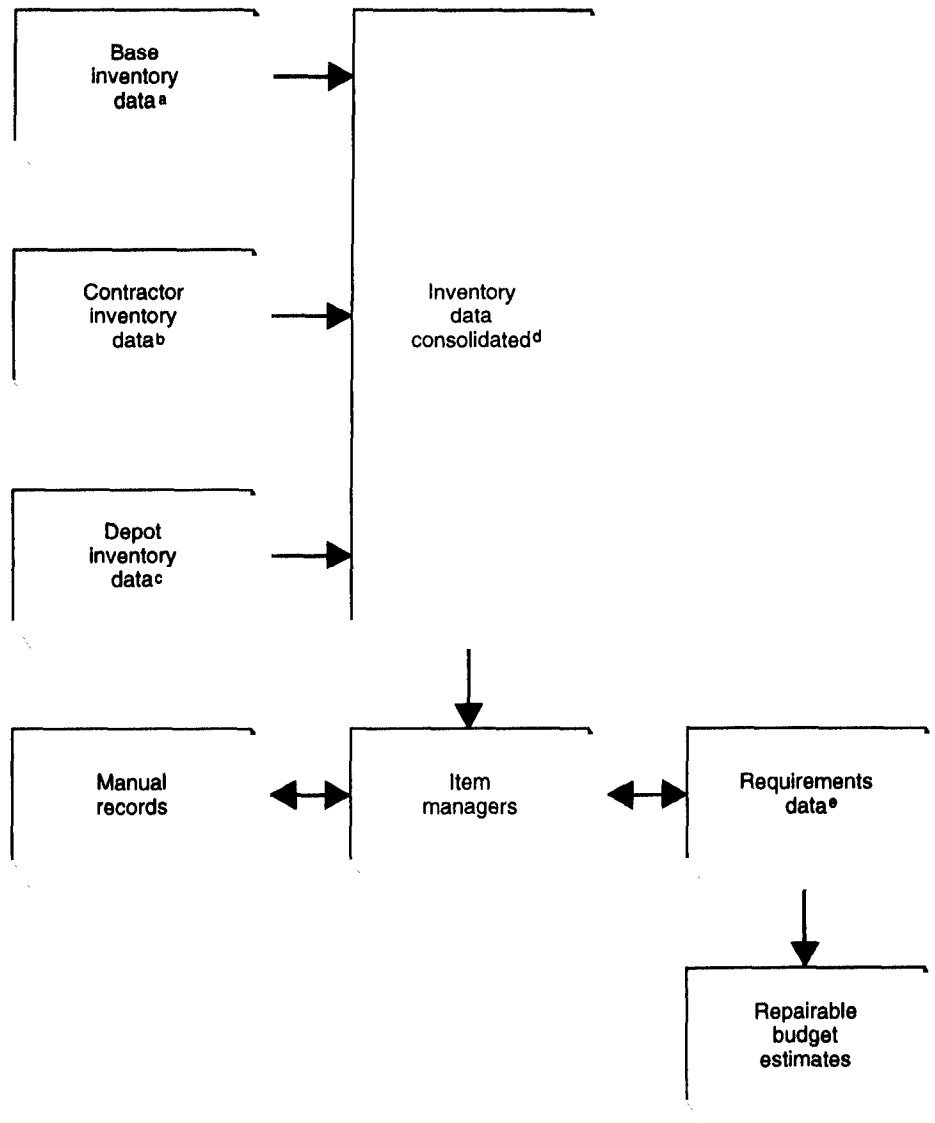
The five ALCs have a total of about 700 item managers to manage worldwide inventories of over 190,000 types of repairable items. This averages about 274 items per manager. However, the actual number of items per item manager varies widely because of the demand for the individual items and the related purchasing activity. For example, a San Antonio ALC official told us that one item manager may manage 30 items while another item manager manages up to 150 items.

To make accurate budget and purchase decisions for repairable inventory items, the item managers need information on the quantity and condition of items on hand worldwide. A number of systems are used to provide inventory quantities, inventory usage, and other data to item managers for estimating future needs. As shown in figure 1.1, inventory data from bases, depots, and contractors are processed and consolidated by several

¹A repairable item is an item that, if worn or damaged, can be repaired for less than the cost of a new item. Defense refers to these items as repairable whether they are new or used.

automated systems which provide inventory data to the item managers and the Recoverable Consumption Items Requirements System. This system contains servicewide totals. In addition, item managers maintain a separate set of manual records, which contains information on total asset quantities purchased, lost, installed, or disposed of since the item became part of the inventory. An item manager obtains data for maintaining the manual records from the automated systems as well as from other sources, such as procurement records and maintenance personnel.

Figure 1.1: Repairable Inventory Item
Data Flow



^aStandard Base Supply System

^bProvided manually or through automated interfaces between contractor and Air Force systems

^cStock Control and Distribution System

^dStock Balance and Consumption Reporting System

^eRecoverable Consumption Item Requirements System (worldwide balances)

The ALCS begin developing the repairable inventory budget 18 months before the start of the fiscal year being budgeted for. For example, the development of the fiscal year 1992 budget started in April 1990 with data as of March 31, 1990. As part of the budgeting process, an AFLC regulation (AFLCR 57-4) requires item managers to reconcile differences between their manual records and the reported worldwide balances shown in the Recoverable Consumption Items Requirements System. Differences can occur when transactions such as issues, receipts, and disposals are not consistently recorded in both sets of records. The objective of the reconciliation is to resolve discrepancies and thus ensure that both sets of records are complete, current, and accurate.

Objectives, Scope, and Methodology

Our primary objectives were to (1) assess the accuracy of inventory data used to develop the Air Force's repairable item budget for procurement and (2) identify and evaluate Air Force actions to correct previously reported weaknesses in the budget development process for repairables.

We worked at Air Force headquarters, Washington D.C.; the Air Force Logistics Command, Wright-Patterson Air Force Base, Ohio; and four Air Logistics Centers located at Robins Air Force Base, Georgia; Tinker Air Force Base, Oklahoma; Kelly Air Force Base, Texas; and Hill Air Force Base, Utah. These Air Logistics Centers accounted for 96 percent of the \$1 billion that the Air Force requested to replace repairable items for fiscal year 1992.

To determine the accuracy of the inventory balances the Air Force used to develop its fiscal year 1992 repairable items budget, we examined records associated with 104 items managed by the ALCS we visited. We selected items with the highest individual budget estimates as of March 31, 1990, as recorded in the Recoverable Consumption Item Requirements System. The estimate for each item exceeded \$1 million. This was the data used by the Air Force Logistics Command to prepare the servicewide fiscal year 1992 repairable items budget. The estimates for the 104 items totaled \$472 million, or approximately 47 percent of the fiscal year 1992 \$1 billion repairable inventory budget estimate. Before selection of the 104 items, we eliminated those items that were in the budget for the first time since there were no existing inventory balances associated with them.

For each item, we examined the item manager's manual records and supporting documentation as far back as 2 years to determine whether (1) sufficient information was available to the item manager to reconcile

the manual records with the reported worldwide inventory balances, (2) variances between the manual records and the worldwide reported balance were reconciled in accordance with an AFLC regulation (AFLCR 57-4), (3) entries on the manual records complied with ALC instructions, (4) calculations were accurate, (5) documents supported adjustments to asset balances, and (6) any errors we identified could have affected the related budget estimates or decision to purchase an item. Whenever we found errors or noncompliance, we attempted to determine their cause through discussions with the item managers and ALC managers.

To identify, in the budget development process, previously reported inventory balance weaknesses, and to determine if Air Force actions address those weaknesses, we reviewed (1) the Air Force Federal Managers' Financial Integrity Act (FMFIA) reports for fiscal years 1983-91, (2) related AFLC and ALC internal control reports for fiscal years 1990 and 1991, (3) our prior audit reports, (4) Defense Inspector General and Air Force Audit Agency reports, (5) AFLC studies on the asset reporting systems, and (6) system documentation for a proposed new requirements system. We also discussed with AFLC and ALC officials the identified problems, ongoing and planned corrective actions to resolve these problems, and planned system improvements to aid asset reconciliation. Further, we discussed the impact that Air Force operations would have on two Defense-wide financial management improvement efforts—financing of repairables through the stock fund and the Defense Business Operations Fund.

To assist in our evaluation of Air Force improvement efforts and to gain a broader perspective of possible processes and methods to ensure accurate reporting of worldwide inventory balances, we met with personnel responsible for maintaining and operating the inventory management systems at three airlines—American, Delta, and Northwest. Each airline maintains about a \$1 billion of repairable and consumable inventory items, and manages 174,000 to 227,000 types of items. Our purpose was to (1) obtain an understanding of how their inventory management systems support their budgeting and compare it with the Air Force's process and (2) discuss what controls their systems have to ensure accurate data on worldwide inventory balances.

We conducted our review from October 1990 through February 1992 in accordance with generally accepted government auditing standards. The Department of Defense provided written comments on a draft of this report. These comments are summarized and evaluated at the end of

chapters 2 and 3 and in other appropriate sections of the report. The comments are included in appendix 1.

Inaccurate Inventory Data Used in Budget Requests and Purchase Decisions

The Air Force maintains duplicate automated and manual worldwide inventory records that are inaccurate and cannot be relied upon for developing budget estimates and making purchase decisions.

Discrepancies between the two sets of records occurred because (1) the Air Force automated systems lacked adequate internal controls over the transmission of inventory data from bases, depots, and contractors and (2) item managers made errors and unsupported adjustments in the manual records. We identified errors in individual inventory balances for 54 of the 104 items we reviewed. These errors resulted in overstatements of \$51.5 million and understatements of \$30.5 million for a total of \$82 million. We could not determine the total effect of these errors on the fiscal year 1992 repairable item budget because the lack of supporting documents, in some cases, precluded us from calculating the correct asset balances and budget requirements.

Reliable inventory balances also are critical for successful implementation of two relatively recent Defense financial management improvement initiatives—the financing of repairable items through the Air Force stock fund and the operation of the Defense Business Operations Fund. Without accurate data, the stock fund could purchase a wrong mix and quantity of repairable items, resulting in oversupply or in shortages that could impair readiness. In turn, the efficient operation of the Defense Business Operations Fund could be hindered since the stock fund is now part of that Fund.

Discrepancies Between Automated and Manual Records Are Not Resolved

For 82 of the 104 items we reviewed, item managers could not explain \$182 million in differences between the automated and manual records. For the 104 items reviewed, the inventory value of the manual and automated record balances totaled \$907.5 million and \$830 million, respectively. The item managers could not resolve these differences because the automated systems did not provide the data needed to do so. In addition, the item managers did not always follow AFLC's reconciliation procedures, including requesting worldwide physical inventories. Instead, they adjusted the requirements data in a manner that failed to disclose significant differences between the automated systems and the manual records.

Millions of Dollars in Unresolved Discrepancies Not Reported

As shown in table 2.1, the item managers could not explain differences of about \$182 million for 82 of the 104 items reviewed. For some items, the automated balance was higher than the manual record balance and, for

others, the manual record balance was higher. Because of such unresolved differences, the Air Force could not be certain of the reliability of repairable item inventory balances it uses to compute budget and purchase requirements. Although Air Force policy states that the reconciliations are a critical process for ensuring reliable inventory data, AFLC officials stated that the results of reconciliations are not routinely reported by the ALCS to AFLC managers. Managers could use knowledge of such differences as indication of potential system problems and the need for physical inventory counts.

Table 2.1: Differences Between Manual and Automated Records

Dollars in Thousands

Center	Differences	Explained	Unexplained
San Antonio	\$107,863	\$ 53,613	\$ 54,250
Oklahoma City	58,567	40,691	17,876
Ogden	92,704	4,119	88,585
Warner Robins	29,539	8,725	20,814
Total	\$288,673	\$107,148	\$181,525

An AFLC regulation instructs item managers to research causes of any differences between manual records and automated reported worldwide balances. The regulation requires item managers to (1) use a form to document the reconciliation process, (2) record the automated reported worldwide balance and the manual record balance, and (3) determine the difference between the manual and automated records and document its resolution. However, item managers did not always follow these procedures. For example, at the Oklahoma City ALC, for 13 of 26 items reviewed, our analysis disclosed that item managers did not record the reported worldwide balances but instead recorded the balance taken from the manual records. We found that turbine blades (unit price of \$495) for the model F110 engine used on the F-16 jet fighter had a reported worldwide quantity of 1,156, but the item manager recorded 6,366 on the reconciliation form, thus failing to disclose a 5,210 quantity difference. In another instance, the reconciliation form indicated 603 turbine blades (unit price of \$1,787) for the model TF30 engine used on the F-111 aircraft, but the reported worldwide quantity was 26. Thus a difference of 577 items was not disclosed.

Item Managers Lack Detailed Data Needed to Resolve Differences

Ideally, the item managers should be able to follow a logical process to resolve differences between automated and manual records. However, item managers do not have access to the individual transactions that result

in changes to balances between reporting periods. This detail is needed to determine what transactions may have been recorded in one record but not the other. Further, they are not able to compare automated and manual inventory balances for individual reporting activities to isolate where reporting differences exist. Without this information, it is difficult, if not impossible to perform the reconciliation effectively.

We found that item managers:

- Could not compare asset balances by reporting activity for the two sets of records. The automated worldwide inventory balances were reported to the item manager by activity. However, the manual record did not show comparable inventory balance by reporting activity, and the balance cannot be easily determined from other available data.
- Did not have access to all individual supply transactions, such as issues, receipts, and physical inventory adjustments, from the reporting activities.
- Could not determine the condition of unreconciled assets recorded in manual records because only the automated worldwide inventory balances identified the condition of each inventory item. Condition information is critical in order to determine the number of items that should be budgeted for, purchased, or repaired. In commenting on a draft of this report, Defense officials stated that unreconciled assets are presumed to be serviceable, a practice which may result in understated repair and/or buy quantities.

To explain differences between the manual and automated records, item managers used inventory balances generated and reported by the systems supporting the worldwide system. However, we found that inventory balances from these supporting systems that should agree often did not agree. Without any certainty as to which balances were correct, the item managers would select the balances that reduced differences. For 26 items from the Oklahoma City ALC, we compared the March 31, 1991, inventory balances appearing on different reports from the supporting systems. We found substantial differences for 23 of the items. For instance, for an item with a unit price of \$39,515, one supporting system report showed that 101 items were available, another supporting system report showed none was available, and the automated worldwide reporting system showed that 18 were available at all locations. For another item with a unit price of \$1,787, the automated worldwide reporting system showed 3,442 on hand, while a supporting system with worldwide balances showed 2,082 on hand.

Comments from several Air Force officials indicate that inventory data reliability has been an ongoing problem. For example, during an August 1990 teleconference between AFLC and its five ALCS, an ALC official commented that there are hundreds of examples of items whose inventory balances differ anywhere from 100 to 500 between the automated worldwide reporting system and its supporting systems. Further, an AFLC official provided, as shown in table 2.2, an example of how four different reports showed different inventory balances ranging from 120 to 349 for the same item as of December 31, 1989.

Table 2.2: Balances in Supporting Systems for the Same Item

Air Force report	Quantity
Monthly Asset Balance Listing	280
Weekly Transaction Listing	334
Quarterly Worldwide Asset Report	120
Daily Supply Transaction Register	349

The balance should have been the same in each system. However, there was no certainty that any one of the four reported balances was correct.

Physical Inventories Not Requested

Although 27 of the 104 items we reviewed met the AFLC regulation criteria for performing worldwide physical counts, item managers did not request such counts to resolve the difference for any of the items. AFLC regulation (AFLCR 57-4) provides for worldwide physical inventories of items when unreconciled differences between the two sets of records exceed 10 percent of the manual record balance and \$1 million. These worldwide physical inventories would be in addition to any counts made at ALCS and bases throughout the year.

Warner-Robins was the only ALC of the four we visited to request worldwide physical inventories during fiscal year 1990. None of the ALCS requested such inventories during fiscal year 1991. An AFLC official pointed out that worldwide physical inventories would not provide timely information for item manager decisions. The AFLC official explained that the coordination for the Warner-Robins requests took almost 3 months because the counts must be approved by AFLC and the requests extensively coordinated between contractors in possession of repairable items, AFLC, ALCS, and bases. Further, AFLC regulation (AFLCR 67-9) on physical inventory states the item managers should request a physical count only after all other means of resolving differences have been exhausted and the accuracy of balances is suspect.

In response to our April 1991 report¹ on internal controls at the ALCS, AFLC officials maintained that procedures exist to prevent inventory errors in the requirements process. In the report, we pointed out that the ALC inventory balances have inaccuracies due to processing problems, improper use of existing control systems, and ignored and uncorrected errors. AFLC officials responded that the ALC inventory balances are corrected through the day-to-day supply operations and the ongoing physical inventory process at individual sites. However, we noted that these actions do little to resolve discrepancies between the automated and manual records.

Automated Records Are Poorly Controlled

The Air Force continues to face widespread problems which impair the reliability of inventory data maintained in its automated worldwide reporting systems. We found that the supporting systems lack adequate internal controls over the transmission of data between them. For example, the supporting systems do not contain a control confirming the total quantities and dollar value of items sent from one system or subsystem and received by another system or subsystem. Such controls are essential to help ensure that all data are accurately processed.

Serious internal control weaknesses have been previously identified with the Air Force's systems. For example:

- In 1988, AFLC concluded that up to 25 percent of the inventory data from one base was not reported to AFLC because (1) magnetic tapes for transferring data between supporting systems were not processed and (2) an AFLC system programming error prevented certain transactions from being processed. Also, transaction transmissions could not be verified. Although AFLC changed the systems to correct these problems, a 1990 study found that over 5 percent of the data was still being lost during transmission. In addition, an AFLC official told us that rejected transactions were not being corrected and retransmitted.
- According to AFLC officials, inventory data from depots has been inaccurately reported because of missing computer software codes and errors in the computer software logic. As we reported² in February 1992, AFLC found Stock Control and Distribution System programming errors that resulted in the duplicate reporting of about \$2.6 billion of inventories.

¹Financial Audit: Financial Reporting and Internal Controls at the Air Logistics Centers (GAO/AFMD-91-34, April 5, 1991).

²Financial Audit: Aggressive Actions Needed for Air Force to Meet Objectives of the CFO Act (GAO/AFMD-92-12, February 19, 1992).

- In December 1990, the Air Force Audit Agency reported³ that, in order to meet the implementation schedule, the Air Force accepted major subsystems of the Stock Control and Distribution System—a key system supporting the worldwide reporting of inventory data and developed under AFLC's Logistics Management Systems Modernization Program—before the subsystems were fully tested. The audit agency found that design was incompletely developed, testing of major interfaces was not complete, transaction testing was incomplete, and identified deficiencies had not been corrected. Because of this report, AFLC delayed implementing the subsystems for almost 6 months to correct the deficiencies.
- AFLC officials also acknowledged that efforts to correct identified problems have been hindered by the lack of current system documentation describing how the supporting systems are supposed to work. At the time of our review, one of the subsystems had been in operation since 1987, but the system documentation still had not been updated to provide an initial understanding of the system. An AFLC official stated that documentation for other supporting systems had not been updated for 10 to 15 years because systems documentation was a low priority.

Weaknesses with the automated systems have been a longstanding problem. According to ALC officials, the problem of inaccurate inventory data has been looked at for over 6 years but not corrected. As long as these systems problems continue, the item managers are faced with an overwhelming task of trying to correct bad data so that they can prepare a reliable budget estimate for repairable items.

Unreliable Manual Records Are Used to Determine Budgets

AFLC regulation (AFLCR 57-4) requires item managers to use inventory balances on the manual records in determining budgetary requirements when differences between the manual record and the reported worldwide inventory balance cannot be resolved. We found that item managers inappropriately adjusted inventory balances in the requirements system in attempting to resolve the \$182 million of differences between the manual and automated records. However, the item managers had erred in recording gains and losses and made inappropriate adjustments totaling \$134 million to the inventory balances on the manual records. We also found that guidance on maintaining manual records and performing supervisory reviews of them to detect and correct errors was inadequate.

³Review of Design and Development Activities for the Stock Control and Distribution System (AFAA/Project 0196611, December 31, 1990).

Inventory Gains and Losses Not Accurately Recorded

For 54 of the 104 items we reviewed, the item managers had been informed of but did not record almost \$82 million of gains and losses on their manual records during the most recent 2-year period for which supporting documentation was available. An inventory loss occurs when an item is no longer available for use, such as when the Air Force condemns or disposes of an item, or when physical inventories find fewer items on hand than recorded. Inventory gains occur through additional procurement or when physical inventories reveal items not recorded. Not recording such adjustments can lead to inventory excesses or shortages. For example:

- Losses of 9,546 condemned engine blades (with a unit price of \$165) for the F100 engine were not entered on the manual record. According to the item manager, the information was ignored because recording the condemned items as an inventory loss would have increased the difference between the manual and automated records from \$0.2 million to \$1.8 million.
- The inventory balance used in determining requirements for propeller blades (unit price of \$10,279) used on the C130 aircraft was overstated because 181 condemned blades were not recorded as losses.
- One ALC had to expedite the purchase of additional F100 engine parts with a unit price of \$518 because it did not have sufficient inventory on hand. This shortage occurred because the losses had not been recorded on the manual record, overstating the balance by 70.
- The inventory balance for another F100 engine part was understated by 2,354 because gains and losses were erroneously recorded. As a result, the ALC erroneously computed a purchase requirement for 4,884 additional parts, which inflated the budget estimate by over \$3 million.

Unsupported Adjustments Further Erode Data Reliability

Unsupported adjustments to the manual record inventory balances to reduce differences further diminished the accuracy of the data used for budget requests and purchase decisions. The item managers made \$52 million of unsupported adjustments to the manual record inventory balances for 37 of the 104 items we reviewed. These adjustments occurred because an AFLC regulation allows manual record balances to be adjusted by the amount of unresolved differences between the manual and automated worldwide inventory balances when differences cannot be resolved for three consecutive quarters. For example, because of this requirement, item managers reduced the balances for

- an F-15 radar part (unit price of \$254,334) from 149 to 130, a difference of 19, or over \$4.8 million;
- a telemetry pack (unit price of \$6,231) from 1,220 to 1,131, a difference of 89, or \$554,559; and
- an F100 engine part (unit price of \$21,373) from 2,401 to 2,380, a difference of 21, or \$448,833.

These adjustments could inappropriately decrease or increase the magnitude of any subsequent differences that may occur. Further, the item manager may make these adjustments without any review or approval by management.

ALC Guidance Is
Inconsistent and Manual
Record Reviews Are
Inadequate

AFLC did not ensure that the ALCs consistently implemented an AFLC regulation (AFLCR 57-4), and the regulation did not require supervisory review of documentation supporting the manual records. Some ALCs had supplemented AFLC's regulation in order to provide detailed guidance on (1) documentation procedures and (2) the data sources item managers should use to record gains and losses on the manual records. However, the ALCs' instructions on maintaining the manual records were not consistent with the AFLC regulation and even varied among the ALCs.

For example, one ALC appropriately advised item managers to record on their manual records inventory adjustments based on periodic counts of items at individual Air Force bases and the depots. In contrast, another ALC inappropriately advised them to only record the inventory adjustments from the depots because the reporting of the base adjustments was unreliable. Unless all adjustments are recorded on the manual records, differences between them and the worldwide reported inventory balances will continue to occur.

In addition, because AFLC guidance did not advise item managers what data to use as a basis for recording losses, some item managers were not aware of available source data. For instance, the AFLC regulation advises the item managers to record as losses shipments to repair activities that do not report assets, but it did not identify the source(s) for this data. The Air Force's quarterly stock balance and consumption report identifies shipments to nonreporting activities, but two item managers we interviewed stated that they were unaware of this report or were never taught how to use it.

Further, AFLC regulation and ALC instructions on reconciliation did not require supervisory review of the manual records to help detect and correct errors. As a result, none of the ALCS we visited required supervisors to routinely review manual records for accuracy. The value of such reviews was demonstrated in 1989 at the Warner-Robins ALC. That onetime review found that the item managers, in entering data in the manual records, had erred about 50 percent of the time, including not documenting asset losses, incorrectly adjusting inventory balances, and making mathematical errors. The ALC subsequently provided additional training to the item managers. Other ALCS had not done similar reviews.

Although the AFLC regulation requires personnel in finance to review the documentation for items being purchased or disposed of, these reviews also do not focus on manual record accuracy. Further, even if they had, the opportunity to correct and detect errors would have been reduced because AFLC gave the ALCS the flexibility to set their own review level thresholds in July 1990. Three of the four ALCS we visited had increased the threshold from \$1 million to \$5 million. The other ALC maintained the \$1 million review level that existed prior to July 1990.

Unresolved Problems Will Hinder Implementation of Defense Initiatives

Continuing system problems and internal control weaknesses could adversely affect two recent Defense initiatives to improve financial accountability and management—the financing of repairables through the Air Force stock fund and the consolidation of various Defense activities under the Defense Business Operations Fund. Reliable Air Force worldwide inventory balances for determining budgets, purchases, and repairs are critical to the success of these initiatives.

Prior to 1990, the Air Force used procurement appropriations to purchase repairable items, which were provided free to customers. In December 1989, the Office of the Secretary of Defense directed the Air Force to begin financing repairables through its stock fund, and the Air Force began implementation in October 1990. Under the stock funding of repairables, customers use Operation and Maintenance appropriations to buy repairable items from the stock fund. Defense expects the stock funding of repairables to save money by providing customers incentives to more judiciously procure, account for, and control these items. Since sustaining stock fund cash depends on revenues generated from sales to customers, it is important that the stock fund base purchase decisions on reliable estimates of customers needs. Purchasing and storing unneeded items generate additional costs for the fund. To ensure solvency, the fund passes

these costs on to the customers through higher prices on all items. The stock fund's customers might then need additional Operations and Maintenance appropriations to pay the increased prices.

Deficiencies in stock fund operations have led to increased prices for stock fund customers in recent years. Our April 1991 report⁴ noted that from fiscal years 1987 to 1989, the Air Force stock fund had increased its charges to customers from 13 percent to 20 percent, largely due to operating losses resulting from unbilled sales and disposal of excess and obsolete items. If not corrected, the deficiencies we identified could also lead to increased charges for repairable items. Because of unreliable inventory data, the stock fund also faces the risk that it may not budget for and purchase the right mix and quantities of items, which can lead to unrequired inventory. Of the \$11 billion the Air Force has identified as unrequired inventory at the end of fiscal year 1990, \$8 billion, or 73 percent of this amount, consisted of repairable items.

The solvency of the Air Force stock fund will directly affect the operations of the Defense Business Operations Fund because the Air Force stock fund is part of the Defense Business Operations Fund. On October 1, 1991, Defense established the Defense Business Operations Fund, which consolidated the nine existing Defense stock and industrial funds and four other Defense activities.⁵ The Air Force stock fund costs constitute about 31 percent or \$17 billion of the Fund's fiscal year 1992 estimated operating costs of \$54 billion. According to Defense, each stock and industrial fund will keep its identity and continue to be operated and managed by the military services. Defense has stated that the primary goal of the consolidated Fund is to provide products and services to operating components, such as a military base or a fighter squadron, at the lowest cost. The total costs of providing products and services becomes the basis for charging customers. We have previously testified⁶ that if the Fund incurs losses they should not be passed on to the Funds' customers since this would distort the annual cost of operations.

In commenting on a draft of this report, Defense stated that it is appropriate for the activity involved to pass losses and gains on to its customers in the form of higher or lower prices. However, we believe that

⁴GAO/AFMD-91-34, April 5, 1991.

⁵Defense Finance and Accounting Service, Industrial Plant Equipment Services, Defense Reutilization and Marketing Service, and Defense Technical Information Service.

⁶Defense's Planned Implementation of the \$77 Billion Defense Business Operations Fund (GAO/T-AFMD-91-5, April 30, 1991).

altering prices to cover past gains and losses diminishes the incentive for the Fund to develop accurate budget estimates and operate efficiently. A requirement to request additional funds from the Congress, to keep the Fund solvent, and to report any gains would give the Congress an opportunity to review the Fund's operations, determine the reasons for the losses and gains, and evaluate the effectiveness of Defense's management of the Fund.

Conclusions

Due to widespread systems problems, the Air Force did not have reliable data to develop budget estimates for repairable items. The automated systems provide inaccurate data because they do not have adequate controls over the processing and accumulation of worldwide inventory data. Further, numerous errors and unsupported adjustments by the item managers diminished the reliability of the manual records. In addition, despite millions of dollars of differences between the automated and manual records, the item managers did not request worldwide physical counts of the items to resolve discrepancies and to help ensure that reliable inventory balances were used in determining requirements.

Management did not adequately oversee reconciliations of manual and automated records. Therefore, the repairable item budget lacks credibility and purchase decisions are made using unreliable data. The continued lack of accurate inventory data, reliable financial management systems, and management oversight will contribute to ineffective financial operations, seriously jeopardizing the success of major Defense initiatives intended to improve financial management and decrease spending for goods and services. If not corrected, these practices may result in the purchase of items that are not needed, thus wasting taxpayer dollars, or in shortages that impair readiness.

Recommendations

We recommend that the Secretary of the Air Force direct the Air Force Deputy Chief of Staff for Logistics to:

- Require that ALCS report to AFLC management the differences between the manual and automated records before and after reconciliation efforts.
- Determine the most efficient way to provide item managers ready access to the inventory management systems data they need for the required reconciliation of worldwide inventory balances. This data should include the receipt, issue, and physical inventory adjustment transactions for each reporting activity.

- **Require AFLC to (1) comply with policies for performing worldwide physical inventories for items that have significant unresolved differences between the manual and automated records and (2) revise policies to eliminate unsupported adjustments to the manual records and the requirements system. The results of physical inventories need to be reported directly to the item manager.**
- **Implement controls to ensure that data is completely and correctly transmitted between the automated systems and/or subsystems.**
- **Revise AFLC procedures to provide all item managers consistent detailed guidance for maintaining the manual records, including (1) the sources from which an item manager should record losses, gains, and adjustments to the manual record and (2) specific instructions on how to document changes to the manual record inventory balances.**
- **Require the ALCS to periodically (1) review manual records for errors and compliance with instructions and (2) report the results to AFLC.**

Agency Comments and Our Evaluation

Defense officials agreed with many aspects of our findings, but disagreed with parts of our recommendations. Overall, Defense asserted that the problems are not as serious as the report concludes because the 104 items we reviewed comprised less than 1 percent of the total number of the Air Force's repairable items reviewed each quarter. Although the number of items we reviewed was small, their value was significant in terms of the fiscal year 1992 budget (\$472 million out of \$1 billion). Similarly, the \$182 million worth of discrepancies between the manual and automated records are significant, over 20 percent, when applied to the inventory balances for these items. For the 104 items reviewed, the inventory value of the manual and automated record balances totaled \$907.5 million and \$830 million, respectively.

Regarding our recommendations on reporting results of reconciliations to AFLC, Defense stated that AFLC does not need to receive information on reconciliation efforts because a mechanism exists for reporting system problems as they are identified. Defense officials acknowledged that the current reporting process does not provide AFLC an indication of the magnitude of the dollar difference between the two sets of records, but, by December 1993, AFLC is to have automated capability to identify differences between the two sets of records. This planned action is in keeping with the intent of our recommendation. However, until this oversight capability is operational, the ALCS should report significant differences to AFLC. Further, AFLC relies on the manual record when differences are not resolved, but AFLC managers will not have any measure

of reliability unless the results of manual record reviews also are reported to them.

Reports that we are recommending could serve as performance indicators to provide management trends on how well the system enhancements are working and if problem areas continue to exist. The reports need not be all inclusive, but could highlight for management the significant dollar differences for those items to be budgeted for or purchased.

Regarding our recommendation on the need for uniform AFLC guidance to ALCS on reconciliation requirements, Defense stated that the ALCS should have flexibility in determining what and how reviews should be done. However, we believe that the ALCS need to follow a uniform methodology in order to provide AFLC consistent application of internal controls and comparable indicators of performance. If each ALC performs the reviews differently, it will be difficult for AFLC to identify where problems exist and what change in procedures may be needed. Without sufficient management information on the reliability of inventory data, breakdowns in internal controls may not be identified and managers will not be in a position to make effective decisions on where improvements are needed.

Regarding our recommendation on providing all supply transactions to item managers, Defense disagreed that the item managers need all supply transactions to perform an effective reconciliation, noting that there are thousands of such transactions daily. Nevertheless, Defense acknowledged that without the item managers obtaining all supply transactions there cannot be a complete reconciliation of the differences between the manual and the automated records. As pointed out in the report, the supply transactions are needed to determine what has been recorded in one record but not the other. In addition, not being able to compare the manual and the automated records by reporting activities precludes the Air Force from identifying where discrepancies occur and the number of repairable items in serviceable or unserviceable condition. Such information is essential in making corrections, preparing accurate budget estimates, and making purchase decisions. Although, it may not be feasible to provide item managers copies of all supply transactions, it is essential that all such information be readily available to them. Our recommendation has been modified to reflect this.

Regarding our recommendation on worldwide physical inventories, Defense does not believe that such inventories would be beneficial due to continuing system problems. We agree that until systems are improved,

errors will continue to occur. However, given the inaccurate data in the manual records and the automated systems, physical inventories are the only means through which the Air Force can, at a given point, verify the accuracy of the manual records which are used by the Air Force to make budget estimates and purchase decisions. According to AFLC policy, physical inventories should be requested to resolve significant differences. With the data problems the Air Force is experiencing, physical inventories should be emphasized more, not less.

Actions Insufficient to Ensure Reliable Inventory Data for Budgets and Purchases

Past efforts to resolve existing system problems have been fragmented and incomplete. Further, AFLC's Logistics Management Systems (LMS) Modernization Program, which is planning to spend about \$1 billion, has not addressed the fundamental problems associated with maintaining duplicate sets of records. Also, the Air Force's reports to Defense pursuant to the Federal Managers' Financial Integrity Act have not adequately disclosed the problems the Air Force faces in budgeting for repairable items. This could delay correction of the problems because they may not receive top management attention.

The Air Force may be able to identify some solutions to its longstanding problems by examining practices followed by private sector airlines which must account for, control, budget, and buy repairable items, similar to the Air Force. Rather than relying on numerous automated systems and manual records for inventory data, the airlines use a single, centralized inventory management system that provides worldwide inventory data.

Efforts to Improve Inventory Records Have Been Fragmented and Incomplete

Past studies have not always identified the specific causes and necessary corrective actions because they have focused on narrow aspects of the problems. For example, during 1987 and 1988, AFLC studied the reporting of inventory data from bases, depots, maintenance activities, and contractors to the Recoverable Consumption Items Requirements System. However, only the study related to bases identified specific causes for inaccurate inventory data, which the Air Force acted to correct.

In June 1990, AFLC initiated another effort to reevaluate the transmission of inventory data from the bases and depots, and results showed that improvements had been made but that problems remained. However, only part of the study dealing with base-level reporting was completed, and it did not identify the specific cause(s) for the remaining problems. Also, AFLC officials told us that because the study team's approach was not coordinated with all the appropriate offices responsible for the systems, the study team's initial analysis was flawed.

Current AFLC efforts that began in 1991 to resolve the existing systems problems are receiving greater top management attention. In May 1991, the office responsible for the requirements systems informed the AFLC commander of the problems' seriousness. The commander subsequently formed the Requirements Interface Process Improvement Team in June 1991 to identify deficiencies, research causes, and correct the system problems for data reported by depots. AFLC and the Air Force Logistics

Management Center also are reexamining the reporting of base-level data. According to AFLC officials, a project manager has been assigned with authority and responsibility for ensuring that the systems problems are resolved. Further, top AFLC management and the ALCS receive quarterly reports on the progress of the efforts.

In commenting on a draft of this report, Defense officials stated that the Requirements Interface Process Improvement Team initiated and made system changes during 1991 and 1992 that have improved the data in the automated systems since our review was completed. Defense did not provide information on the degree to which specific system changes improved the reliability of the inventory data. Defense officials acknowledged that AFLC continues to research and resolve system problems.

Automation of Manual Records Will Not Correct Problems

AFLC is planning to automate the item managers' manual records as part of its Logistics Management Systems Modernization Program. If successfully implemented, this enhancement could help reduce the item managers workload because most of the data entries and computations would be done automatically rather than manually. It should also help reduce recording and mathematical errors that occur more easily when using manual records.

However, this enhancement will not address the fundamental difficulties associated with maintaining two parallel sets of records. Even after the manual record is automated, the item managers will still be required to resolve any differences between the two sets of records. The reporting of inventory data by bases, depots, and contractors will continue to use the existing systems. The current system enhancements do not provide for the item manager to receive the detailed data needed for resolving differences between the records. Without the individual transactions that have affected the records, resolving differences will continue to be an extensive, labor intensive, time-consuming effort that does not provide better assurance as to the reliability of the inventory data used to make budget estimates and purchase decisions. According to San Antonio ALC officials, item managers spend about one-third of their time attempting to correct inaccurate data in the inventory reporting systems.

In the long term, we question the need to maintain two sets of inventory records. This philosophy is not consistent with the Defense Corporate Information Management efforts to standardize systems, eliminate

redundant systems, and improve the quality and consistency of data in Defense's information systems. Further, maintaining a single set of integrated records with proper internal controls to ensure accuracy could provide several benefits. For example, a single set of records would

- simplify the entire process so that the (1) item managers would not need to reconcile differences between records and (2) systems would not need to provide the enormous amounts of detailed data to perform these reconciliations;
- reduce the reporting, maintenance, and use of redundant data in the automated systems, which require additional internal controls to ensure their reliability;
- facilitate updating worldwide inventory balances based on the results of physical inventories; and
- facilitate the integration of budgeting and accounting, which we and OMB have required in agency financial management systems for many years, and which has recently been reemphasized by the Chief Financial Officers Act of 1990.

Since improvement efforts cut across organizational lines and involve various systems, it is critical that someone have overall authority and responsibility for ensuring that fundamental problems are resolved. The CFO Act stipulates that the CFO for Defense is responsible for overseeing all financial management activities and systems design, including the implementation of agency asset management systems. Defense's plan for implementing the CFO Act provides that the assistant secretaries for financial management of the military departments and the comptrollers of Defense agencies direct and manage financial management activities of their components, consistent with financial management policies of the Defense CFO. Thus, the Air Force's Assistant Secretary for Financial Management, along with the Defense CFO, is responsible for overseeing efforts to improve the Air Force's inventory management systems and ensure better integration of budgeting and accounting. In commenting on a draft of this report, Defense stated that the problems exist with logistics systems and therefore are not the responsibility of the comptroller. However, we believe that since the data are critical to developing reliable budgets, the comptroller should be involved in correcting the system problems. The Air Force Audit Agency pointed out in an April 1991¹ report that many logistics systems, which include the repairable item inventory systems, contain financial management information. Furthermore, the CFO

¹Review of Internal Controls for Financial Management Information Within Air Force Logistics Command's Logistics Management Systems (AFAA Project 0196618, April 1, 1991).

Act 31 U.S.C. 902(a), provides that the Defense CFO shall “direct, manage, and provide policy guidance and oversight of” Defense asset management systems, including systems for “property and inventory management and control.”

In attempting to find solutions to its problems, the Air Force may benefit by considering inventory management practices followed by private sector airlines in their management and control of repairable inventory items. In a June 1991 report,² we pointed out that companies have found it useful to compare their practices with those of other organizations to determine which practices are best—a technique referred to as benchmarking. Successful benchmarking requires looking outside the organization, identifying organizations that excel in a particular process or practice, and determining if the practices can be applied to improve performance.

Similar to the Air Force, the three airlines we visited—American, Delta, and Northwest—(1) operate central inventory management and procurement functions, (2) need to maintain worldwide knowledge and accountability of repairable items, (3) perform aircraft overhauls at central facilities, and (4) perform aircraft maintenance at several locations throughout the world and maintain inventories at these locations. However, the three airlines rely on the inventory balances recorded in a single system. Physical inventories are an important control in their systems, and they are facilitated by a single, centralized system.

According to airline officials, their systems (1) link budgeting, accounting, and supply information through a single data base and (2) provide users from all worldwide locations access to the same data through on-line computer terminals. The inventory records in these airlines’ systems are used to supply items to maintenance, prepare budgets, and make purchase decisions. They are periodically reconciled with the general ledger. These central records show the total quantity and dollar value of each repairable item on hand at each location (maintenance facility or airport), at contractors for repair, and in transit between locations. Airline systems also incorporate data from various functions such as inventory status and tracking, procurement, and engineering. For each item, the records also show how many have been used at each location and a history of purchases that includes the unit cost for each purchase.

²Defense Logistics: Observations on Private Sector Efforts to Improve Operations (GAO/NSIAD-91-210, June 13, 1991).

Air Force's Financial Integrity Act Report Does Not Disclose Weaknesses

Although the AFLC commander was aware of the problems in the budgeting for repairables, the AFLC's fiscal year 1991 Statement of Assurance to the Secretary of the Air Force did not disclose the weaknesses. As a result, the problems were not considered for inclusion in the Air Force's fiscal year 1991 Federal Managers' Financial Integrity Act report to the Secretary of Defense, and Defense in turn did not report them to the President and the Congress.

FMFIA was enacted in September 1982 to strengthen internal control and accounting systems throughout the federal government and to help reduce fraud, waste, abuse, and misappropriation of federal funds. The act and implementing OMB-guidance holds agency managers accountable for correcting noted deficiencies and requires that agencies annually identify and report internal control and accounting system problems and planned remedies. These reports allow problems and related corrective actions to receive top management attention.

In response to previously recognized weaknesses with ALC inventory record accuracy, the Air Force's fiscal year 1991 FMFIA report stated that the Air Force completed implementing systems, such as the Stock Control and Distribution System, in August 1991 to help correct weaknesses in the ALCs' inventory accuracy. According to the report, system enhancements will provide better capability for the item managers to detect computational errors and reconcile worldwide assets. However, as pointed out earlier, the system enhancements do not fully address the problems. Further, the Air Force Audit Agency reported³ in April 1991 that AFLC did not have an effective internal control review program that implements FMFIA requirements for its Logistics Management Systems Modernization Program. This program involves some of the systems used to compile the worldwide inventory balances and compute requirements for budgeting and purchasing. The AFLC financial management official in charge of AFLC's internal control review program could not explain why recognized problems in budgeting for repairables were not disclosed in the Commander's statement of assurance to the Secretary of the Air Force.

Conclusions

Past Air Force efforts to resolve system problems with the reporting of inventory data have not been fully successful. Current efforts do not address fundamental problems that diminish the reliability of inventory data used to make budget estimates and purchase decisions. The Air Force will continue to maintain duplicate records of worldwide inventory

³AFAA Project 0196618, April 1, 1991.

balances which item managers will still have to reconcile without the data needed to resolve differences between two inventory records. The Air Force may find solutions to some of its long-standing problems by examining practices followed by private sector airlines whose automated systems integrate accounting, budgeting, and supply records. Also, the Air Force has not disclosed in its annual Federal Managers' Financial Integrity Act reports internal control weaknesses in its budgeting process.

Recommendations

We recommend that the Secretary of the Air Force direct the Air Force Assistant Secretary for Financial Management and the Air Force Deputy Chief of Staff for Logistics to jointly do the following:

- Develop a comprehensive, long-term strategy for improving processes and designing systems for these processes that would better ensure the reliability of repairable items inventory data. The processes and systems should eliminate dual recordkeeping, include controls to ensure accurate recordkeeping, and link accounting, budgeting, and inventory information.
- Include in the Air Force's Financial Integrity Act report to Defense material internal control weaknesses in the reliability of worldwide repairable item inventory balances.

Agency Comments and Our Evaluation

Defense agrees that the Air Force needs to develop a comprehensive, long-term strategy for improving processes and designing systems to ensure the reliability of repairable item inventory data. As part of this strategy, the Air Force has efforts underway that are aimed at ensuring that accurate data is passed between the various systems. However, Defense disagrees that the manual records should be eliminated because it believes that they serve as an internal control for the automated systems. We believe that once the existing system problems are corrected and the systems are working as intended, the manual records should be phased out. As discussed in chapter 3, keeping duplicate sets of records is inefficient and increases opportunities for errors. In addition, the current practice of performing the manual reconciliation does not serve as an internal control for the automated systems because the reconciliation cannot be completed, and, thus, there is no assurance that either record is correct.

Defense also disagreed that the problems discussed in the report should be reported in the Air Force's Federal Managers' Financial Integrity Act report. We continue to believe that the matters discussed are serious

enough to be reported. As discussed in chapter 2, significant dollar differences between the manual record and automated system could not be reconciled. Further, the item managers failed to record inventory gains and losses in the manual records used in making budget estimates for over one-half of the items we reviewed. In its comments, Defense acknowledged that over 60 system changes have been made since 1991 to address data accuracy problems. Further, Defense stated that AFLC has not acknowledged problems associated with its budgeting for repairable items. Nevertheless, Defense's comments pointed out that the systems problems were well known to the Air Force. Defense should report the weaknesses that caused these discrepancies until corrective actions have been implemented and tested for effectiveness.

Comments From the Assistant Secretary of Defense

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



PRODUCTION AND
LOGISTICS
(L/SD)

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301-8000

9 JUL 1992

Mr. David M. Connor
Director, Defense Financial Audits
Accounting and Financial Management Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Connor:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) Draft Report, "FINANCIAL MANAGEMENT: Internal Control Weaknesses Impede Air Force's Budgeting for Repairable Items," Dated May 7, 1992 (GAO Code 903124) OSD Case 9065.

Although the Department generally agrees with the manner in which the draft report describes the role of the item manager in the budget process, the Department does not agree that the existing problems with the Air Force inventory of repairable items are great enough to cause the inventory records to be unreliable or to impede implementation of the Defense Business Operations Fund.

The Department acknowledges that there are differences between balances reflected in the manual records of repairable items maintained by item managers and the balances shown in automated inventory records. However, the differences identified in the GAO draft report are based on a very limited, highly selective sample of items from the Air Force inventory of repairable items. The differences were the result of problems with the automated inventory systems that existed in 1990, that were known and being corrected by the Air Force. A major initiative was undertaken by the Air Force in March of 1990 to correct systems problems. More than 60 systems changes have been made to correct interface problems with the automated systems that feed the automated worldwide inventory balances. These systems improvements have not been taken into account in the GAO report. The data on which the differences are based was not included in the draft report. The data was subsequently provided by the GAO, but the fact that the inventory balances used in the analysis are between one and two years old, limits the ability of the DoD to verify the GAO conclusions. For

See comments 1 and 2.

See comment 1.

See comment 3.

**Appendix I
Comments From the Assistant Secretary
of Defense**

See comment 4.

these reasons, the DoD cannot agree that the variances in inventory records identified in 1990 warrant a material weakness that should be reported under the Federal Managers' Financial Integrity Act.

See comment 4.

While the Air Force is taking concerted action to correct data system deficiencies, the manual asset reconciliation process that is currently in use provides a legitimate and necessary check against which the balances in the automated records can be validated. Contrary to the GAO conclusion, it is essential that the manual inventory records be maintained as an internal control.

See comment 1.

Until automated system interface problems have all been identified and rectified, the Department does not agree that the Air Force should conduct worldwide physical inventories to resolve discrepancies unless the discrepancies are truly significant and all other means of reconciling the differences have been exhausted.

The detailed DoD comments on the report findings and recommendations are provided in the enclosure. The Department appreciates the opportunity to comment on the draft report.

Sincerely,



**COLIN MCMILLAN
ASSISTANT SECRETARY OF DEFENSE
(PRODUCTION & LOGISTICS)**

Enclosure

**Appendix I
Comments From the Assistant Secretary
of Defense**

GAO DRAFT REPORT - DATED MAY 7, 1992
(GAO CODE 903124) OSD CASE 9065

**"FINANCIAL MANAGEMENT: INTERNAL CONTROL WEAKNESSES IMPEDE
AIR FORCE'S BUDGETING FOR REPAIRABLE ITEMS"**

DEPARTMENT OF DEFENSE COMMENTS

* * * * *

FINDINGS

- **FINDING A: Item Managers Have Important Role in Budget Process.**
The GAO reported that item managers at the five Air Logistics Centers under the Air Force Logistics Command are responsible for the worldwide management of repairable items. The GAO explained that repairables inventory data from bases, depots, maintenance activities, and contractors are reported by a number of automated systems and consolidated in the Recoverable Consumption Items Requirements System--which is used for making budget estimates and purchase decisions. The GAO observed item managers are responsible for reconciling differences between system-generated balances and manual records that show total quantities purchased, lost, installed, or disposed of since the item initially entered inventory. (pp. 1-2, pp.10-14/GAO Draft Report)

DOD RESPONSE: Concur. The DoD generally agrees with the GAO's description of the role of the item managers in the budget process. The Air Force has attempted to collect worldwide asset and requirements data for repairable items. Asset visibility allows the item managers to compute worldwide buy and repair requirements in addition to making maximum use of on-hand inventory. The inventory data come from several sources and automated systems. Air Force item managers attempt to reconcile any variances between the different automated systems through an asset reconciliation procedure. The asset reconciliation process is an internal control used by the item manager to better ensure that accurate asset data is used by the Recoverable Consumption Item Requirements Computation System (D041). It is an effective internal control process only when the quality of data fed into the D041 system is consistently good. The D041 system data are not, however, budgetary or financial data. The data are used by the item managers primarily to manage inventory on a day-to-day basis. Budget estimates are a secondary application of the data.

- **FINDING B: Millions of Dollars in Unresolved Discrepancies Not Reported.** The GAO reported that, for 84 of the 104 items it reviewed, the difference between the item manager manual records

Now on pp. 2 and 8-11.

See comment 5.

**Appendix I
Comments From the Assistant Secretary
of Defense**

and the reported worldwide inventory balances totaled over \$288 million--differences of about \$182 million could not be explained. The GAO asserted that, because of such unresolved differences, the Air Force cannot be certain of the reliability of repairable item inventory balances used to compute budget and purchase requirements. The GAO found that, although Air Force policy states that the reconciliations are critical for ensuring reliable inventory data, the results of reconciliations were not routinely reported by the individual centers to the Air Force Logistics Command management. The GAO concluded that such differences could be used as management indicators (1) on potential system problems and (2) on the need for physical inventory counts.

The GAO noted that item managers are required by regulation to research causes of any differences between manual records and automated reported worldwide balances. The GAO noted that, in addition, the regulations call for the following:

- using a form to document the reconciliation process;
- recording the automated reported worldwide balance and the manual record balance; and
- determining the difference between the manual and automated records and documenting resolution of the differences.

The GAO found that item managers did not always follow the required procedures. For example, at the Oklahoma City Logistics Center, for 13 of the 26 items it reviewed, the GAO found that item managers did not record the reported worldwide balances, but instead recorded the balance taken from the manual records. (pp 3-4, pp. 18-21, pp. 36-37/GAO Draft Report

DOD RESPONSE: Partially concur. The DoD agrees that discrepancies between automated and manual inventory records of Air Force repairable items were not always reported to the Air Force Logistics Command by the Air Logistics Centers. The Air Force was well aware of the problems with data accuracy in the worldwide inventory balances reflected in its automated systems. Because the source of the inventory discrepancies was known to the Air Force and the problem was being addressed as a priority, the DoD does not concur that the Air Logistics Centers should have reported the results of the reconciliations between manual and automated inventory record balances to the Air Force Logistics Command.

Now on pp. 2-3, 14-15,
and 24.

See comment 1.

**Appendix I
Comments From the Assistant Secretary
of Defense**

The purpose of the asset reconciliation process is to determine if there is a difference between net accountable assets (as reflected in manual inventory records) and the reported worldwide inventory balances (as reflected in the applicable automated data systems). Differences are then researched by the item managers and asset balances adjusted accordingly in the D041 system. The current policy requires the item managers to research discrepancies and adjust to the worldwide inventory when discrepancies that cannot be resolved have persisted for three computation cycles (i.e., adjusting on the fourth cycle). Prior to the adjustment, the item manager is required to use the manual worldwide inventory balance. Item managers cannot be 100 percent certain that worldwide inventory balances are correct. Under the present circumstances, the current policy is sufficient.

See comment 1.

Reviewing the base (retail) transactions would require an inordinate amount of the item managers' time and effort, and still may not reconcile inventories to 100 percent accuracy, since there are anomalies in the data passed to the D041 system. The number of items in the GAO sample that displayed differences also is a concern. The sample results verify earlier Air Force Logistics Command findings that there are discrepancies in the interface data fed into the D041 system. For that reason, the Air Force Logistics Command senior management established the Requirements Interface Process Improvement Team to improve the quality of data output from systems that interface with the D041 system.

The GAO claim that \$182 million of differences could not be explained by item managers was not be verified by the Air Force Logistics Command because the draft report did not provide either the national stock numbers associated with the examples or the method by which the total difference of \$288 million and the unexplained differences of \$182 million were computed. The information was later requested, and it was provided to the DoD on June 22, 1992. Because the inventory record balances used by the GAO were between one and two years old, review and analysis will require an extended period of time - if it is possible at all.

In discussions with representatives of the GAO, it was learned that the evaluators used both the value by which the quantity of any given item may have been over-reported and the value by which the quantity of the same item may have been under-reported in computing the total discrepancies in the inventory records. The addition of the absolute values of the over-reported items to the absolute values of the under-reported items, in lieu of

See comment 6.

**Appendix I
Comments From the Assistant Secretary
of Defense**

calculating the net difference, overstates the impact of those differences.

On the basis of the information provided, and the limited amount of time that was available for review and analysis of the raw data, it is not possible for the DoD to determine whether the differences identified in the draft report were significant or not.

- **FINDING C: Item Managers Lack Detailed Data Needed to Resolve Differences.** According to the GAO, item managers should be able to follow a logical process to resolve differences between automated and manual records to determine what transactions may have been recorded in one record but not the other. The GAO asserted that, without such information, it is difficult, if not impossible to perform the reconciliation in an effective manner. The GAO found that item managers:

- cannot compare asset balances by reporting activity for the two sets of records--because while automated worldwide inventory balances are reported to the item manager by activity, the manual record does not show comparable inventory balance by reporting activity and the balance cannot be easily determined from other available data;
- do not have access to all individual supply transactions from the reporting activities--such as issues, receipts and physical inventory adjustments; and
- do not maintain balances on their manual records that identify the condition of the inventory item--serviceable or unserviceable.

The GAO noted that automated reported worldwide inventory balances include the condition of each inventory item. The GAO concluded that such information is critical to determine the number of items that should be budgeted for, purchased, or repaired.

The GAO found that, to explain differences between the manual and automated records, item managers used inventory balances generated and reported by the systems supporting the worldwide system. The GAO also found that inventory balances from the supporting systems that should agree--often did not. The GAO noted that, without any certainty as to which balances were correct, the item managers would select the balances that reduced differences.

**Appendix I
Comments From the Assistant Secretary
of Defense**

Now on pp. 15-17.

See comment 1.

See comment 1.

In summary, the GAO concluded that differing inventory balances have been an ongoing problem. The GAO observed that there are hundreds of examples of items whose inventory balances differ anywhere from 100 to 500 between the automated worldwide reporting system and the supporting systems. (pp. 3-4, pp. 21-24/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that Air Force item managers do not have access to all individual supply transactions that contribute to the data that is summarized in inventory reports. The DoD does not agree, however, that such information is necessary for item managers to perform effective reconciliations. In addition, the GAO finding that differing inventory balances have been an ongoing problem is misleading since it overlooks the improvement in the quality of asset balances that has taken place in 1991 and 1992.

Item managers have access to information about wholesale and depot retail-level accountable transactions (issues, receipts, and physical inventory adjustments) via the Stock Control and Distribution System. Retail transactions, which impact base supply asset balances, are transferred from the Standard Base Supply System and reported to the Stock Control and Distribution System. The Stock Control and Distribution System does not accumulate this data. It edits the Standard Base Supply System transactions and converts those transactions into consolidated base balance data for processing into the D041 system. The data is not readily accessible in a standard report and large-scale system changes would be required to consolidate base level accountable transaction data. The Air Force has over 400 reporting activities, and the Stock Control and Distribution System processes almost 200,000 daily transactions on 800,000 items. (This information is for all Air Force items.) The magnitude of collecting and providing only the repairable item portion of the transactions to item managers for manual review and validation would make the costs of such an undertaking prohibitive.

At the present time, the use of asset balances from systems that support the worldwide reporting system is an adequate method for item managers to use in attempting to reconcile differences between the manual and automated inventory records. Until problems with automated system interfaces have been rectified, the item manager who is performing a reconciliation should continue to rely on those balances which most closely support the quantities shown in the manual inventory records.

**Appendix I
Comments From the Assistant Secretary
of Defense**

Over the next several years the Air Force will regionalize its base computer systems. The effort will consolidate all base logistics systems within six regions and will simplify the processing of the base-level data that are transmitted to the depots. The effort is expected to reduce the number of data interfaces significantly, thereby reducing the potential for error experienced in the past.

See comment 7.

The DoD recognizes that it is important to portray accurately the condition of assets in the inventory to determine buy and repair requirements. When the asset condition cannot be substantiated, guidance states that, as a general rule, unreconciled assets should continue to be reported in the system as being in serviceable condition to preclude distortion of the repair requirement. Although such action may understate repair and/or buy quantities, it is more prudent with respect to the use of taxpayer money.

See comment 8.

The GAO observation that there are hundreds of examples of items for which inventory balances differ from 100 to 500 each between the worldwide automated report and the records reflected in its supporting systems is attributed to one Air Logistics Center official. The observation was not validated, since only 104 items were reviewed. The GAO also provided no information concerning the total quantities and values of the items for which the Air Logistics Center official claimed differences of 100 to 500 each.

See comment 3.

Although there was a significant problem with asset data at the time of the GAO review, the Air Force Stock Control and Distribution System has undergone a major modernization during which time numerous system deficiencies that had an adverse impact on asset balance integrity were detected. More than 60 of the documented system deficiencies have been corrected and others are currently in the process of being corrected. Correction of system deficiencies that affect accountable balance processing are always given top priority because of the overall impact on customer support and the requirements processes. The worldwide asset balance process in the Air Force is a dynamic multi-system process that is complex and involves almost 60 interfacing systems. Efforts are continuing to review systems, document problems, and initiate corrective actions. Asset balance quality in the D041 system has improved substantially in 1991 and 1992, and that improvement is not recognized in the draft report.

A revision to the Air Force Logistics Command Recoverable Consumption Item Requirements System (D041) Manual (AFLCM 57-4)

**Appendix I
Comments From the Assistant Secretary
of Defense**

was ongoing at the time of the GAO review. The revised manual was published on August 1, 1991. It includes updated and expanded guidance for performing asset reconciliations. The Air Force Logistics Command will review the policies in the manual to determine if further expansion and/or more detailed guidance would be appropriate. The review is scheduled for completion by August 31, 1992.

- **FINDING D: Physical Inventories Not Requested.** The GAO reported that, although 27 of the 104 items reviewed met the Air Force Logistics Command regulation criteria for the performance of worldwide physical counts, item managers did not request a worldwide physical inventory to resolve the differences for any of the items. The GAO observed that the Air Force regulation provides for worldwide physical inventories of items when unreconciled differences between the two sets of records exceed 10 percent of the manual record balance and \$1 million. According to the GAO, such inventories are to be in addition to any counts made at Air Logistics Centers and bases throughout the year.

The GAO determined that, of the four Air Logistics Centers it visited, Warner-Robins Air Force Base was the only Center to request worldwide physical inventories during FY 1990. The GAO noted that none of the Centers had requested such inventories during FY 1991. The GAO commented that according to Center officials, worldwide physical inventories would not provide timely information for item manager decisions. The GAO explained that the Warner-Robins request took almost three months (1) because the counts had to be approved by the Air Force Logistics Command and (2) because of the required extensive coordination between the Command, the Air Logistics Centers, bases and contractors in possession of repairable items. The GAO also found that an Air Force Logistics Command regulation on physical inventory stated that the item managers should request a physical count only after all other means of resolving differences have been exhausted and the accuracy of balances found to be suspect. The GAO also referenced its April 1991 report, in which it had previously reported on inventory discrepancies at the Air Logistics Centers (OSD Case 8376-G). (pp. 3-4, pp. 24-25, pp. 36-37/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that inventories were not always requested by item managers who noted discrepancies that met the criteria for a physical inventory. The DoD does not, however, agree with the implication that physical inventories should have been requested, because the requirement for inventories should have been waived until the

Now on pp. 2-3, 17-18,
and 24.

See comment 1.

**Appendix I
Comments From the Assistant Secretary
of Defense**

data system interface problems responsible for errors in the automated system were rectified.

Under normal circumstances, item managers should follow the policy to request worldwide inventories if, after exhaustive research, they cannot reconcile asset balances. Because of the discrepant data being reported to the D041 system, a waiver to that policy should have been provided until the quality of data significantly improved. Until the D041 system receives consistently good data from interfacing systems, and the accuracy of the data can be verified, conducting inventories on all the impacted items would be futile.

The length of time required for an inventory would exceed the quarterly computation cycle so that, by the time one inventory would be completed, another inventory would be required on the same item, because erroneous data would have been fed into the next computation cycle and asset differences would have been identified again. In such cases, the effort to perform physical inventories would be non-productive.

- **FINDING E: Automated Records Are Poorly Controlled.** The GAO concluded that the Air Force continues to face widespread problems, which impair the reliability of inventory data maintained in the automated worldwide reporting systems. The GAO found that the supporting systems lack adequate internal controls over the transmission of data. The GAO explained that the supporting systems do not contain a control confirming the total quantities and dollar value of items sent from the system or subsystem and received by another system. The GAO asserted that such controls are essential to help ensure that all data are processed accurately. The GAO described examples of serious internal control weaknesses that have been previously identified with the Air Force systems, as follows:

- The GAO explained that, in 1988, the Air Force Logistics Command concluded that up to 25 percent of the inventory data from one base was not reported because (1) magnetic tapes for transferring data between supporting systems were not processed, (2) an Air Force system programming error prevented certain transactions from being processed, and (3) transaction transmissions could not be verified. The GAO noted that even though the Air Force made changes to the systems to correct the cited problems, a 1990 study found that over 5 percent of the data was still being lost during transmission. In addition, the GAO found that rejected transactions were not being corrected and retransmitted.

**Appendix I
Comments From the Assistant Secretary
of Defense**

- The GAO reported that inventory data from depots has been reported inaccurately because of mission computer software codes and errors in the computer software logic. The GAO again referenced a prior report, issued in February 1992, in which it reported that the Air Force Stock Control and Distribution System had programming errors that resulted in duplicate reporting of about \$2.6 billion of inventories (OSD Case 8376-L).
- The GAO also referenced a December 1990 Air Force Audit Agency report, which concluded that the Air Force accepted major subsystems of the Stock Control and Distribution System before the subsystems were fully tested. The GAO noted that the Air Force Logistics Command had to delay implementing the subsystems for almost 6 months to correct the deficiencies.
- The GAO reported that Air Force efforts to correct identified problems have been hindered by the lack of current system documentation describing how the supporting systems are supposed to work. The GAO found that one of the subsystems had been in operation since 1987, but the system documentation still had not been updated to provide an understanding of the system. The GAO also found that documentation for other supporting systems had not been updated for 10 to 15 years, because systems documentation is considered a low priority.

The GAO observed that, even though inaccurate inventory data has been looked at for over 6 years, the problem had not been corrected. The GAO concluded that as long as the systems problems continue, the item managers are faced with an overwhelming task of trying to correct bad data so that reliable budget estimates can be prepared for repairable items. (p. 4, pp. 25-28, pp. 36/37/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that Air Force item managers are faced with a formidable task of correcting bad data. The DoD also agrees that the problems have not been completely corrected. Because the draft report does not acknowledge the fact that more than 60 corrections and improvements were made in 1991 and 1992, the DoD cannot agree with the implication that the Air Force has simply permitted the problem with inaccurate inventory data to remain unresolved for more than six years.

The GAO accurately reported the results of the 1988 and the 1990 studies. The GAO evaluators looked at the March 1990 computation

Now on pp. 3, 18-19, and 24.

See comment 3.

**Appendix I
Comments From the Assistant Secretary
of Defense**

cycle, documentation for 2 years prior to the March 1990 cycle, and inventory balance reports for the March 1991 cycle. The GAO did not, however, review recent products. Therefore, the GAO report reflects results that are outdated by at least a year.

Numerous system deficiencies have been corrected since May 1991, when the Requirements Interface Process Improvement Team was formed. The corrections were reflected in subsequent computation cycles and additional improvements in asset data should be evident in the upcoming June 1992 cycle. Therefore, the GAO is incorrect in its assertion that improvements have not been made to the automated systems for over six years. While the quality of asset data output to the D041 system has vastly improved, the identification and correction of all the problems continues.

The Air Force Logistics Command began updating documentation as the Stock Control and Distribution System modernization progressed. The Stock Control and Distribution System documentation contained in Air Force Manual 67-1, Volume III, Part Three, has had 14 chapters published. Five chapters currently are being revised, and eight chapters still require extensive revision. The DoD recognizes the importance of providing system users with accurate and detailed system information.

• **FINDING F: Inventory Gains and Losses Not Accurately Recorded.**

The GAO reported that for 54 of the 104 items it reviewed the item managers had been informed of, but did not record, almost \$82 million of gains and losses on the manual records during the most recent 2-year period for which supporting documentation was available. The GAO explained that an inventory loss occurs when an item is no longer available for use--such as when the Air Force condemns or disposes of an item, or when physical inventories find fewer items on hand than recorded. The GAO further explained that inventory gains occur through additional procurement or when physical inventories reveal items not recorded. The GAO concluded that not recording such adjustments can lead to inventory excesses or shortages. (p. 4, pp. 28-30/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that Air Force item managers are not recording inventory adjustments for all possible inventory gains and losses of which they are aware. Under current policies, the item managers do not make adjustments for variances that cannot be validated until those variances have consistently appeared for three consecutive reconciliation cycles. Such a policy allows time for the correction of data system problems to take effect. Because the delay in making the

See comment 3.

Now on pp. 3 and 19-20.

See comment 9.

**Appendix I
Comments From the Assistant Secretary
of Defense**

adjustments to inventory records precludes the possibility of distorting inventory balances through the premature recording of unvalidated inventory adjustments, the DoD does not concur that failure to record unvalidated adjustments can lead to inventory gains or losses.

The current Air Force reconciliation policy is stated in Chapter 28 of Air Force Logistics Command Manual 57-4 dated August 1991. It directs the item manager to count validated gains and losses. However, if unvalidated variances have been consistent for three consecutive reconciliation cycles, the item manager may adjust the starting position on the fourth reconciliation cycle by the smallest quantity. When the reported inventory does not agree with the manual record and the gains or losses are unvalidated, the item manager is directed to use the manual record balance for purposes of requirements computation to prevent overstatement or understatement of buy and repair requirements. The recording of gains and losses and the asset reconciliation process are expected to be automated in the Requirements Data Bank in December 1993.

- **FINDING G : Air Logistics Center Guidance is Inconsistent and Manual Record Reviews are Inadequate.** The GAO found that some Air Logistics Centers had supplemented Air Force Logistics Command Regulation 57-4 to provide detailed guidance on documentation procedures and the data sources item managers should use to record gains and losses on the manual records. The GAO found, however, that the instructions on maintaining the manual records were not consistent with the regulation--and even varied among the four Air Logistics Centers. The GAO reported that the Air Force Logistics Command regulation and the Air Logistics Center instructions on reconciliation did not require supervisory review of the manual records to help detect and correct errors. As a result, none of the centers visited required supervisors to review manual records routinely for accuracy.

The GAO found that, although the Air Force Logistics Command regulation requires personnel in finance to review the documentation for items being purchased or disposed of, the reviews did not focus on manual record accuracy. The GAO asserted that the effectiveness of any reviews would have been compromised because, in July 1990, the Command gave the Centers the flexibility to set review level thresholds. The GAO found that three of the four Centers had increased the threshold from \$1 million to \$5 million, but the fourth Center maintained the \$1 million review level that existed prior to July 1990. (pp. 31-33, pp. 36-37/GAO Draft Report)

Now on pp. 21-22 and 24.

**Appendix I
Comments From the Assistant Secretary
of Defense**

See comment 1.

DOD RESPONSE: Partially Concur. The DoD agrees that guidance issued by the five Air Logistics Centers is not entirely uniform. Guidance issued by the Air Force Logistics Command and the Air Logistics Centers will be reviewed to ensure that it provides the greatest degree of consistency possible while maintaining the flexibility that each Air Logistics Center requires in order to perform its mission. That review will be accomplished by October 30, 1992. The DoD does not, however, agree with the implication that flexibility in the guidance issued by the respective Air Logistics Centers should be eliminated. Mandating complete uniformity in that guidance would be contrary to the principles of total quality management, since it would fail to recognize the flexibility afforded to the five Air Logistics Center commanders and the capabilities of managers to establish appropriate guidance for the specific operations under their control. Similarly, the DoD does not agree that tailoring of review procedures to satisfy the requirements of management at each Air Logistics Center thereby renders those procedures inadequate.

Under the total quality management philosophy, the Air Logistics Centers were reorganized into product directorates and now have the responsibility for managing their own functions and resources and instilling quality assurance at the lowest levels. By building quality into the processes, the need for external reviews is minimized. Any establishment of internal reviews, approval levels, and other process validations is now the prerogative of the Air Logistics Center commanders and the product directors. Air Force Logistics Command Manual 57-4 is being revised to reflect that philosophy. Estimated completion date is October 31, 1992.

FINDING H : Unresolved Problems Will Hinder Implementation of Defense Initiatives. The GAO reported that, prior to 1990, the Air Force used procurement appropriations to purchase repairable items, which were provided free of charge to customers. The GAO observed, however, that in December 1989 the Office of the Secretary of Defense directed the Air Force to begin financing repairables through the stock fund--and the Air Force began implementation in October 1990. The GAO explained that, under the stock funding of repairables, customers use Operation and Maintenance appropriations to buy repairable items from the stock fund. The GAO observed that deficiencies in stock fund operations have led to increased prices for stock fund customers in recent years. The GAO cited an April 1991 report that stated, during the period from FY 1987 to FY 1989, the Air Force stock fund had increased charges to customers from 13 percent to 20

**Appendix I
Comments From the Assistant Secretary
of Defense**

percent--largely due to operating losses resulting from unbilled sales and disposal of excess and obsolete items. In the previously referenced February 1992 report (OSD Case 8376-L), the GAO pointed out it had concluded that, because of unreliable inventory data, the stock fund faced the risk that it may not budget for and purchase the right mix and quantities of items.

The GAO concluded that the solvency of the Air Force stock fund will directly affect the operations of the Defense Business Operations Fund. The GAO explained that, on October 1, 1991, the Defense Business Operations Fund was established--which consolidated the nine existing Defense stock and industrial funds and four other Defense activities. The GAO pointed out that the Air Force stock fund costs constitute about 31 percent or \$17 billion of the Defense Business Operations Fund estimated FY 1992 operating costs of \$54 billion. The GAO explained that each stock and industrial fund will keep its identity and continue to be operated and managed by the Military Services, and that the primary goal of the consolidated Fund is to provide products and services to operating components--such as a Military base or a fighter squadron--at the lowest cost. The GAO testified in April 1991 that, if the Fund incurs losses, the losses should not be passed on to the Fund customers, since such action would distort the annual cost of operations (OSD Case 8684). In its April testimony, the GAO asserted that DoD should, instead, request additional appropriations to cover such losses. (pp. 33-37/GAO Draft Report)

Now on pp. 22-24.

See comment 2.

DOD RESPONSE: Nonconcur. The historical stock fund data discussed in this finding do not apply to the Repairable Support Division of the stock fund because that division did not come into existence until October 1, 1990. Actual sales to customers for repairable items began on April 1, 1992. As a result, no history is available to document price fluctuations to customers or rising prices due to losses. In addition, the inventory losses portion of the Repairable Support Division surcharge has been reduced to zero for FY 1992 and FY 1993. At this time, the Air Force has not passed any losses incurred by that division on to its customers. Since the cost of repairable items will not be charged to customers until October 1992, the claim that charges to customers have increased is unfounded.

The April 1991 GAO Report which is cited in this draft report included findings on data deficiencies concerning consumable items; those items are financed in a separate division of the stock fund. As the DoD response to the April 1991 report stated, the main reason for the increased charges for consumable items was price stabilization, not inventory losses.

**Appendix I
Comments From the Assistant Secretary
of Defense**

See comment 2.

The GAO pointed out that the Air Force stock fund costs constitute about 31 percent or \$17 billion of the Defense Business Operations Fund estimated FY 1992 operating costs of \$54 billion. To put the matter in perspective, it is important to note that supply management costs are \$9.5 billion or 18 percent of that \$54 billion, and the Air Force Reparable Support Division's acquisition portion of the Air Force stock fund is \$428 million, or less than 1 percent of that \$54 billion total.

In addition, the DoD does not agree that it is inappropriate for the stock fund to pass on the cost of losses suffered by the fund to customers. The purpose of a revolving or "working capital" fund is to provide a mechanism for an enterprise to sustain itself financially through the sale of products or services. Once the initial capital to finance such an enterprise has been provided, it is appropriate for the activity involved to pass losses on to its customers in the form of higher prices and to return any gains to its customers in the form of reduced prices.

- **FINDING I: Efforts to Improve Inventory Records Have Been Fragmented and Incomplete.** The GAO found that, in June 1990, the Air Force Logistics Command initiated an effort to reevaluate the transmission of inventory data from the bases and depots. The GAO noted the results showed that improvements had been made, but problems still remained. The GAO noted that only part of the study dealing with base level reporting was completed, and did not identify the specific cause(s) for the remaining problems. The GAO observed that, because the study team's approach was not coordinated with all the appropriate offices responsible for the systems, the initial analysis was flawed.

The GAO acknowledged that current Air Force efforts (which began in 1991) to resolve the existing systems problems are receiving greater top management attention. The GAO found that, in May 1991, the office responsible for the requirements systems informed the Air Force Logistics Command of the seriousness of the problem. The GAO pointed out that the following actions have occurred:

- the Command subsequently authorized a concentrated effort to identify deficiencies, research causes, and correct the systems problems for data reported by depots;
- the Air Force Logistics Command and the Air Force Logistics Management Center are reexamining the reporting of base level data;

**Appendix I
Comments From the Assistant Secretary
of Defense**

Now on pp. 3-4 and
28-29.

See comment 10.

- a project manager has been assigned with authority and responsibility for ensuring the systems problems are resolved; and
- Air Force Logistic Command management and the Air Logistic Centers receive quarterly reports on the progress of the efforts. (pp. 5-6, pp. 39-41/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that, because the efforts to improve the quality of data entering the Air Force automated inventory records are still ongoing, they are incomplete. However, the level of coordination and review achieved by the team that is conducting the improvement initiative shows that the effort is not fragmented.

The Air Force efforts to improve requirements data problems began prior to the 1991 study. An ongoing "Dirty Data" study in 1988 resolved some of the issues; however, others were discovered in 1990, and a formal procedure for reporting data problems to the headquarters of the Air Force Logistics Command was developed. As a result, the magnitude of the interfacing system problems was recognized.

In June 1990, the Air Force Logistics Command directed the development of a "tiger team" to identify and correct the problems. Although the original study was not completed, the GAO contention that the study team approach was flawed because it was not coordinated with all the appropriate offices is not valid. The study was conducted by team members representing all the systems involved, and the results were valid. The study was not completed because a new team (the Requirements Interface Process Improvement Team) was formed to address the wholesale aspect of the review and because the base (retail) portion of the study was assigned to the Air Force Logistics Management Center.

The Requirements Interface Process Improvement Team was formed in June 1991, and it consists of specialists from the data systems, software, and analysis organizations. The team members are assigned on a full-time basis to identify and resolve the problems impacting the quality of the data in the requirements computation system, with inventory and usage accuracy being the top priority. The team has initiated more than 60 corrective actions which have already been accomplished. Validation of the corrective actions is a primary function of the team. Monthly meetings to discuss strategy and results are conducted and involve senior managers from each participating organization. Quarterly meetings are also conducted at the general officer level. Corrective actions continue to be made.

See comment 3.

**Appendix I
Comments From the Assistant Secretary
of Defense**

- **FINDING J: Automation of Manual Records Will Not Correct Problems.** The GAO reported that the Air Force Logistics Command is planning to automate the item managers' manual records as part of the Logistics Management Systems Modernization Program. The GAO concluded that, if successfully implemented, such an enhancement could help reduce the item managers' work load, because most of the data entries and computations would be done automatically--rather than manually. The GAO further concluded that it should help reduce recording and mathematical errors that occur more easily when using manual records.

The GAO pointed out, however, that the enhancement will not address the fundamental difficulties associated with maintaining two parallel sets of records. The GAO noted that, even after the manual record is automated, the item managers will still be required to resolve any differences between the two sets of records--and the reporting of inventory data by bases, depots, and contractors will continue to use the existing systems. The GAO explained the currently planned system enhancements do not provide for the item manager to receive the detailed data needed for resolving differences between the records and, without the individual transactions that have affected the records, resolving differences will continue to be an extensive, labor intensive, time-consuming effort--one that still will not provide better assurance as to the reliability of the inventory data used to make budget estimates and purchase decisions. The GAO found that item managers spend about one-third of their time attempting to correct inaccurate data in the inventory reporting systems.

The GAO questioned the need to maintain two sets of inventory records. The GAO indicated that philosophy is not consistent with the Defense Corporate Information Management efforts to (1) standardize systems, (2) eliminate redundant systems, and (3) improve the quality and consistency of data in DOD information systems. The GAO asserted that maintaining a single set of integrated records with proper internal controls to ensure accuracy could accomplish the following:

- simplify the entire process so that the (1) item managers would not need to reconcile differences between records, and (2) systems would not need to provide the enormous amounts of detailed data to perform these reconciliations;
- reduce the reporting, maintenance, and use of redundant data in the automated systems, which require additional internal controls to ensure its reliability;

**Appendix I
Comments From the Assistant Secretary
of Defense**

- facilitate updating worldwide inventory balances based on the results of physical inventories; and
- facilitate the integration of budgeting and accounting, which have been required in agency financial management systems for many years by the GAO and the Office of Management and Budget, and which has recently been reemphasized by the Chief Financial Officers Act of 1990.

The GAO noted the Chief Financial Officers Act stipulates that the Chief Financial Officer for the DOD is responsible for overseeing all financial management activities and systems design, including the implementation of agency asset management systems. The GAO pointed out that the DOD, in implementing the Chief Financial Officers Act, has instructed the Assistant Secretary for Financial Management of each Military Service to ensure that the provisions of the Act are adhered to. The GAO concluded, therefore, that the Air Force Assistant Secretary of Financial Management, along with the DOD Chief Financial Officer, is responsible for overseeing efforts to improve the Air Force inventory management systems and ensuring better integration of budgeting and accounting.

The GAO observed that the Air Force may benefit by considering inventory management practices followed by private sector airlines in the management and control of repairable inventory items. The GAO referenced still another prior report issued in June 1991 (OSD Case 8686), in which it [the GAO] indicated that companies have found it useful to compare their practices with those of other organizations to determine which practices are best--i.e., benchmarking. (pp. 41-45/GAO Draft Report)

Now on pp. 29-31.

DOD RESPONSE: Partially Concur. The DoD agrees that automating the manual records will not, by itself, correct discrepancies between the manual and the automated inventory balances in the Air Force inventory. The DoD does not agree, however, with the GAO challenge to the Air Force practice of maintaining a separate set of manual inventory records as a check and balance for the automated records. The DoD also does not agree with the GAO observation that the Chief Financial Officer of the DoD is responsible for overseeing efforts to improve inventory management systems.

See comment 4.

See comment 11.

Automation of the manual form in the Requirements Data Bank will alleviate the manual effort involved and reduce recording and mathematical errors, but it will not solve the problems which result from incorrect data from interfacing systems. As indicated in the DoD response to Finding I above, the Air Force

Appendix I
Comments From the Assistant Secretary
of Defense

Logistics Command is aggressively working to resolve those data problems.

See comment 4.

The use of manual records for asset reconciliation, as well as to identify deficiencies in automated systems during the time the systems are being refined, does not equate to maintaining two parallel (and ostensibly duplicative) sets of inventory records. The manual process is designed to be a check on the accuracy of the automated data. Eliminating the manual records and relying solely on automated systems creates the risk of not being alerted to systems errors when and if they occur. The following is an example of the use of a manually reconciled asset balance in the requirements computation:

If Base A ships ten assets to Base B, an automated inventory adjustment is made, subtracting ten assets from Base A. If Base B fails to record the receipt of those assets in its automated records (another inventory adjustment), ten assets will disappear from the automated system reporting. However, the item manager, using documents available, recognizes those assets are still accountable to the manual record. The ten assets (manually reconciled--not reported by the automated system), will be included in the requirements computation because the manual account still shows them as available to meet requirements. The ten assets which were not immediately added to the inventory records at Base B will be picked up the following quarter after a routine inventory.

Air Force item managers perform almost 50,000 asset reconciliations during most quarterly requirements cycles. (The GAO's sample of 104 items is less than 1 percent of the total items reviewed during each cycle.) The time that item managers spend researching and resolving system reporting differences is necessary to ensure that correct quantities of assets are used in the requirements computation process.

See comment 4.

The GAO observed that the manual research does not provide better assurance as to the reliability of the inventory data used to make purchase decisions. A 1991 survey by Massachusetts Institute of Technology researchers found that many large data bases used in private industry had serious flaws, which often went undetected because they did not have systems in place to protect against anomalies and errors. The study concluded that many of the data base errors occurred because there was no longer a human expert to filter out bad data. The DoD cannot accept the conclusion that a single automated system would provide an acceptable method of double checking accountable asset

**Appendix I
Comments From the Assistant Secretary
of Defense**

quantities. The manual checks and balances performed by item managers provide appropriate internal controls. The Air Force Logistics Command ongoing identification and resolution of data interface problems will further enhance the accuracy and effectiveness of these controls.

See comment 11.

The GAO assertion that the Chief Financial Officer of the DoD is responsible for overseeing efforts to improve the Air Force's inventory management systems is incorrect. These systems are logistics systems and, as such, they are not under the control of the DoD Comptroller. The responsibility for correcting problems with logistics systems within the Office of the Secretary of Defense properly belongs to the Assistant Secretary of Defense (Production and Logistics).

- **FINDING K: Air Force Financial Integrity Act Report Does Not Disclose Weaknesses.** The GAO found that although the Air Force Logistics Command was aware of the problems in budgeting for repairables, the Command FY 1991 Statement of Assurance to the Secretary of the Air Force did not disclose the weaknesses. The GAO concluded that, as a result, the problems were not considered for inclusion in the Air Force FY 1991 Federal Managers' Financial Integrity Act report to the Secretary of Defense -- and, in turn, the Department did not report the weaknesses to the President and the Congress.

The GAO acknowledged that, in response to previously recognized weaknesses with the Air Logistic Center inventory record accuracy, the Air Force FY 1991 Financial Managers' Integrity Act report stated that, in August 1991, the Air Force completed implementing systems--such as the Stock Control and Distribution System--to help correct weaknesses in the accuracy of the Air Logistics Centers inventory. The GAO pointed out that, in April 1991, the Air Force Audit Agency had reported the Air Force Logistics command did not have an effective internal control review program for its Logistics Management Systems Modernization program, which involves some of the systems used to compile the worldwide inventory balances and compute requirements for budgeting and purchasing. The GAO reported that the Command could not explain why recognized problems in budgeting for repairables were not disclosed in the Commander's Statement of Assurance to the Secretary of the Air Force (p.6, pp. 45-47/GAO Draft Report)

Now on p. 32.

DOD RESPONSE: Nonconcur. The Federal Managers' Financial Integrity Act established a requirement for managers in Federal activities to identify material weaknesses and report them to the President and the Congress through their respective

See comment 4.

**Appendix I
Comments From the Assistant Secretary
of Defense**

organizational structures. The Air Force Logistics Command has not acknowledged that there are problems associated with its budgeting for repairable items. The GAO assertion concerning internal controls apparently is based on an April 1991 Air Force Audit Agency report. That report identified weaknesses in Air Logistics Center inventory accuracy and indicated that the development of new automated inventory systems would help to correct those weaknesses. It is on that basis that the GAO concludes the command was aware of weaknesses not disclosed in the Air Force Logistics Command annual statement of assurance to the Secretary of the Air Force.

The April 1991, Air Force Audit Agency Report focused on the lack of internal control review procedures for Logistics Management Systems development. The audit concluded that the command needed to establish a formal internal review requirement for each program office. The Air Force Logistics Command concurred with the Air Force Audit Agency's recommendation and, subsequently, developed a handbook entitled -- "Guideline for Developing and Evaluating Internal Management Controls in Automated Information Systems," dated July 1991. The pending publication of an update to the guidebook (scheduled for August 1992), in conjunction with the development of additional guidance, should satisfy the Air Force Audit Agency recommendation. The Air Force Audit Agency did not recommend the reporting of any of its findings as material weaknesses under the terms of the Federal Managers' Financial Integrity Act.

In the case of the discrepancies between the manual and automated inventory records of Air Force repairable items, the manual records are an internal control to provide a system of checks and balances for the automated records. The discrepancies identified by the GAO represent differences in 1990 data that GAO could not reconcile. The sample they took is significantly less than 1 percent of the asset reconciliations undertaken by the Air Force quarterly, and does not consider systems improvements made in 1991 and 1992. In that context, the problem is not sufficiently material to be reportable as a material weakness.

RECOMMENDATIONS

- **RECOMMENDATION 1:** The GAO recommended that the Secretary of the Air Force direct the Deputy Chief of Staff for Logistics to require that the Air Logistics Centers report to Air Force Logistic Command management the differences between the manual and automated records before and after reconciliation efforts. (p. 37/GAO Draft Report)

Now on p. 24.

**Appendix I
Comments From the Assistant Secretary
of Defense**

See comment 1.

DOD RESPONSE: Nonconcur. It is the Department's position that providing the results of reconciliations performed by the Air Logistics Centers to the Air Force Logistics Command to identify potential system problems is not practical at this time. It would be labor intensive to develop an interim system for reporting the data, and the costs of developing such a system could easily outweigh the benefits to be derived from informing the Air Force Logistics Command of the differences.

Mechanisms for recognizing system problems and reporting them to the Air Force Logistics Command are already in place, and the discrepancies are being addressed aggressively. Other management indicators currently in use include the Item Management Review and a D041 system user complaint program (Project Scrub), which was instituted in February 1990 to standardize the reporting of any suspected data problems.

By December 1993, the asset reconciliation process will be automated in the Requirements Data Bank. The Air Force Logistics Command will then have query capability to identify all items with differences between net accountable and reported data. That enhancement will provide an additional gauge of asset balance accuracy.

- **RECOMMENDATION 2:** The GAO recommended that the Secretary of the Air Force direct the Deputy Chief of Staff for Logistics to determine the most efficient way to provide item managers the inventory management systems data needed for the reconciliation required of worldwide inventory balances--i.e., receipt, issue, and physical inventory adjustment transactions for each reporting activity. (p. 37/GAO Draft Report)

Now on p. 24.

DOD RESPONSE: Partially concur. The DoD agrees that an efficient method should be devised to provide Air Force item managers the inventory systems data needed to reconcile differences in inventory balances. Because of the concerted effort the Air Force Logistics Command is making to identify and correct problems with data systems containing input from each of more than 400 reporting activities worldwide, the DoD does not agree that the item managers should be provided with transaction data from all of those reporting activities.

See comment 1.

The Air Force Logistics Command will be directed by the Deputy Chief of Staff for Logistics to determine the most efficient way to provide item managers the inventory systems data needed to ensure the accuracy of worldwide inventory balances. The direction will be issued by August 1, 1992. A report will be

**Appendix I
Comments From the Assistant Secretary
of Defense**

required by December 1, 1992. The report will identify controls to ensure that data are transmitted correctly between the automated systems. However, providing all inventory transactions for more than 400 reporting activities is not feasible at this time because (1) the information is not readily accessible, (2) the review would be labor-intensive, and (3) massive system changes would be required.

- **RECOMMENDATION 3:** The GAO recommended that the Secretary of the Air Force direct the Deputy Chief of Staff for Logistics to require the Air Force Logistics Command to (1) comply with policies for performing worldwide physical inventories for items that have significant unresolved differences between the manual and automated records, and (2) revise policies to eliminate unsupported adjustments to the manual records and the requirements system. (The GAO asserted that the results of physical inventories need to be reported directly to the item manager.) (p. 38/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that Air Force policy should state clearly that worldwide physical inventories will be requested when a significant variance exists and after all other means have been exhausted. The Air Force Logistics Command will be directed to review existing policies and redefine what is meant by significant variances in its Air Force Logistics Command Manual 57-4. The direction will be issued by August 31, 1992. To avoid the conduct of unnecessary physical inventories, the requirement will be waived while problems with automated system interfaces are being rectified.

The need to make adjustments to the asset balances used in the requirements system is a continuous aspect of inventory management. To preclude unreasonable expenditures of resources for the purpose of adjusting minor variances, item managers will be permitted to make adjustments that are not completely supported and/or documented by the various interfacing systems. Item managers will be required to explain or describe all adjustments during the reconciliation process.

- **RECOMMENDATION 4:** The GAO recommended that the Secretary of the Air Force direct the Deputy Chief of Staff for Logistics to implement controls to ensure that data are completely and correctly transmitted between the automated systems and/or subsystems. (p. 38/GAO Draft Report)

DOD RESPONSE: Concur. By August 1, 1992, the Air Force Logistics Command will be directed to produce a report identifying controls that are necessary to ensure that data are

Now on p. 25.

See comment 1.

Now on p. 25.

**Appendix I
Comments From the Assistant Secretary
of Defense**

transmitted correctly between the automated systems that are used to compute worldwide inventory balances. The report will be required by December 1, 1992.

- **RECOMMENDATION 5:** The GAO recommended that the Secretary of the Air Force direct the Deputy Chief of Staff for Logistics to revise the Air Force Logistics Command procedures to provide all item managers consistent detailed guidance for maintaining the manual records, including (1) the sources from which an item manager should record losses, gains, and adjustments to the manual record and (2) specific instructions on how to document changes to the manual record inventory balances. (p. 38/GAO Draft Report)

Now on p. 25.

DOD RESPONSE: Partially concur. The DoD agrees that guidance provided to inventory managers by both the Air Force Logistics Command and the Air Logistics Centers concerning the maintenance of manual inventory record balances should be consistent to the extent possible. Requiring that such guidance be completely consistent for all item managers does not conform to current total quality management philosophies, which allow individual Air Logistics Center commanders and product directors the flexibility to establish their own internal reviews, approval levels, and other validation processes.

See comment 1.

By October 31, 1992, guidance issued by the Air Force Logistics Command and the Air Logistics Centers will be reviewed to ensure consistency and accuracy to the extent considered necessary. As stated in the DoD response to Finding G, the establishment of internal reviews, approval levels, and other validation processes are now the prerogative of the respective Air Logistics Center commanders and product directors under the total quality management concept. This philosophy will be included in Air Force Logistics Command Manual 57-4 by October 31, 1992.

- **RECOMMENDATION 6:** The GAO recommended that the Secretary of the Air Force direct the Deputy Chief of Staff for Logistics to require the Air Logistics Centers to periodically (1) review manual records for errors and compliance with instructions, and (2) report the results to the Air Force Logistics Command. (p. 38/GAO Draft Report)

Now on p.25.

DOD RESPONSE: Partially Concur. The DoD concurs that Air Logistics Centers should regularly review manual inventory records for errors and compliance with instructions. The DoD does not agree, however, that the results of all such reviews need to be reported to the Air Force Logistics Command, where

See comment 1.

**Appendix I
Comments From the Assistant Secretary
of Defense**

management attention would be diverted from the more critical effort to improve the data in the automated inventory records.

The Air Force Logistics Command will be directed to review existing guidance in Air Force Logistics Command Manual 57-4 to ensure that instructions for manual inventory record reviews are adequate. That direction will be issued by August 31, 1992. However, in light of the high priority being placed on the efforts of the Air Force Logistics Command Requirements Interface Process Improvement Team to identify and rectify problems involving the quality of data entering the requirements computation system, additional reporting of discrepancies in manual records to the Air Force Logistics Command is not considered to be either necessary or cost-effective at this time.

- **RECOMMENDATION 7:** The GAO recommended that the Secretary of the Air Force direct the Assistant Secretary for Financial Management and the Deputy Chief of Staff for Logistics to jointly develop a comprehensive, long-term strategy for improving processes and designing systems for those processes that better ensure the reliability of repairable items inventory data--i.e., (1) eliminate dual record keeping, (2) ensure accurate record keeping, and (3) link accounting, budgeting, and inventory information. (p. 47/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that the Air Force needs to develop a comprehensive, long-term strategy for improving processes and designing systems to ensure the reliability of repairable item inventory data. The DoD does not, however, agree that such long-term strategy should include elimination of manual records. The manual reconciliation performed by item managers should continue to serve as an internal control for automated systems.

Strategies for improvement are already being formulated:

- Functional and system software specialists at the Air Force Logistics Command are in the process of developing a plan for retesting selected system interfaces to ensure that accurate data is passed to all receiving systems. The plan, including a forecast of the resources required for implementation, is expected to be submitted to senior managers at the Air Force Logistics Command for a determination on whether implementation is feasible. An estimated completion date for the development of the plan should be available by August 1992.

Now on p. 33.

See comment 4.

**Appendix I
Comments From the Assistant Secretary
of Defense**

- The Air Force Logistics Command is also developing a plan for the design of a test bed of pseudo national stock numbers that could be used to test all future Logistics Management System interfaces. An estimated completion date for the development of that plan should also be available by August 1992.
- In July 1991, the Air Force Logistics Command published a handbook entitled -- "Guideline for Developing and Evaluating Internal Management Controls in Automated Information Systems." The handbook includes program testing requirements to ensure that data accuracy is maintained through check digit, crossfooting, control totals, etc. The handbook is being updated and will be reissued to all data automation organizations by the end of August 1992. By following the published guidelines, discrepant data in newly implemented systems should be minimized.

- **RECOMMENDATION 8:** The GAO recommended that the Secretary of the Air Force direct the Assistant Secretary for Financial Management and the Deputy Chief of Staff for Logistics to jointly include material internal control weaknesses regarding the reliability of worldwide inventory repairable item inventory balances in the Air Force Financial Integrity Act report to Defense. (pp. 47-48/GAO Draft Report)

DDP RESPONSE: Nonconcur. The Federal Managers' Financial Integrity Act requires managers in Federal activities to identify and report material weaknesses. While inaccuracies and variances in inventory data are a weakness, the questions that must be addressed are (1) whether the inaccuracies and variances in the Air Force repairable item inventory records are significant enough to constitute a material weakness, (2) whether adequate corrective actions are being taken, and (3) whether adequate controls are in place.

The discrepancies identified by the GAO between the manual and automated inventory records of Air Force repairable items were the result of problems with the automated worldwide inventory systems that existed in 1990 that were well known to the Air Force. A major initiative was undertaken to correct the problems and, since that time, significant improvements have been made in the automated systems that are not accounted for in the GAO report. The GAO findings confirm that the manual inventory records provide a legitimate and necessary check on the automated inventory balance records. In this context, it is the Department's position that the problem is not sufficiently material to be reportable as a material weakness.

Now on p. 33.

See comment 4.

The following are GAO's comments on the Assistant Secretary of Defense's letter dated July 9, 1992.

GAO Comments

1. The Defense response is discussed in the "Agency Comments and Our Evaluation" section at the end of chapter 2.
2. Our report states that stock fund operating losses could occur with the stock fund financing of repairables if data accuracy problems continue. Such operating losses in the past have resulted in higher prices to stock fund customers, which is counter-productive to meeting the Defense Business Operations Fund's goal of providing products and services at the lowest cost. The example regarding stock fund losses in the late 1980s, which is cited in chapter 2, is presented to illustrate the potential for such a problem regarding repairables. The report also reiterates our position presented in testimony on how losses and gains should be treated with implementation of the Defense Business Operations Fund.
3. We did not consider these improvements because they had not been completed at the time of our review. Although Defense provided information on the number of system changes subsequent to the completion of our review, it did not provide information on the degree to which specific system changes improved the reliability of inventory data.
4. The Defense response is discussed in the "Agency Comments and Our Evaluation" section at the end of chapter 3.
5. The D041 system contains financial data that is critical to developing budgets. Similarly, the Air Force Audit Agency has reported that the logistics systems contain financial management information. Chapter 3 has been amended to state these points.
6. We believe that the total value of discrepancies is a better indicator of data inaccuracies. Netting overstatements and understatements would disguise the magnitude of the problem. We have amended chapter 2 to state that the discrepancies we identified included both overstatements and understatements.
7. Chapter 2 of our report has been changed to incorporate Defense's comment.

8. The comment Defense refers to was one of several made by Air Force officials on data accuracy problems. We have modified chapter 2 to clarify this point. Our report provides examples from the Oklahoma City ALC that show that differing inventory balances between systems persisted through March 1991.

9. The Defense response does not appropriately address the errors in recording gains and losses in the manual records. Defense's response discusses a policy for making adjustments based on unreconciled differences. We believe the policy is inappropriate, as discussed in the report.

10. Our report points out that the AFLC studies performed during the 1987-90 time frame fell short of identifying causes and that only certain segments of asset reporting were investigated. Also, our report attributes to AFLC officials the statement that the 1990 study team approach was not appropriately coordinated. The report has been changed to recognize that the Requirements Interface Process Improvement Team has initiated system changes in 1991 and 1992 to correct problems.

11. As stated in our report, the CFO Act requires the Defense CFO to oversee all financial management activities and related systems changes, including the implementation of asset management systems.

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