	United States General Accounting Office
GAO	Report to the Chairman, Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, House of Representatives
November 1999	DEFENSE INVENTORY

# Improvements Needed to Prevent Excess Purchases by the Air Force





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#### Abbreviations

DOD Department of Defense



United States General Accounting Office Washington, D.C. 20548 National Security and International Affairs Division

B-280236

November 10, 1999

The Honorable Christopher Shays Chairman, Subcommittee on National Security, Veterans Affairs, and International Relations Committee on Government Reform House of Representatives

Dear Mr. Chairman:

This report is one in a series of reports on the Department of Defense's (DOD) management of secondary inventory–spare and repair parts and other items that support DOD's operating forces on land, at sea, and in the air.<sup>1</sup> Over the past several years, we have testified and issued a number of reports that cite the management of defense inventory as a high-risk area.<sup>2</sup> The management of inventory involves significant Air Force expenditures. The Air Force annually purchases about \$4.4 billion of secondary inventory and has a reported on-hand inventory valued at about \$25.9 billion. As of September 30, 1997, Air Force inventory files showed that the Air Force had contracts for \$1.5 billion of secondary inventory, \$384 million of which exceeded current operating requirements–the inventory needed to prevent out-of-stock situations and to meet funded war reserves.

As requested, we focused this review on inventory the Air Force had on contract (that is, ordered but not yet delivered) that was excess to current operating requirements. Specifically, to determine whether the Air Force was canceling purchases that exceeded current operating requirements, we judgmentally selected and reviewed 160 items with inventory valued at \$162.4 million on contract that exceeded current operating requirements as

<sup>&</sup>lt;sup>1</sup>See Related GAO Products at the end of this report.

<sup>&</sup>lt;sup>2</sup>In 1990, we began a special effort to review and report on the federal program areas that we had identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement. This effort, which was supported by the Senate Committee on Government Affairs and the House Committee on Government Reform, brought a much needed focus on problems that were costing the government billions of dollars. We identified inventory management as high risk in our 1992, 1995, 1997, and 1999 high-risk reports because of the high levels of inventory in excess of current needs and the lack of adequate systems for determining inventory requirements.

	of September 30, 1997. The scope and methodology of our work are described in appendix I.
Results in Brief	The Air Force did not always cancel purchases that exceeded current operating requirements. The Air Force canceled contracts for \$5.5 million of the \$162.4 million excess inventory that we reviewed, but it could have canceled more. Contracts for unnecessary items are not being canceled primarily because the Air Force process for canceling contracts takes a long time, during which costs are incurred for which the government is liable. Specifically, it takes 60 to 90 days to provide managers with the requirement information needed to make cancellation decisions. Also, the Air Force model provides for over 63 months of supply—more time than needed to order and receive items. In addition, the model uses invalid requirements that reduce quantities to be canceled. Once a purchase is considered for cancellation, Air Force managers use a model to determine if the savings from canceling the contract would exceed the cost of reordering the items at a later date. In several cases that we reviewed, the model indicated that it was not cost beneficial to cancel contracts for unneeded inventory items because of potential reprocurement costs. However, the model is flawed because it does not consider parts recovered from retired weapon systems that are available to be reused. As a result, the model understates the amount of purchases that could be canceled. In other cases, inaccurate records increased manager workloads by causing items to be unnecessarily reviewed.
	We are recommending that the Air Force strengthen management oversight procedures and internal controls over the processes for canceling purchases. For example, the Air Force needs to improve the timeliness and accuracy of data that managers use to make contract cancellation decisions.
Background	DOD's logistics principles state that inventories will be established at the minimum levels required to meet customer needs. Inventory management comprises several major functions, including determining what is needed; buying needed items; and storing, maintaining, distributing, and disposing of these items. Five Air Force Air Logistics Centers, along with other activities such as maintenance depots and disposal activities, perform these inventory management functions.

	In April 1999, we reported <sup>3</sup> that as of September 30, 1997, \$39.4 billion of DOD's \$65.8 billion secondary inventory exceeded current requirements. Our past work has shown that weaknesses in procedures used to cancel contracts for inventory that is no longer needed to satisfy current operating requirements have contributed to buying inventory that should not have been purchased. This report focuses on the Air Force process for canceling contracts for items that are in excess of current operating requirements.
Opportunities Exist to Cancel More Contracts	Our analysis of 160 judgmentally selected items with excess inventory on contract valued at \$162.4 million showed that the Air Force canceled contracts for 14 of the items worth \$5.5 million because they were no longer needed to meet current requirements. However, the Air Force could have canceled more contracts. Additional contracts were not canceled because (1) the Air Force process for canceling contracts takes a long time (for example, 60 to 90 days to provide managers with requirements information), during which contractors incur costs for which the government is liable, reducing savings opportunities from canceling contracts; (2) the Air Force model that estimates requirements provides for over 5 years of supply, a period greater than the normal period needed to replace the items; and (3) the model uses invalid requirements, thus reducing the quantities to be canceled. For contracts identified for cancellation, the Air Force termination model does not consider all reclamation assets (material recovered from weapon systems that are not part of the active fleet) when making cancellation decisions. In addition, in some cases, inaccurate inventory records inappropriately identified contracts for cancellation and unnecessarily increased managers' workloads.
Requirements Model Does Not Provide Timely Information for Canceling Contracts	DOD Materiel Management Regulation 4140.1-R states that termination decisions generally should be reached within 30 days of notification that contracts should be considered for termination. However, model runs analyzing requirements for the contract being considered for cancellation are not finalized and provided to managers until 60 to 90 days after the runs. Reviews to verify data can take an additional 2 to 3 weeks. As a result, it can take 3 months to finalize a requirement computation. Further,

<sup>3</sup>Defense Inventory: Status of Inventory and Purchases and Their Relationship to Current Needs (GAO/NSIAD-99-60, Apr. 16, 1999).

	additional time is taken to request termination costs from the contracting office, which must request the cost information from the contractor.
	One of the factors that determine whether a contract should be terminated is the cost that a contractor has incurred. The longer it takes to make a decision to terminate a contract, the higher the contractor costs will be and the less likely it will be for the termination to be economical. For example, a contracting official said that each day termination was delayed on a contract for torque landing gear collars the contractor incurred an additional \$5,000 in costs that the government would have to pay to cancel the contract and not take delivery of the collars.
	According to Air Force officials, it takes several weeks to assemble inventory data from many sources (contractors, retail locations, and inventory control points) for the model to make requirement computations. The officials plan to reduce the time it takes to provide managers with this data. The Air Force will use techniques such as data warehousing (storing all data in a central computer repository) to improve the accuracy and reduce the time it takes to assimilate the data required for the requirements model.
Providing for Several Years of Supply Limits Cancellations	The requirements model computes the quantity of an item that should be purchased for inventory purposes. The period for which inventory is purchased is referred to as the buy period. The buy period consists of an operating period (the current period for which the Air Force has an approved budget; for example, the last quarter of fiscal year 1998 and all of fiscal year 1999) and a lead time (the time needed to purchase and receive inventory, up to a maximum of 36 months). On June 30, September 30, December 31, and March 31, the operating periods are equal to 15, 12, 9, and 6 months, respectively. Therefore, the buy period may represent as many as 51 months of supply (operating period plus lead time). The model adds an additional 12 months to the buy period to determine what it calls the termination period. The model further computes what is called a worldwide termination level that, by using the greater of certain buy or termination period requirements, may reduce the amount of inventory to be considered for termination. Figure 1 summarizes these inventory requirements.

Figure 1: Levels of Inventory Requirements

Buy period (as long as 51 months)			
Operating period (6, 9, 12, or 15 months	Lead time (as long as 36 months)	Termination period (12 months)	Worldwide termination level
As long as 63 months			

Source: Air Force data.

Because the Air Force requirements model provides for inventory to be used during the time needed to order and receive inventory and for a safety level to satisfy fluctuations in demand or lead time, orders can be placed so that they arrive before out-of-stock situations occur. However, because the operating and termination periods and the worldwide termination level may represent from 18 to 27 months of additional supply, item managers are prevented from considering large quantities of inventory for cancellation. For example, a September 1997 requirement computation for a rotor blade used on the T-33 aircraft engine protected over 49 months of supply. As shown in table 1, requirements for the item included 15,798 blades to cover the safety level as well as the item's 25-month lead time. The item's 12-month operating period, the 12-month termination period, and the worldwide level prevented an additional 13,192 items from being considered for cancellation.

Type of requirement	Quantity required	Months of supply
Safety level + lead time	15,798	25+
Operating period	7,410	12
Termination period	5,757	12
Worldwide termination level	25	Not applicable
Total	28,990	49+

#### Table 1: Rotor Blade Requirements

Source: Air Force inventory records.

Termination Period Limits Contract Cancellations	<ul> <li>While the buy period may represent enough inventory to satisfy as many as 51 months of needs, the requirements model adds 12 months of requirements to the buy period to compute an item's termination period. Our analysis of 56 of the 160 sample items showed that the 12-month termination period added \$158 million of inventory requirements to the buy period. For example, the 12-month termination period for a different rotor blade used on the TF-33 aircraft engine added 4,188 blades, valued at \$435,000, to the buy period requirements. Although the buy period provides for enough inventory to satisfy requirements during the time needed to order and receive inventory (lead time) and an operating period that can provide from 6 to 15 months of supply, the termination period protects an additional 12 months of supply from consideration for termination.</li> </ul>
Additional Termination Level Further Limits Contract Cancellations	Even though the buy and termination periods may represent as long as 63 months of needs, the Air Force computes a worldwide termination level that reduces the quantity of inventory considered for termination. For 10 of the 160 sample items reviewed, the worldwide level reduced contract quantities to be canceled by \$1.1 million. For example, as of December 10, 1997, the Air Force had 109 disc brake assemblies on contract for the C-17 aircraft. As indicated in table 2, the requirements model showed that at both the buy and termination periods, 84 on-contract assemblies were not needed to meet current operating requirements. By using the greater of certain buy or termination period requirements the model computed a worldwide level of 77. Therefore, seven fewer assemblies were subject to termination and the value of the items considered for cancellation was reduced from \$2,156,918 to \$1,977,174, a difference of \$179,744.

Requirements<sup>a</sup>/assets

Base stock level

Depot safety level818War reserve434343Repair cycle222727Total requirements167167174On-hand assets142142142On-contract assets109109109Total assets251251251Difference848477*Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement is took to satisfy demands while items are being repaired.Source: Air Force inventory records.Source: Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating requirements increases mission support.				
Repair cycle222727Total requirements167167174On-hand assets142142142On-contract assets109109109Total assets251251251Difference848477*Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired.Source: Air Force inventory records.Source: Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	Depot safety level	8	1	8
Total requirements167167174On-hand assets142142142On-contract assets109109109Total assets251251251Difference848477*Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired.Source: Air Force inventory records.According to Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	War reserve	43	43	43
On-hand assets142142142On-contract assets109109109Total assets251251251Difference848477*Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired.Source: Air Force inventory records.According to Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	Repair cycle	22	27	27
On-contract assets109109109Total assets251251251Difference848477*Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired.Source: Air Force inventory records.Source: Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	Total requirements	167	167	174
Total assets251251251Difference848477*Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired. Source: Air Force inventory records.According to Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	On-hand assets	142	142	142
Difference848477 <sup>a</sup> Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired. Source: Air Force inventory records.According to Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	On-contract assets	109	109	109
<sup>a</sup> Base stock level and depot safety level requirements are used to permit continued operations in the event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired. Source: Air Force inventory records. According to Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	Total assets	251	251	251
event of minor interruptions of the normal replenishment process or a fluctuation in demand. The war reserve requirement is used to ensure fast mobilization in the event of war, and the repair cycle requirement represents stock to satisfy demands while items are being repaired. Source: Air Force inventory records. According to Air Force officials, the Air Force uses the larger of the individual requirement levels to determine the quantities to be terminated to increase mission support while recognizing that some on-order inventory may not be needed later. However, because the buy period already includes requirements for war reserves and safety levels, it is not clear how stockpiling items that are not needed to meet current operating	Difference	84	84	77
requirements increases mission support.	requirement represents stock to Source: Air Force inventory reco According to Air Force individual requirement l to increase mission supp inventory may not be ne already includes require clear how stockpiling ite	satisfy demands while items rds. officials, the Air Ford evels to determine th port while recognizin reded later. However ments for war reserve ems that are not need	s are being repaired. ce uses the larger of ne quantities to be te ng that some on-orde , because the buy pe ves and safety levels,	the rminated r riod it is not

#### Table 2: Comparison of Termination Quantities for a Disc Brake Assembly

94

**Termination period** 

96

Worldwide level

96

Buy period

In our review of 160 sample items, we identified 9 items for which prestocked requirements of more than \$4 million decreased the quantity of inventory to be canceled. For example, in September 1997, 186 slats (the leading edge of an aircraft wing) were on contract, costing \$13,472 each, for the E-3 B/C aircraft. The requirements model computed a termination quantity of four slats. However, the termination quantity could have been increased to nine slats if the prestocked requirement of five had not been included in the computation. In another example, in September 1997, the Air Force had 18,869 high-pressure turbine blades on hand and another 9,987 on contract. The blades cost \$400 each and are used on the F-16 C/D aircraft. As shown in table 3, based on requirements for 26,371 blades, which included a prestocked requirement of 1,982 blades, 2,485 blades were subject to termination. By eliminating the prestocked requirement, the termination quantity would have increased to 4,467 blades.

Requirements/assets	Including prestocked requirement	Without prestocked requirement
Assets on hand	18,869	18,869
Assets on contract	9,987	9,987
Total assets	28,856	28,856
Prestocked requirements	1,982	0
Other requirements	24,389	24,389
Total requirements	26,371	24,389
Termination quantity	2,485	4,467

#### Table 3: Comparison of Termination Quantities for a High-Pressure Turbine Blade

Source: Air Force inventory records.

Although the Air Force has not funded prestocked requirements for a number of years, Air Force officials believe that those requirements represent reasonably valid requirements that allow for fluctuations in needs during times of conflict.

Reclamation Assets Are Not	The Air Force did not always take into account the full impact of ongoing
Always Considered in	or planned asset reclamation projects in its termination model.
Cancellation Decisions	Reclamation projects are specifically designed to increase on-hand assets
Cancenation Decisions	through the recovery of spare parts from weapon systems that are not part

of the active fleet. Because the influx of reclaimed assets is only considered for 2 years into the future, all potentially available reclamation assets are not considered when making termination decisions.

In our review of the 160 sample items, we identified 7 items for which reclamation assets affected reprocurement quantities and cancellation decisions. For example, in September 1997, the Air Force had the purchase of 64 turbine spacer assemblies on contract. The \$1,200-spacer assemblies are used on the TF-33 aircraft engine. Because the requirement computation included reclaimed assets, the entire on-contract quantity became excess to requirements. However, the item manager used the termination model to determine that it was not economical to terminate at that time. The termination model only considered 2 years of reclaimed assets when computing the reprocurement quantity, even though the spacer assemblies will be reclaimed beyond the 2-year period. Considering all potential reclamation assets may have caused the termination to be economical. **Inaccurate Records** Records for the 160 items in our sample showed that \$162.4 million of inventory on contract was not needed to meet current operating **Overstated Excess** requirements. However, inventory records for 32 items were inaccurate. **Inventory on Contract** For example, requirements were not recorded for eight items, on-contract quantities for five items had been delivered but showed up both as on-hand and due-in inventory, on-contract quantities for four items were for foreign military sales and should not have been considered as Air Force assets. and contracts for three items had been canceled, but due-in quantities remained on record. As a result, the \$162.4 million in inventory which was identified as not needed to meet current operating requirements was overstated by \$26.3 million and manager workloads were unnecessarily increased because items were mistakenly identified for cancellation review.

For example, a September 1997 requirement computation identified three data entry keyboards, costing \$162,381 each, as on-contract inventory and subject to termination. The item manager attempted to cancel the contract but found that the three keyboards had been delivered to the Air Force in

October 1996. Records had not been updated to show that the keyboards had been shipped.

In another case, Air Force records for September 30, 1997, showed 24 thermal insulation tiles used on the B-2 aircraft on hand and an additional 7 on contract. By May 1998, the tiles had been replaced by another type of insulation tile, and when the item manager attempted to terminate the contract for the seven tiles, he was informed by a contracting official that the on-contract quantity was in error. The tiles, which cost \$5,400 each, had been delivered a year earlier in May 1997.

According to Air Force officials, managers are responsible for insuring that all due-in and on-order assets used in computing requirements are accurate and for correcting those that are not accurate. Air Force officials recognize that data accuracy problems exist, and a requirements improvement team has been formed to address problems relating to the accuracy of on-hand and on-order inventory data.

Conclusions

Ineffective and inefficient inventory management practices result in buying items where there is already sufficient inventory to support needs. Correcting these problems would make more funds available where needs are not being met. While we cannot precisely quantify the overall extent of the problems discussed in this report, canceling purchases that exceed requirements could free up resources for higher priority needs.

Because the Air Force requirements model does not provide managers timely information, the government incurs additional contractor costs that reduce savings from canceling contracts. Due to lengthy operating and terminating periods and the worldwide termination level, managers are prevented from considering large quantities of inventory for cancellation. The Air Force model already provides for a safety level and lead time inventory to minimize out-of-stock situations. Therefore, the lengthy periods and additional levels are not necessary and tie up scarce financial resources in inventory. Further, including invalid prestocked requirements in termination decisions understates the amount of inventory subject to cancellation.

By not including all potential reclamation assets in the termination model, the Air Force understates the amount of inventory on hand. This practice ties up resources in inventory that may never be used. In addition,

	inaccurate records increase manager workloads and misdirect their efforts by causing items to be unnecessarily reviewed.
Recommendations	To improve the process for canceling purchases that exceed current requirements, we recommend that the Secretary of Defense direct the Secretary of the Air Force to (1) provide managers with the requirements information needed to cancel contracts in a timely manner, (2) examine the necessity for using lengthy operating and termination periods and additional levels of supply (worldwide termination levels) when identifying contracts for termination, and (3) eliminate prestocked war reserve requirements that are not authorized for purchase from all calculations that affect contract cancellation decisions. We further recommend that the Secretary (1) consider all potential reclamation assets when making cancellation decisions and (2) take measures to improve the accuracy of inventory management records, such as ensuring that requirements and on-contract inventory are properly recorded.
Agency Comments and Our Evaluation	In commenting on a draft of this report. DOD partially agreed with the report and our recommendations. (See app. II for DOD's complete comments.) The Department agreed with our recommendations for (1) providing information needed to cancel contracts in a timely manner, (2) examining the necessity for using lengthy operating and termination periods and worldwide termination levels when identifying contracts for termination, and (3) improving the accuracy of inventory management records. The Department stated that the Air Force will issue memorandums addressing these recommendations by the end of calendar year 1999. These memorandums will direct the Air Force Materiel Command to (1) modify the requirements system to help expedite decisions in canceling contracts, (2) examine operating and termination periods and the worldwide termination levels, and (3) take appropriate management actions to improve the accuracy of inventory management records. DOD did not agree with our recommendation to eliminate prestocked requirements from all calculations that affect contract cancellation decisions. DOD stated that prestocked war reserve requirements allow for fluctuations in need during potential conflicts and should be considered in contract termination decisions. As our report points out, the Air Force requirements model specifically provides separate safety levels of

inventory to accommodate fluctuations of demand. Including prestocked requirements simply increases the size of the safety levels. Further, the Air Force neither funds nor authorizes managers to purchase prestocked requirements. We believe that if the requirements are not sufficiently important to be purchased, they should not be considered in cancellation decisions. Therefore, we continue to believe that our recommendation has merit.

DOD also did not agree with our recommendation to consider all potential reclamation assets when making cancellation decisions. DOD stated that in view of the aging of aircraft, it is not prudent to increase reliance on potential reclamation assets. Our report points out that when computing reprocurement quantities, the Air Force termination model only considered assets to be reclaimed for a 2-year period, even though supporting documents indicated that parts will be reclaimed beyond that time. We recognize that some parts cannot be recovered from weapon systems that are not part of the active fleet. However, since on-contract inventory is considered for cancellation 1-1/2 years to 5 years into the future, there is sufficient opportunity to identify all usable reclamation assets. Regardless of the age of aircraft, these assets are a viable source of parts for keeping aircraft operational and should be considered when making cancellation decisions. Thus, we continue to believe that our recommendation has merit.

We are sending copies of this report to the appropriate congressional committees; to the Honorable William S. Cohen, Secretary of Defense; the Honorable F. Whitten Peters, Secretary of the Air Force; and the Honorable Jacob J. Lew, Director, Office of Management and Budget.

Please contact me at (202) 512-8412 if you have any questions. Key contributors to this report were Charles Patton, James Murphy, Louis Modliszewski, and David Keefer.

Sincerely yours,

David R. Warn

David R. Warren, Director Defense Management Issues

### Appendix I Scope and Methodology

We analyzed September 30, 1997, inventory stratification reports, which match on-hand and due-in inventory to requirements, for overall data regarding Air Force secondary inventory purchases. We did not validate the Air Force's automated inventory database; however, we did note database discrepancies during our review of documents and discussions with item managers. In collecting data on individual sample items, we used the same data the Air Force uses for inventory management, reporting, and budgeting purposes.

We used the data to identify Air Force inventory items that had inventory on contract or on purchase request that exceeded then-current requirements. We identified 1,560 items that had \$384.1 million of inventory on contract that exceeded needs. We focused our efforts on items that were on contract because they represented the bulk of the inventory being purchased that exceeded requirements.

To determine the adequacy of the Air Force process for canceling purchases that exceed current operating requirements, we judgmentally selected 160 items with about \$162.4 million of inventory on contract in excess of current operating requirements (80 items with \$46.4 million on contract managed at the Air Force Air Logistics Center, Ogden, Utah; 70 items with \$68.7 million on contract managed at the Air Force Air Logistics Center, Oklahoma City, Oklahoma; and 10 items with \$47.3 million on contract managed at the Air Force Air Logistics Center, San Antonio, Texas). Of the 160 items, 95 were repairable items and 65 were consumable items. We selected items that had the highest values and quantities of inventory on order in excess of needs, as well as a cross section of the remaining items.

For the items, we analyzed data from the September 1997 inventory stratification reports and information and documents from item managers on requirement computations and efforts to cancel contracts that exceeded requirements. We used the information and documents as a basis for follow-up questions and discussions with item managers. We also met with other Air Force officials, as needed, to discuss various subjects and concepts relevant to overall Air Force inventory management. We valued inventory items at the latest acquisition cost.

We performed our review from May 1998 through September 1999 in accordance with generally accepted government auditing standards.

# **Comments From the Department of Defense**

OFFICE OF THE UNDER SECRETARY OF DEFENSE 3000 DEFENSE PENTAGON WASHINGTON DC 20301-3000 OCT 2 0 (999 ECHNOLOG Mr. David R. Warren Director, Defense Management Issues National Security and International Affairs Division 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: Improvements Needed to Prevent Excess Purchases by the Air Force," dated September 14, 1999 (GAO Code 709343/OSD Case 1892). The DoD partially concurs with the draft report. The DoD agrees with the GAO recommendation that requirements information should be provided in order to expedite contract termination decisions. The DoD also agrees that operating and termination periods and worldwide termination supply levels should be examined, and that appropriate management actions should be taken to improve the accuracy of inventory management records. The DoD does not agree with the GAO recommendation to exclude prestocked war reserve requirements from calculations affecting contract termination decisions because these requirements allow for fluctuations in need during potential conflicts and should be considered in contract termination decisions. The DoD also does not agree with the GAO recommendation that the Air Force consider more than two years of potential reclamation assets because increased reliance on potential reclamation assets is not prudent in view of the aging of aircraft and the increasing rate of condemnations. Detailed comments on the recommendations are included in the attachment. The DoD appreciates the opportunity to comment on the draft report. Sincerely, Deputy Under Secretary of Defense (Logistics) Attachment

	FREPORT DATED SEPTEMBER 14, 1999 O CODE 709343/OSD CASE 1892
	: IMPROVEMENTS NEEDED TO PREVENT EXCESS RCHASES BY THE AIR FORCE"
DEPARTMENT OF DEF	ENSE COMMENTS TO THE RECOMMENDATIONS
<b>RECOMMENDATION:</b> T he Secretary of the Air Force	he GAO recommended that the Secretary of Defense direct e to:
(1) Provide managers wit a timely manner	h the requirements information needed to cancel contracts in
alendar year 1999 directing	The Air Force will issue a memorandum by the end of the Air Force Materiel Command to modify the expedite decisions in terminating contracts.
	y for using lengthy operating and termination periods and y (worldwide termination levels) when identifying contracts
alendar year 1999 directing	The Air Force will issue a memorandum by the end of the Air Force Materiel Command to examine operating and vorldwide termination supply levels. The memorandum will al termination.
	war reserve requirements that are not authorized for tions that affect contract cancellation decisions;
	cur. Prestocked war reserve requirements allow for otential conflict, and should be considered in contract
(4) Consider all potential	reclamation assets when making cancellation decision; and
	ur. With the aging of aircraft, the uncertainty of equipment grate of condemnations, increasing reliance on potential be prudent.

(5) Take measures to improve the accuracy of inventory management records, such as ensuring that requirements and on-contract inventory are properly recorded. <b>Do RESPONSE</b> : Concur. The Air Force will issue a memorandum to the Air Force Materiel Command by the end of calendary year 1999 directing that appropriate management actions be taken to improve the accuracy of inventory management records.	
ensuring that requirements and on-contract inventory are properly recorded. <u><b>DoD RESPONSE</b></u> : Concur. The Air Force will issue a memorandum to the Air Force Materiel Command by the end of calendar year 1999 directing that appropriate	
ensuring that requirements and on-contract inventory are properly recorded. <u><b>DoD RESPONSE</b></u> : Concur. The Air Force will issue a memorandum to the Air Force Materiel Command by the end of calendar year 1999 directing that appropriate	
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ensuring that requirements and on-contract inventory are properly recorded. <u><b>DoD RESPONSE</b></u> : Concur. The Air Force will issue a memorandum to the Air Force Materiel Command by the end of calendar year 1999 directing that appropriate	(5) Take measures to improve the accuracy of inventory management records, such as
Materiel Command by the end of calendar year 1999 directing that appropriate	ensuring that requirements and on-contract inventory are properly recorded.
Materiel Command by the end of calendar year 1999 directing that appropriate	
Materiel Command by the end of calendar year 1999 directing that appropriate management actions be taken to improve the accuracy of inventory management records.	<b><u>DoD RESPONSE</u></b> : Concur. The Air Force will issue a memorandum to the Air Force
management actions be taken to improve the accuracy of inventory management records.	Materiel Command by the end of calendar year 1999 directing that appropriate
	management actions be taken to improve the accuracy of inventory management records.

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Defense Inventory: DOD Could Improve Total Asset Visibility Initiative With Results Act Framework (GAO/NSIAD-99-40, Apr. 12, 1999).

Defense Inventory: Navy's Procedures for Controlling In-Transit Items Are Not Being Followed (GAO/NSIAD-99-61, Mar. 31, 1999).

Major Management Challenges and Program Risks: Department of Defense (GAO/OCG-99-4, Jan. 1999).

High Risk Series: An Update (GAO/HR-99-1, Jan. 1999).

Inventory Management: More Information Needed to Assess DLA's Best Practices Initiatives (GAO/NSIAD-98-218, Sept. 2, 1998).

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Inventory Management: DOD Can Build on Progress by Using Best Practices for Reparable Parts (GAO/NSIAD-98-97, Feb. 27, 1998).

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