

July 2002

# DEFENSE INVENTORY

## Air Force Needs to Improve Control of Shipments to Repair Contractors



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# Contents

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<b>Letter</b>		1
	Results in Brief	2
	Background	3
	Procedures to Control Shipped Inventory Are Not Being Followed or Are Ineffective	5
	Contractors Given Unrestricted Access to Government-Furnished Material	5
	Quarterly Shipment Reports Not Provided	6
	Contractors Not Posting Government-Furnished and Manager- Directed Material Receipts	7
	Contractors Not Reporting Shipment Discrepancies	9
	Procedures for Following Up on Unconfirmed Material Receipts Are Ineffective	10
	Air Force Has Not Established Integrated Financial Management System	11
	Air Force Program Oversight Is Insufficient	12
	Conclusions	12
	Recommendations for Executive Action	13
	Agency Comments and Our Evaluation	14
<b>Appendix I</b>	<b>Scope and Methodology</b>	17
<b>Appendix II</b>	<b>Comments from the Department of Defense</b>	20
<b>Appendix III</b>	<b>GAO Staff Acknowledgments</b>	25
<b>Related GAO Products</b>		26
<b>Tables</b>		
	Table 1: Fiscal Year 2000 Shipments by Number, Value, and Type	4
	Table 2: Types of Shipments in Fiscal Year 2000	4
	Table 3: Status of Material Receipt, from GAO Review of Shipments in Fiscal Year 2000	8



G A O

Accountability \* Integrity \* Reliability

United States General Accounting Office  
Washington, DC 20548

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July 1, 2002

The Honorable Richard J. Durbin  
The Honorable Tom Harkin  
United States Senate

The Honorable Peter A. DeFazio  
The Honorable Carolyn B. Maloney  
House of Representatives

This is one in a series of reports addressing defense inventory vulnerabilities to fraud, waste, and abuse. (A list of related GAO products appears at the end of this report.) Since at least 1990, our office has considered Department of Defense inventory management to be a high-risk area because inventory management systems and procedures are ineffective. A lack of control over inventory shipments increases their vulnerability to undetected loss and theft and substantially increases the risk that millions of dollars will be spent unnecessarily. In response to your request, this report evaluates the Air Force's inventory control procedures for material shipped to contractors for repair or for use in repair. Specifically, we assess the Air Force's adherence to procedures designed to safeguard this material.

The Air Force contracts with private companies (i.e., repair and production contractors) to produce, maintain, and repair its equipment. In some cases, the Air Force furnishes from its inventories some or all of the parts necessary to perform the contracts. Control responsibility for this material is the shared responsibility of the Air Force Materiel Command and its three inventory control points, the Defense Logistics Agency, and repair contractors. The Air Force Materiel Command administers the Air Force's supply system and provides management policies and procedures. Through its three inventory control points, the command authorizes inventory movement from Defense Logistic Agency storage depots<sup>1</sup> to repair contractors. The Defense Logistics Agency—which operates and manages 24 storage depots—receives, stores, and issues Air Force inventory and maintains Air Force inventory records. In addition, the Defense Contract Management Agency, through its property administrators, assesses the accuracy of repair contractor records and

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<sup>1</sup> Air Force inventory is also issued to contractors from warehouses at Air Force bases.

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determines whether all government property is accounted for. Contractors are responsible for establishing and maintaining systems to control, protect, preserve, and maintain all government property.

To assess adherence to procedures, we examined shipments valued at about \$2.6 billion to the Air Force's repair contractors in fiscal year 2000. These shipments included classified, sensitive, pilferable, and unclassified items.<sup>2</sup> We primarily focused our work at the three Air Force inventory control points and 12 selected Air Force repair contractors (associated with 14 repair contracts). More details about our scope and methodology appear in appendix I.

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## Results in Brief

The Air Force and contractor personnel have largely not complied with Department of Defense and Air Force inventory control procedures designed to safeguard material shipped to contractors, placing items worth billions of dollars at risk of fraud, waste, and abuse. The following items identify inadequate procedures and departures from required procedures:

- The Air Force's three inventory control points have not restricted repair contractors' access to the specific items and quantities of government-furnished material<sup>3</sup> needed to accomplish the contract. This practice could allow contractors to obtain unneeded and unauthorized material.
- The inventory control points have not sent quarterly reports on the status of shipped material to property administration officials at the Defense Contract Management Agency. Without the quarterly reports, these officials cannot independently verify that contractors have accounted for government-furnished material.
- Contractors receiving shipped material have not (1) properly entered the receipt of shipments into their records and into the inventory control points' reporting systems or (2) routinely reported shipment discrepancies. These failures impair the Air Force's ability to account for

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<sup>2</sup> Classified items are those that require the highest degree of protection in the interest of national security; sensitive items are those that require a high degree of protection and control because of their high value and/or hazardous or technical nature; and pilferable items have a ready resale value or a civilian application and are therefore especially subject to theft.

<sup>3</sup> Government-furnished material is that which contractors requisition in support of repairs, alterations, and modifications. Generally, this material is incorporated into or attached onto deliverable end items (final products such as aircraft) or consumed or expended in performing the contract.

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shipments worth millions of dollars. Unaccounted-for inventory included items that warrant a high degree of protection and control, such as circuit card assemblies and navigation set control units.

- Air Force procedures for following up on shipments that contractors have not confirmed as received are ineffective, leaving the exact status of the shipments uncertain.
- The Air Force has not provided adequate program oversight because it does not request and analyze data on contractor shipment discrepancies to identify the extent and cause of discrepancies so that corrective action may be taken. This lack of oversight impedes the Air Force's ability to improve its supply operations and to determine which activities are responsible for lost or misplaced items.

We are recommending that the Secretary of Defense direct the Secretary of the Air Force to improve compliance with existing procedures for controlling shipped inventory and to improve the procedures themselves. In written comments on a draft of this report, the Department of Defense concurred with six recommendations, non-concurred with one recommendation, and partially concurred with three recommendations. The main point the Department makes is that it has corrected problems with an automated internal control system for loading stock numbers and quantities and screening them against contractor requisitions. Therefore, we modified our recommendations, stating that the effectiveness of this automated internal system must be demonstrated.

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## Background

Inventory shipped for repair or in support of repairs typically involves the following types of material:

- Manager-directed material, which item managers direct to be shipped to a contractor for repair, alteration, or modification.
- Government-furnished material, which contractors requisition in support of repairs, alterations, or modifications. Generally, this material is incorporated into or attached onto deliverable end items (final products such as aircraft) or consumed or expended in performing the contract.

For fiscal year 2000, Air Force logistics records for all inventory control points showed the following number, value, and type of material had been shipped to contractors (see table 1).

**Table 1: Fiscal Year 2000 Shipments by Number, Value, and Type**

	Universe of shipments	
	Number of shipments	Value
Manager-directed material	12,222	\$2,371,663,119
Government-furnished material	9,222	\$252,406,484
<b>Total</b>	<b>21,444</b>	<b>\$2,624,069,603</b>

Source: Item Manager Wholesale Requisition Process System.

Table 2 shows a breakdown of all shipments to contractors in fiscal year 2000 by the security type, number of items, and dollar value of shipments.

**Table 2: Types of Shipments in Fiscal Year 2000**

	Number of shipments	Number of items	Value
Classified military items	7,110	57,920	\$1,613,289,625
Sensitive items	1	48	50,884
Pilferable items	132	440	7,248,022
Nonsensitive items	13,491	102,767	944,960,004
Items with unknown security classification	710	1,305	58,521,065
<b>Total</b>	<b>21,444</b>	<b>162,480</b>	<b>\$2,624,069,603</b>

Source: GAO analysis.

Department of Defense (DOD) policy contains specific internal control procedures to help ensure that shipped inventory is accounted for. When an item is shipped, a shipping notification should be sent to the receiving contractors. The intended recipient of the material is responsible for notifying the inventory control point once the item has been received or if a discrepancy exists (e.g., the item was not received or the quantity received was less than expected). The notification of receipt and discrepancy reporting processes are internal controls designed to account for all shipped assets. If within 45 days of shipment the inventory control point has not been notified that a shipment has arrived, it is required to follow up with the intended recipient. The rationale behind this requirement is that until receipt is confirmed, the exact status of the shipment is uncertain and therefore vulnerable to fraud, waste, and abuse.

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## Procedures to Control Shipped Inventory Are Not Being Followed or Are Ineffective

As a result of departures from required procedures or ineffective procedures, the Air Force's shipped inventory is vulnerable to loss or theft. First, the Air Force has allowed repair contractors access to government-furnished material not needed to fulfill the repair contract. Second, inventory control points have not provided property administrators with the required government-furnished material status reports to use in verifying contractor records of government-furnished material received. Third, contractors have not adequately recorded receipt of items and reported receipt to inventory control points. Fourth, contractors have not routinely reported discrepant shipments to the designated shipping activity. Fifth, Air Force procedures for following up on shipments that contractors have not confirmed as received are ineffective. Sixth, the Air Force has not provided adequate oversight of shipments to contractors.

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## Contractors Given Unrestricted Access to Government-Furnished Material

DOD requires inventory control points to establish one or more internal control systems (i.e., management control activities) to restrict contractor access to government-furnished material. Among other things intended, the control systems are to screen all repair contractor requisitions for validation and approval and to restrict contractor access to government-furnished material to the specific items and quantities listed in the repair contract. However, the inventory control points' systems generally screen and restrict access to government-furnished material by a federal stock class or stock group rather than by stock number and quantity.<sup>4</sup> Also, the contracts we reviewed generally did not specify, as required, both the items and the quantities of material that the inventory control points had agreed to furnish to contractors.<sup>5</sup> As long as contractors requisition items within an authorized federal stock class or stock group, government-furnished material is automatically provided whether or not it is needed to fulfill the repair contract.

In a July 1997 memorandum, the Air Force Materiel Command reiterated the requirement that the inventory control points screen all repair contractor requisitions by stock number and quantity for validation and

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<sup>4</sup> Only 12 of the 14 contracts we reviewed authorized the contractors to requisition government-furnished material. Of those 12 contracts, 9 are screened by federal stock class or stock group rather than by stock number and quantity.

<sup>5</sup> Only 12 of the 14 contracts in our review authorized the contractor to requisition government-furnished material. Of those 12 contracts, 8 did not specify both the items and the quantities of material the inventory control points had agreed to furnish to contractors.

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approval, and it developed procedures for an automated method of loading stock numbers and quantities into the control systems. Air Force officials indicate that the major obstacle now is that the procedures for the automated method of loading stock numbers do not work as designed. For this reason, the Air Force Materiel Command waived the requirement for screening by stock number and quantity and allowed inventory control points to continue to screen contractor requisitions for government-furnished material at the federal stock class or stock group level.

The following example illustrates the weakness in the current screening process. A contract we reviewed listed 14 specific, stock-numbered parts—from seven different stock classes—that were required to repair the end item (an electronic countermeasures system for the B-52H aircraft). However, because the inventory control point's system screened and restricted the contractor's access to government-furnished material by federal stock class, the contractor could requisition any item from the seven different stock classes in which the 14 parts are grouped. The seven stock classes contain over 502,900 other stock-numbered parts that are not needed to repair the end item. The contractor could requisition any of these parts, in any quantity, and the improper requisition could pass through the inventory control point's screening system and be approved.

We did not determine whether contractors had obtained unauthorized material as a result of their access to material by federal stock class or group. However, these control weaknesses are the same as those identified in earlier reports as having allowed contractors to obtain unneeded and unauthorized material. For example, in a 1998 report on the adequacy of government oversight over government-furnished material to a contractor, the Air Force Audit Agency reported 2,978 of the 5,569 validated requisitions were not needed to accomplish the contract. The unneeded requisitions included 1,090 stock numbers valued at \$17.4 million. Similarly, a 1995 DOD inspector general report on management access to the DOD supply system concluded that granting contractors access to government-furnished material in the DOD supply system by federal stock class continued to be a material internal control weakness that placed DOD material at undue risk.

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## Quarterly Shipment Reports Not Provided

To independently verify that contractors have accounted for all government-furnished material received, DOD policy requires inventory control points to provide to property administrators at the Defense Contract Management Agency quarterly status reports showing all shipments of Air Force material to contractors. Inventory control point



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officials responsible for distributing the reports to property administrators told us that the reports have not been sent.

We found that existing Air Force procedures governing distribution of the quarterly status reports do not assign responsibility for distributing these reports to officials at inventory control points and are outdated (e.g., the systems for generating the reports no longer exist). Air Force officials acknowledge that the procedures are not current and stated that they are in the process of updating them.

Proper distribution of government-furnished material status reports has been a long-standing issue. For example, a 1995 Department of Defense inspector general audit report on management access to the DOD supply system stated that the Air Force should take the distribution of its status report more seriously, ensuring that the report is issued each quarter. The audit report asserts that property administrators are the last line of defense in protecting material resources and, as such, they need an independent record of the government-furnished material shipped to contractors. The Air Force's quarterly status report provides such a record; without it, property administrators must rely entirely on contractors' records.

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## Contractors Not Posting Government-Furnished and Manager-Directed Material Receipts

Department of Defense and Air Force policies contain specific procedures governing the notifications that contractors should send to their inventory control points when they receive shipped inventory. The policies state that, upon receipt of an item, a receiving contractor must enter the shipment into its inventory records and notify the inventory control point of material receipt. To accomplish notification of receipt, the Air Force requires contractors to enter receipts into a reporting system at the appropriate inventory control point. The notification of receipt is an internal control designed to account for all shipped assets.

During fiscal year 2000, the Air Force shipped thousands of items with a reported value at about \$2.6 billion to contractors. As part of our review, we sought to determine whether items reportedly shipped to repair contractors had in fact been received and entered into both the contractors' records and the inventory control points' reporting systems.

Our review indicated that contractors are not following policies governing receipt notification. Of the \$2.6 billion of inventory shipped to contractors in fiscal year 2000, we judgmentally selected and reviewed 9,003 items valued at \$814.2 million. We found that contractors had not always

properly posted material receipts for these items into their records or into the inventory control points' reporting systems. Specifically, 48 percent of these items had been received and properly posted by contractors to the inventory control points' reporting systems; 19 percent of the shipped items had been received but were either improperly posted or not posted by contractors to their records and/or the inventory control points' reporting systems; and 33 percent of items reportedly had not been received by contractors or lacked sufficient documentation to prove that they had been accounted for by the contractors. The items unaccounted for included those that warrant a high degree of protection and control because of their high value and/or their security classification, such as circuit card assemblies and navigation set control units. This lack of documentation is in itself an internal control weakness. For example, the federal acquisition regulation requires that contractors' property control records provide a complete, current, and auditable record of all transactions involving government property. Table 3 presents more detailed information on the items in our review.

**Table 3: Status of Material Receipt, from GAO Review of Shipments in Fiscal Year 2000**

	Number of items	Value
<b>Shipment properly posted to the reporting system</b>		
Contractor received items and entered items into the reporting system using the correct document number, stock number, and quantity	4,315	\$247,510,461
<b>Subtotal</b>	<b>4,315</b>	<b>247,510,461</b>
<b>Shipment improperly posted or not posted to reporting system but accounted for</b>		
Contractor received items but entered items into the reporting system using an incorrect document number, stock number, and/or quantity	543	69,573,954
Contractor received item and entered item into inventory record, but it is not reflected in the reporting system	1,096	436,277,575
Other	71	13,485,901
<b>Subtotal</b>	<b>1,710</b>	<b>519,337,431</b>
<b>Shipment not posted and not accounted for</b>		
Contractors did not retain inventory records of shipment receipts or clearly document receipt transactions	1,145	23,086,538
Contractor reportedly did not receive items	1,829	24,211,946
Other	4	9,739
<b>Subtotal</b>	<b>2,978</b>	<b>47,308,224</b>
<b>Total</b>	<b>9,003</b>	<b>\$814,156,116</b>

Source: GAO analysis.

No dominant cause for these failures to properly account for shipment receipts emerged in our discussions with contractor officials. However, in

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our interviews with contractor personnel, they identified a number of factors:

- inadequate training/instruction on how to use and enter information into the reporting system,
- lack of awareness of reporting procedures,
- data transmission problems (e.g., transactions entered by the contractors did not show up in the reporting system),
- data input errors made while attempting to enter information into the system, and
- data deleted from the reporting system because of data storage constraints.

In addition, two contracts in our review did not contain a reporting requirement.

Because of these reporting problems, the inventory control points' reporting systems contained inaccurate information on large numbers of shipment receipt notifications, thus reducing the value of the information as a means of accurately and adequately accounting for all shipped assets. Inventory control point personnel indicated that they are often forced to work around the reporting systems, and they expend considerable time and effort to collect, maintain, and analyze receipt information that should be readily available to them in these automated systems. Visibility over shipped material depends in part on accurate contractor reporting of material receipts; without adequate reporting, the Air Force cannot readily account for shipped material, making it vulnerable to theft or loss.

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## Contractors Not Reporting Shipment Discrepancies

Air Force policy also requires contractors to notify the shipping activity if a discrepancy exists between items shipped and items received. The purpose of discrepancy reporting is to determine the cause of discrepancies, effect corrective action, and prevent recurrence. Such reports also provide (1) support for adjustment of property and financial inventory accounting records, (2) information as a basis for claims against contractors, and (3) information for management evaluations.

As table 3 shows, 1,829 of the items (valued at about \$24.2 million) we reviewed had reportedly not been received, but only 8 of the items were reported as discrepancies and resolved. For the remaining 1,821 items, we found a number of problems in discrepancy reporting.

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- Contractor personnel did not report the discrepancies. According to most contractor personnel, this situation occurred primarily because the shipping activity did not notify them of impending shipments, thus they did not expect the shipment and could not monitor its status. Others indicated that they simply never report any discrepancies.
  - Contractor personnel reported the discrepancies, but they did not route the discrepancy reports to the appropriate shipping activity personnel who could investigate and resolve the discrepancies. Although we found that contractor personnel did not properly route shipping discrepancies to the appropriate shipping activity, they were under the impression that they had.
  - Contractor personnel reported the discrepancies, but did not follow up when no response was received from the shipping activity. They did not follow up because they planned to reorder the material that they had not received.
  - Contractor personnel reported the discrepancies, but when they later determined that the materials had been received, they did not cancel the discrepancy reports.

This failure to comply with Air Force procedures undermines the Air Force's ability to determine the cause of discrepancies, effect corrective action, and prevent recurrence. This situation can also result in loss of control over material, lost recovery rights, and material remaining in a questionable status for long periods of time.

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## Procedures for Following Up on Unconfirmed Material Receipts Are Ineffective

To ensure proper reporting and accounting of material receipts, DOD policy requires that inventory control points follow up with the contractor within 45 days from the date of shipment if they have not been notified that a shipment has arrived. The rationale behind this requirement is that until receipt is confirmed, the exact status of the shipment is uncertain and therefore vulnerable to fraud, waste, and abuse.

At present, Air Force procedures do not ensure adequate follow-up on unconfirmed receipts. According to Air Force officials, inventory control points send electronic inquiries to contractors to follow up on all shipments. However, the Air Force has not yet established a system by which (1) the inventory control points can reconcile material shipped to contractors with material received by contractors to determine unconfirmed receipts and (2) contractors can respond to the follow-up inquiries to confirm receipts or discrepancies. Consequently, inventory control points assume that all material shipped to contractors is received by them, and they close the record on the shipments without contractor

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confirmation of material receipt. The inventory control point does not become aware that material has not been received unless the contractor inquires about the shipment. The result is a situation in which unconfirmed receipts are officially considered delivered, an assumption that, in turn, places this material at risk of fraud, waste, abuse, and theft.

The following example illustrates how the lack of adequate follow-up on unconfirmed receipts places this material at risk. In June 2000, the Defense Distribution Depot in Warner Robins, Georgia, reportedly issued and delivered 85 electron tubes to an Air Force repair contractor, but, according to contractor personnel, the shipment was never received and the contractor never reported the discrepancy to the inventory control point. In January 2002, we requested proof of issuance and delivery from the Warner Robins depot. The depot provided proof of issuance but could not confirm delivery. According to depot personnel, a delivery signature was not obtained from the contractor's receiving personnel at the time of delivery. Nevertheless, the inventory control point closed the record on this \$3.5 million shipment, assuming the electron tubes had been received. The electron tubes remain unaccounted for.

To address its deficiencies relating to proper reporting and accounting of material receipts, the Air Force plans to transition to the Department of Defense Commercial Asset Visibility System (CAV II). This will require a 2-year scheduled transition starting in fiscal year 2003 and ending in fiscal year 2004.

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## Air Force Has Not Established an Integrated Financial Management System

Another weakness preventing effective accountability over shipped inventory relates to the Air Force's financial management system. The Chief Financial Officers Act of 1990 requires a plan for the integration of agency financial management systems. The Federal Financial Management Improvement Act of 1996 built upon the 1990 act and required agencies to maintain an integrated system (i.e., an integrated general ledger controlled system). With such a system, accounting records and logistics records (i.e., records from the supply and repair side of inventory control points) should be updated automatically when inventory items are purchased and received. Any differences between these two sets of records should be identified periodically and research conducted to alert management at the inventory control points to possible undetected loss or theft of shipped items.

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As part of the its latest efforts to reform its financial operations, the Department of Defense has stated that it will develop Defense-wide integrated systems.<sup>6</sup> If effectively designed and implemented, these systems will be integral to ensuring effective accountability over the Air Force's shipped inventories.

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## Air Force Program Oversight Is Insufficient

To evaluate and improve supply operations and reporting performance, Air Force policy requires shipping activities to record, summarize, and report to Air Force headquarters the volume and dollar value of shipment discrepancies, and headquarters is required to analyze this data to identify the causes, sources, and magnitude of discrepancies so that corrective actions can be taken. This policy is consistent with federal government standards for internal controls that require ongoing oversight to assess the quality of performance over time and to ensure that findings of audits and other reviews are promptly resolved.

Air Force headquarters acknowledges that it has not requested nor collected contractor shipment discrepancy data, and, as of February 2002, had not developed a definite plan of action or a target date for full implementation. The lack of program oversight may represent inadequate management emphasis. Even if the Air Force were collecting the contractor shipment discrepancy data, it would not be meaningful because, as shown earlier, contractors are not reporting discrepancies accurately. The lack of this information impedes the Air Force's ability to evaluate and improve supply operations as well as its ability to determine which activities are responsible for lost or misplaced items.

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## Conclusions

Inventory worth billions of dollars has been vulnerable to fraud, waste, and abuse because the Air Force either did not adhere to control procedures or did not establish effective procedures. Because of these control weaknesses, repair contractors have access to items and quantities of items not specified in their contracts, and the Defense Contract Management Agency does not have the quarterly reports on shipment status that it needs to independently verify that contractors have accounted for shipments of government-furnished material. In addition,

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<sup>6</sup> Under 10 U.S.C. 2222, the Department is to submit to the Congress an annual strategic plan for improving financial management. The Department's plan was submitted in January 2001.

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contractor receipt posting and discrepancy reporting practices produce incomplete and inaccurate information, impairing the ability of the Air Force to monitor shipments. Even if contractor records on shipment receipts were accurate, the Air Force's system cannot reconcile material shipped to contractors with material received by contractors, so the Air Force cannot readily identify shipments with unconfirmed receipts. Consequently, the Air Force cannot readily account for these shipments, which include classified, sensitive, and pilferable items. Finally, the Air Force has not exercised the required extent of program oversight by collecting data on contractor shipment discrepancies and using it to assess practices for safeguarding shipped inventory; as a result, it cannot identify the extent and cause of contractor shipment discrepancies or take corrective action.

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## Recommendations for Executive Action

To improve the control of inventory being shipped, we recommend that the Secretary of Defense direct the Secretary of the Air Force to undertake the following:

- Improve processes for providing contractor access to government-furnished material by
  - listing specific stock numbers and quantities of material in repair contracts (as they are modified or newly written) that the inventory control points have agreed to furnish to contractors;
  - demonstrating that automated internal control systems for loading and screening stock numbers and quantities against contractor requisitions perform as designed;
  - loading stock numbers and quantities that the inventory control points have agreed to furnish to contractors into the control systems manually until the automated systems have been shown to perform as designed; and
  - requiring that waivers to loading stock numbers and quantities manually are adequately justified and documented based on cost-effective and/or mission-critical needs.
- Revise Air Force supply procedures to include explicit responsibility and accountability for
  - generating quarterly reports of all shipments of Air Force material to contractors; and
  - distributing the reports to Defense Contract Management Agency property administrators.
- Determine, for the contractors in our review, what actions are needed to correct problems in posting material receipts.

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- Determine, for the contractors in our review, what actions are needed to correct problems in reporting shipment discrepancies.
  - Establish interim procedures to reconcile records of material shipped to contractors with records of material received by them, until the Air Force completes the transition to its Commercial Asset Visibility system in fiscal year 2004.
  - Comply with existing procedures to request, collect, and analyze contractor shipment discrepancy data to reduce the vulnerability of shipped inventory to undetected loss, misplacement, or theft.

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## Agency Comments and Our Evaluation

In written comments on a draft of this report (see app. II), the Department of Defense concurred with six of the recommendations, non-concurred with one recommendation, and partially concurred with three recommendations. DOD did not concur with our second recommendation—to improve processes for controlling contractor access to government-furnished material by developing automated internal control systems for loading stock numbers and quantities and screening them against contractor requisitions. DOD states that the Air Force Special Support Stock Control system already has the recommended capability in place. Although the Air Force Special Support Stock Control system may be capable of loading stock numbers and quantities and screening them against contractor requisitions, we found that in practice the system was not able to carry out this function as designed. A January 2002 software change implemented to address the issue did not resolve it, and Air Force officials acknowledged in April 2002 that this system was still not working properly. To correct the weakness in its current automated internal control systems, Air Force officials stated that in April 2002 the Air Force Materiel Command planned to revise its existing procedures for an automated method of loading stock numbers into the current control systems. We believe that the Air Force's actions to correct its internal control systems deficiencies are a step in the right direction, and, if the revised procedures do work as designed, they will improve the process for controlling contractor access to government-furnished material. Based on DOD's comments, we modified our recommendation to emphasize the need to demonstrate that automated internal control systems for loading and screening stock numbers and quantities against contractor requisitions perform as designed.

DOD partially concurred with the recommendation to load stock numbers and quantities for items requisitioned by contractors into the control systems manually until the automated system is implemented. DOD again stated that the Air Force Materiel Command's current control systems



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already provide the capability for loading and screening national stock numbers and quantities against contractor requisitions. However, DOD directed the Air Force to determine the feasibility of establishing an interim capability until all repair contracts are written in compliance with Air Force policies and procedures. We continue to believe our recommendation will be valid until the previously discussed automated internal control system for loading stock numbers and quantities and screening them against contractor requisitions is proven to work as designed.

DOD partially concurred with the recommendation to require that waivers to loading stock numbers and quantities manually are adequately justified and documented based on cost-effective and/or mission-critical needs. DOD reiterated that the current Air Force control systems already provide the capabilities for loading stock numbers and quantities and screening them against contractor's requisitions. DOD further states that it will direct Headquarters, Air Force Installations and Logistics, to ensure that future decisions affecting validation of contractor orders involving government-furnished materiel or equipment are based on cost-effectiveness and/or mission-critical needs and that requests are processed in accordance with DOD policies and procedures. We agree with DOD that any future waivers should be justified and documented. However, we continue to believe our recommendation will be valid until the waiver is rescinded, because the waiver allows for the inventory control point to continue to load and screen contractor requisitions at the federal stock class or stock group levels rather than loading contracts at the required national stock number level.

Finally, DOD partially concurred with the recommendation to comply with existing procedures to request, collect, and analyze contractor shipment discrepancy data to reduce the vulnerability of shipped inventory to undetected loss, misplacement, or theft. DOD stated that in February 2001, Headquarters, Air Force Installations and Logistics, directed all Air Force major commands to collect and analyze these types of supply discrepancies for possible trends. DOD added that each major command was tasked to provide Air Force Installations and Logistics a semi-annual report of its findings (negative reports were not required). DOD recently directed Headquarters, Air Force Installations and Logistics, to re-emphasize this requirement to all major commands and to require that all major commands submit a report on their findings for the last 12 months. Moreover, a negative report will be required if no supply discrepancies were received. While we believe this is a step in the right direction, we also believe the DOD response to our recommendation does not address

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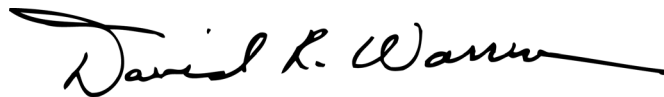
the contractor discrepancy reporting issues raised in this report. Although some Air Force major commands may actually be collecting and analyzing shipment discrepancies at their Air Force bases, we found that similar contractor shipment discrepancy data has not been requested nor collected. As we stated in this report, Air Force headquarters acknowledges that it has neither requested nor collected these contractor discrepancy report data for shipments, and, as of February 2002, had not developed a definite plan of action or a target date for full implementation. We continue to believe the conditions we reported on and our recommendation are still valid and should be addressed by DOD. Based on DOD's comments, we have made it clear that the shipment discrepancy data referred to in this report and in the related recommendation was provided by the contractors.

Appendix I contains the scope and methodology for this report. DOD's written comments on this report are reprinted in their entirety in appendix II.

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As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its issue date. At that time, we will send copies of this report to the appropriate congressional committees; the Secretary of Defense; the Secretary of the Air Force; the Director, Office of Management and Budget; and the Director, Defense Logistics Agency. We will also make copies available to others upon request.

Please contact me at (202) 512-8412, or Lawson Gist, Jr. (202) 512-4478, if you or your staff have any questions concerning this report. Other GAO staff acknowledgments are listed in appendix III.



David R. Warren  
Director  
Defense Capabilities and Management

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# Appendix I: Scope and Methodology

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To assess the Air Force's and its repair contractors' adherence to procedures for controlling shipped inventory, we took the following steps:

- To identify criteria for controlling shipped inventory, we reviewed Department of Defense and Air Force policies and procedures, obtained other relevant documentation related to shipped inventory, and discussed inventory management procedures with officials at the following locations: Headquarters, Department of the Air Force, Washington, D.C.; the Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio; the Oklahoma City Air Logistics Center, Tinker Air Force Base, Oklahoma; the Ogden Air Logistics Center, Hill Air Force Base, Utah; the Warner Robins Air Logistics Center, Robins Air Force Base, Georgia; the Defense Contract Management Agency, Alexandria, Virginia; and the Defense Logistics Management Standards Office, Fort Belvoir, Virginia.
- To identify the number, value, and types of shipped inventory, we obtained computerized supply-side records of all government-furnished material shipments and manager-directed material shipments between October 1999 and September 2000 from the Air Force Materiel Command at Wright-Patterson Air Force Base, Ohio. The records contained descriptive information about each shipment, including the document number, national stock number, and quantity shipped. We excluded broken items shipped from end-user activities to contractor repair facilities and repaired material returned from a contractor repair facility to a storage activity or end user because the Air Force Materiel Command could not readily identify and provide the descriptive information. To determine the security type of selected shipments in fiscal year 2000, we identified the national stock number for all shipments of government-furnished material and manager-directed material. We then matched the national stock number with security classification codes in the Department of Defense Federal Logistics Information System.
- To select contractors and items shipped to them, we used computerized shipment data obtained from the Air Force Materiel Command. To develop our methodology, we conducted a preliminary review using three judgmentally selected contractors; two contractors were chosen on the basis of their proximity to the inventory control points, and the third was selected because of the substantial volume of shipments between it and all of the inventory control points. For these initial contractors, we selected 214 government-furnished material items and 1,159 manager-directed material items, based on such factors as the national stock number of the items and the number of items and/or dollar value of the shipments. Subsequently, we judgmentally selected an additional nine repair contractors, three for each inventory control point, that had either the largest dollar value or the largest number of government-furnished and

manager-directed items shipped to them. For these contractors, we then selected 188 government-furnished material items and 7,442 manager-directed material items based on the military sensitivity of the items in the shipments and the unit price and/or dollar value of the shipments. Because the number of selected contractors and shipments was limited and judgmentally selected, the results of our analysis cannot be projected to all Air Force repair contractors and shipments.

- To assess whether shipments had been received and entered into the inventory control points' repair-side reporting system, we obtained from the inventory control points their computer-generated shipment receipt histories. The receipt histories contained descriptive information about each shipment, including the document number, national stock number, and quantity reported as received.
- We did not independently verify the overall accuracy of the databases for which we obtained data, but used them as a starting point for selecting shipments that we then tracked back to records and documents on individual transactions. Because our conclusions are based only on those shipments for which we tracked back to documents, use of this data is reasonable for our purposes.
- To determine whether contractors had accounted for our selected shipments, we then matched the Air Force Materiel Command supply-side records of shipments to inventory control points' repair-side receipt histories. When we identified discrepancies, we followed up with the repair contractors and inventory control points by tracking items back to contractor inventory records and by holding discussions with officials at the following locations: BAE Flight Systems, Mojave, California; Boeing, San Antonio, Texas; Boeing Electronic Systems, Heath, Ohio; Heroux, Inc., Quebec, Canada; ITT Avionics, Clifton, New Jersey; Lockheed Martin, Marietta, Georgia; Lockheed Martin, San Antonio, Texas; Lockheed Martin Lantirn, Warner Robins, Georgia; Northrop Grumman, Baltimore, Maryland; Northrop Grumman, Warner Robins, Georgia; PEMCO Aeroplex, Birmingham, Alabama; Teledyne Electronic Technologies, Warner Robins, Georgia; and the Defense Distribution Depots (located in Warner Robins, Georgia, and Oklahoma City, Oklahoma).
- To determine what happened to selected items that had reportedly not been received by contractors, our Office of Special Investigations followed up with commercial carriers by obtaining proof of delivery information and by holding discussions with officials at the following locations: ABF Freight Systems, Inc., Fort Smith, Arkansas; Associated Global Systems, Inc., New Hyde Park, New York; CorTrans Logistics, LLC, Wooddale, Illinois; Emery Worldwide, Ontario, California; Federal Express Corporation, Somerset, New Jersey; and United Parcel Service, Washington, D.C.

- To learn whether issues associated with unaccounted-for shipments were adequately resolved, we reviewed Department of Defense, Air Force, and Air Force Materiel Command implementing guidance. Such information provided the basis for conclusions regarding the adherence to procedures for controlling shipped inventory.
- To determine whether the Air Force had emphasized shipped inventory as part of its assessment of internal controls, we reviewed assessments from the Department of the Air Force, the Oklahoma City Air Logistics Center, the Ogden Air Logistics Center, and the Warner Robins Air Logistics Center for fiscal years 1999 and 2000.

Our work was performed from May 2001 through April 2002 in accordance with generally accepted government auditing standards. We conducted our other investigative work during March 2002 and April 2002 in accordance with investigative standards established by the President's Council on Integrity and Efficiency.

# Appendix II: Comments from the Department of Defense



DEPUTY UNDER SECRETARY OF DEFENSE FOR  
LOGISTICS AND MATERIEL READINESS  
3500 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3500

JUN 17 2002

Mr. David R. Warren  
Director, Defense Capabilities Management  
U.S. General Accounting Office  
Washington, D.C. 20548


Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE INVENTORY: Air Force Needs to Improve Control Over Shipments to Repair Contractors," May 7, 2002 (GAO Code 350079).

The Department concurs with the six of the recommendations in the draft report, partially concurs with three of the recommendations and nonconcur with Recommendation 2, in which the Air Force already has the recommended capability in place and operating. In fact, the Air Force has taken immediate steps to improve compliance with controls already in place over shipments to repair contractors.

The Department's detailed comments to the recommendations are enclosed. The Department appreciates the opportunity to comment on the draft report.

Sincerely,

  
Allen W. Beckett  
Principal Assistant

Enclosure



GAO CODE 350079/GAO-02-617

**“DEFENSE INVENTORY: AIR FORCE NEEDS TO IMPROVE CONTROL OVER  
SHIPMENTS TO REPAIR CONTRACTORS”**

**RECOMMENDATION 1:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to improve processes for providing contractor access to government-furnished material by listing specific stock numbers and quantities of material in repair contracts (as they are modified or newly written) that the inventory control points have agreed to furnish to contractors. (p. 13/GAO Draft Report)

**DoD RESPONSE:** Concur.

a. DoD will direct Headquarters Air Force Materiel Command/Logistics (HQ AFMC/LG) to:

(1) Establish management oversight to ensure that the Air Logistics Centers comply with AFMCI 23-113, which already requires that repair contracts authorizing Government Furnished Material and Equipment be written at the stock number and quantity level.

(2) Develop a plan to modify existing contracts and provide a schedule to ensure full compliance by 2004.

**Estimated Completion Date (ECD): 14 Jun 02**

b. DoD will direct HQ AFMC/LG to change Section H, AFMAN 23-110, Volume III, Part One, Chapter 9, to emphasize that appendix B of all contracts authorizing Government Furnished Materiel and/or Equipment must be written and validated at the stock number and quantity level.

**ECD: 31 Jan 03**

**RECOMMENDATION 2:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to improve processes for providing contractor access to government-furnished material by developing automated internal control systems for loading and screening stock numbers and quantities against contractor requisitions. (p. 13/GAO Draft Report)

**DoD RESPONSE:** Non-concur. The Air Force Special Support Stock Control (SSSC) D035D System already has this capability at both the contract and DoD Activity Address Code level via user interface and a mass contract upload feature. This enables an automated check between requisitions and stock numbers.

**RECOMMENDATION 3:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to improve processes for providing contractor access to government-furnished material by manually loading stock numbers and quantities that the inventory central points have agreed to furnish to contractors into the control systems until the implementation of the automated systems is complete. (p. 13/GAO Draft Report)

**DoD RESPONSE:** Partially concur. The Air Force Materiel Command Materiel Control Activity process already provides user and mass contract stock number/quantity upload capabilities for those contracts written IAW AFMCI 23-113. DoD will direct Headquarters Air Force Installations and Logistics (HQ AF/IL) to determine the feasibility of establishing an interim maintenance interface capability until all repair contracts are written in compliance with AFMCI 23-113.

**ECD: 14 Jun 02**

**RECOMMENDATION 4:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to improve processes for providing contractor access to government-furnished material by requiring that waivers to manually loading stock numbers and quantities are adequately justified and documented based on cost-effective and/or mission critical needs. (p. 13/GAO Draft Report)

**DoD RESPONSE:** Partially concur. The problem cited by the GAO was specific to a software problem in 1999-2000 between the Air Force Materiel Command's contract provisioning and materiel control activity systems which has since been resolved. DoD will direct the HQ AF/IL to ensure that future decisions affecting validation of contractor orders involving Government Furnished Materiel or Equipment be based on cost effectiveness and/or mission critical needs and requests processed IAW DoD 4140.1-R and DoD 4000.25-1-M.

**ECD: 14 Jun 02**

**RECOMMENDATION 5:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to revise Air Force supply procedures to include explicit responsibility and accountability for generating quarterly reports of all shipments of Air Force material to contractors. (p. 13/GAO Draft Report)

**DoD RESPONSE:** Concur.

a. DoD will direct HQ AF/IL to formalize responsibility and accountability for the generation of required quarterly reports to the applicable Defense Contract Management Agency (DCMA) office by updating AFMAN 23-110, Volume III, Part 8, Chapter 15.

**ECD: 14 Jun 02**

b. DoD will direct HQ AFMCLG to publish interim policy and procedures.

**ECD: 28 Jun 02.**

**RECOMMENDATION 6:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to revise Air Force supply procedures to include explicit responsibility and accountability for distributing the reports to DCMA property administrators. (p. 13/GAO Draft Report)



**DoD RESPONSE:** Concur.

a. DoD will direct AF/IL to formalize responsibility and accountability for the distribution of required quarterly reports to the applicable DCMAs by updating AFMAN 23-110, Volume III, Part 8, Chapter 15.

**ECD: 14 Jun 02**

b. DoD will direct HQ AFMC/LG to publish interim policy and procedures.

**ECD: 28 Jun 02**

**RECOMMENDATION 7:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to determine, for the contractors in the GAO review, what actions are needed to correct problems in posting material receipts. (p. 14/GAO Draft Report)

**DoD RESPONSE:** Concur. DoD will direct HQ AF/IL to determine, for the contractors in the GAO review, actions required to correct materiel receipt posting problems.

**ECD: 14 Jun 02**

**RECOMMENDATION 8:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to determine, for the contractors in the GAO review, what actions are needed to correct problems in reporting shipment discrepancies. (p. 14/GAO Draft Report)

**DoD RESPONSE:** Concur. DoD will direct HQ AF/IL to determine, for the contractors in the GAO review, actions required to ensure that contractor personnel are aware of procedures in submitting supply and transportation discrepancy reports.

**ECD: 14 Jun 02**

**RECOMMENDATION 9:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to establish interim procedures to reconcile records of material shipped to contractors with records of material received by them, until the Air Force completes the transition to the Department of Defense Commercial Asset Visibility system in fiscal year 2004. (p. 14/GAO Draft Report)

**DoD RESPONSE:** Concur. DoD will direct HQ AF/IL to establish interim procedures to reconcile records of Government Furnished Materiel and Equipment shipped to repair contractors and records of materiel acknowledged received by them.

**ECD: 14 Jun 02**

**RECOMMENDATION 10:** The GAO recommended that the Secretary of Defense direct the Secretary of the Air Force to comply with existing procedures to request, collect, and analyze shipment discrepancy data to reduce the vulnerability of shipped inventory to undetected loss, misplacement, or theft. (p. 14/GAO Draft Report)

**DoD RESPONSE:** Partially concur. In Feb 2001, HQ AF/IL directed all Air Force major commands to collect and analyze these types of supply discrepancies for possible trends. Each major command was tasked to provide AF/IL a semi-annual report of their findings. Negative reports were not required. DoD will direct HQ AF/IL to re-emphasize this requirement to all major commands and require all major commands submit a report on their findings for the last 12 months. A negative report will be required if no supply discrepancies were received.

**ECD: 31 Jul 02**

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# Appendix III: GAO Staff Acknowledgments

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## Acknowledgments

Key contributors to this report include Sandra F. Bell, George Surosky, Susan Woodward, Jay Willer, David Fisher, Norman M. Burrell, and John Ryan.

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# Related GAO Products

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*Performance and Accountability Series: Major Management Challenges and Program Risks—Department of Defense.* [GAO-01-244](#). Washington, D.C.: January 2001.

*High-Risk Series: An Update.* [GAO-01-263](#). Washington, D.C.: January 2001.

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*Defense Inventory Management: Problems, Progress, and Additional Actions Needed.* [GAO/T-NSIAD-97-109](#). Washington, D.C.: March 20, 1997.

*High-Risk Series: Defense Inventory Management.* [GAO/HR-97-5](#). Washington, D.C.: February 1997.

*High-Risk Series: Defense Financial Management.* [GAO/HR-97-3](#). Washington, D.C.: February 1997.



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