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Report to the Chairman, Subcommittee on Readiness, Committee on Armed Services, House of Representatives

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ARMY INVENTORY

Growth in Inventories That Exceed Requirements

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National Security and
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The Honorable Earl Hutto
Chairman, Subcommittee on
Readiness
Committee on Armed Services
House of Representatives

Dear Mr. Chairman:

This report responds to the former Chairman's concern about the extent of growth in the Army's inventory and the extent to which this growth could be attributed to the Army's buying and maintaining more than it needed to meet military requirements. In this regard, the former Chairman asked us to determine

- what had caused the growth and
- what actions needed to be taken to curb it without impairing military capability.

We are sending copies of this report to the Director, Office of Management and Budget; the Chairmen, House Committee on Government Operations, Senate Committee on Governmental Affairs, House and Senate Committees on Appropriations, and the Senate Committee on Armed Services; and the Secretaries of Defense and the Army. Copies will also be made available to other parties on request.

This report was prepared under the direction of Richard Davis, Director, Army Issues, who may be reached on 275-4141 if you or your staff have any questions. Other major contributors are listed in appendix III.

Sincerely yours,

Frank C Conahan

Frank C. Conahan
Assistant Comptroller General

Executive Summary

Purpose

For the 5-year period ending September 30, 1988, the Army's wholesale level inventory increased from $6.1 billion to $12 billion. The former Chairman of the Subcommittee on Readiness, House Committee on Armed Services, asked GAO to determine how much of this inventory growth could be attributed to the Army's buying and maintaining more inventory than it needed to meet its military requirements. The former Chairman also asked GAO to determine what had caused the growth and what actions needed to be taken to curb it without impairing military capability.

Background

Managing the Army's wholesale level inventory is the responsibility of the Army Materiel Command and its six National Inventory Control Points.

That part of an item's inventory that is needed to meet current operating and war reserve requirements is referred to as the Army's "Approved Force Acquisition Objective." The difference between an item's Approved Force Acquisition Objective and its total inventory is referred to as "inapplicable inventory."

Results in Brief

Inflation, price increases, and the major modernization efforts undertaken by the Army all contributed to the inventory growth. It was not possible to quantify the extent of inventory growth attributable to each of the various factors. One fact was clear, however; the percentage of inventory that was not needed to meet approved requirements grew faster than overall inventories.

As of September 30, 1988, inapplicable inventory represented $2.6 billion, or 22 percent, of the Army's total inventory. This figure represents a 168-percent growth compared to a 96-percent growth for the overall inventories since 1983. The largest growth, in terms of dollars, of inapplicable inventory occurred at the Aviation Systems Command, one of the six Army buying commands. At this Command, GAO found that the inapplicable inventory had increased primarily for the following reasons:

- Inventory was being retained to support end items that were being phased out of the Army's system.
- Demands forecasted for items often did not materialize.
- The database that computed requirements contained erroneous information.

GAO determined that more timely and aggressive actions by item management officials could have reduced the procurement of unneeded items. In some cases, information was available before the procurement contracts were awarded or shortly thereafter to show that the items were not needed. However, the Army has not developed a systematic approach to evaluating when unneeded procurements should be canceled, reduced, or allowed to proceed.

GAO also found that inaccurate information in the requirements database had contributed to the growth of inapplicable inventory and had been previously reported by various audit groups at other Army buying commands as well as at the Aviation Systems Command.

Principal Findings

Extent of Growth in Inapplicable Assets

GAO found that, for the 5-year period under review, the Aviation Systems Command's inventory increased from $1.7 billion to $4 billion, an increase of 134 percent. However, its inapplicable inventory increased from $207 million to $804 million, an increase of 289 percent. GAO judgmentally selected 45 items in the Command's inapplicable inventory. These items accounted for $531 million, or about 66 percent, of the $804 million of inapplicable inventory.

Inventory Retained to Support Equipment Being Phased Out

Twenty-one of the 45 items GAO reviewed related to end items of equipment being phased out of the Army system. These 21 items accounted for $453 million of the inapplicable inventory reported by the Aviation Systems Command as of September 30, 1988. According to inventory management officials, the reasons that items had not been phased out were as follows:

- The 1984 moratorium on the disposal of inventory precluded them from disposing of items related to end items still in the active Army's inventory. Although the moratorium has been lifted, the Army has been reluctant to dispose of unneeded inventory for fear that it may dispose of something that will be needed in the future.
- The Army's inventory retention policy essentially allows for the retention of any or all items as either economic, contingency, or numeric retention level stocks.

Forecasted Demands Overestimated

Thirteen of the 45 line items GAO reviewed involved cases in which requirements computed on the basis of estimated demand rates had not materialized. In some cases, item managers had received updated information in time to cancel procurements but had not done so. As of September 30, 1988, the Aviation Systems Command reported $33.8 million of inapplicable inventory for these 13 items.

One of the 13 items was a centrifugal diffuser, which is used in the overhaul of the T700-GE-701 engine for the AH-64 helicopter. A May 1986 supply control study computed a requirement for 141 diffusers—with a unit price of $7,042—based on an estimated depot demand rate of 35 diffusers per 100 engines overhauled. In March 1987, 6 months before a contract was awarded for 88 diffusers, the depot overhaul factor was reduced to 10 diffusers per 100 engines, but no action was taken to reduce the planned procurement.

Errors in the Requirements Database

For 6 of the 45 items GAO reviewed, the Aviation Systems Command's database contained erroneous information, which caused the requirements system to compute incorrect requirements levels for these items. As of September 30, 1988, the Aviation Systems Command reported about $26 million of inapplicable inventory for these six items.

One of the 6 items was the T-700-GE-401 engine, which is owned and managed by the Navy and procured by the Army. Because the Army does not own the item, the Aviation Systems Command does not compute a requirement for it. Inaccurate data in the Command's database, however, showed that the item was owned by the Army and that 2 engines were on hand and 14 were due in from procurement. As a result, the 16 engines, with an inventory value of $7,005,600, were incorrectly reported as inapplicable inventory.

Other Factors Contributing to Inapplicable Inventory

For five other items, with a reported inapplicable inventory value of $18.4 million, the reasons for the inapplicable inventory varied. For example, in one case, the Aviation Systems Command transferred logistic support for the Army's U-21 aircraft and all serviceable engines to a contractor in March 1987. However, unserviceable engines were retained by the Command in case the 5-year support contract was not renewed and in case the engines were needed for foreign military sales. Because the Command no longer managed the item, the automated system did not compute a requirement for the engine, and 60 on-hand

unserviceable engines, valued at $6,341,640, were reported as inapplicable inventory.

Missed Opportunities to Reduce the Procurement of Unnecessary Assets

GAO determined that timely and aggressive action on the part of item management officials to cancel or reduce planned procurements could have prevented unnecessary procurement. Item management officials told GAO that recommended cutbacks or cancellations of planned procurements had lower priorities than recommendations to buy and that they do not have sufficient time to act on all recommendations.

The Aviation Systems Command has been aware of inaccuracies in the database and the failure of item managers in taking timely actions to reduce unneeded procurement. Nevertheless, Command officials have not established a system to provide feedback on corrective actions being taken.

Recommendations

GAO recommends that the Secretary of the Army direct the Commander of the Army Materiel Command to take the following actions:

- Dispose of items that are not needed to support end items being phased out of the Army's inventory.
- Reemphasize to item managers the need to be more responsive to changes in forecasted demands and to update and correct the database that computes requirements.
- Establish a systematic approach to aggressively canceling or reducing planned procurements when items are not needed to meet current requirements.
- Report, as part of the Federal Managers' Financial Integrity Act process, the actions being taken to address the database problems as well as the actions to cancel or reduce unneeded procurements.

Agency Comments

The Department of Defense agreed with all of GAO's findings and recommendations and provided information on how and when the recommendations would be implemented. The Department's detailed comments appear as appendix II.

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Abbreviations

AFAO	Approved Force Acquisition Objective
AVSCOM	Aviation Systems Command
DOD	Department of Defense
GAO	General Accounting Office
NICP	National Inventory Control Point

Chapter 1

Introduction

Managing the Army's wholesale level inventory is the responsibility of the Army Materiel Command and its six Army National Inventory Control Points (NICP). These organizations are responsible for determining inventory requirements, procuring, storing, maintaining, and issuing the items to user activities such as posts, camps, and stations.

That part of an item's total inventory that is required for current operating and war reserve needs is classified as "Approved Force Acquisition Objective" (AFAO) requirements. The difference between the item's inventory applicable to AFAO requirements and the item's total inventory is referred to as "inapplicable inventory." Inapplicable inventory assets are categorized by the Army as either "retention-level" inventory or "excess" inventory.

During the period September 30, 1983, to September 30, 1988, total inventory increased $5.9 billion, from $6.1 billion to $12 billion, an increase of 96 percent.[1]

The $5.9 billion increase in the Army's total inventory during the 5-year period consisted of $4.3 billion growth in inventory applicable to AFAO requirements and $1.6 billion in inapplicable inventory.

Inventory applicable to AFAO requirements increased from $5.1 billion to $9.4 billion, a 83-percent increase, and inapplicable inventory increased from $976 million to $2.6 billion, a 168-percent increase.

The Aviation Systems Command (AVSCOM), where our review was performed, showed similar, but larger rates of increases in both applicable and inapplicable inventories. To illustrate, of the total inventory growth of $2.3 billion from 1983 to 1988, inventory applicable to AFAO requirements accounted for $1.7 billion of the increase, and inapplicable inventory accounted for the other $600 million. Applicable inventory increased 112 percent, and inapplicable inventory increased 289 percent.

There are valid reasons for growth in the inventory levels during the 5-year period. Inflation, price increases, and the major modernization efforts undertaken by the Army all contributed to the growth. It was not possible to quantify the extent of inventory growth attributable to each

[1]As defined in this report, "inventory" includes assets on hand, assets due in from procurement, and assets on purchase requests (the procurement phase just prior to the approved orders' being placed on contract). Also, the inventory figures relate to the assets procured or to be procured with procurement appropriation funds

of these factors. However, one factor that was discernible was the continuous growth in the percentage of inventory that was not needed to meet AFAO requirements. During the 5-year period, inapplicable inventory, as a percentage of total inventory, increased from 16 to 22 percent on an Army-wide basis and from 12 to 20 percent at AVSCOM.

Objectives, Scope, and Methodology

Concerned about the growth in the Army's inventory, the former Chairman of the Subcommittee on Readiness, House Committee on Armed Services, asked GAO to determine how much, if any, of this growth could be attributed to the Army's buying and maintaining more than it needed to meet military requirements. In this regard, the former Chairman asked us to determine

- what had caused the growth and
- what actions needed to be taken to reduce the growth without impairing military capability.

We selected AVSCOM as the location for our review because the dollar value and the percentage of growth of its inventory during the 5-year period ending September 30, 1988, were the largest of all the NICPs. Additionally, AVSCOM had the largest amount of inapplicable inventory as of September 30, 1988, and with the exception of one other NICP, it had experienced the largest rate of growth in this category of inventory.

To address the objectives, we reviewed Department of Defense (DOD) and Army policies and procedures regarding the requirements determination for inventory acquisition and retention. We also interviewed personnel responsible for implementing supply management actions and reviewed and analyzed studies and reports from various analytical and audit agencies, such as the Logistics Management Institute; Logistics Operations, Incorporated; the Army Audit Agency; and DOD's Office of the Inspector General.

We selected 45 items, on a judgmental basis, that AVSCOM had identified in its September 30, 1988, budget stratification report as being inapplicable to current AFAO requirements (see app. I). We selected the items that had $5 million or more of inapplicable inventory and excess items that had significant amounts of due-ins. The 45 items represented 66 percent of the $804 million of inapplicable inventory reported by AVSCOM as of September 30, 1988.

For each of the selected items, we reviewed the item case files and held discussions with appropriate AVSCOM officials to determine why items had become inapplicable and whether actions could have been taken to prevent items from becoming inapplicable.

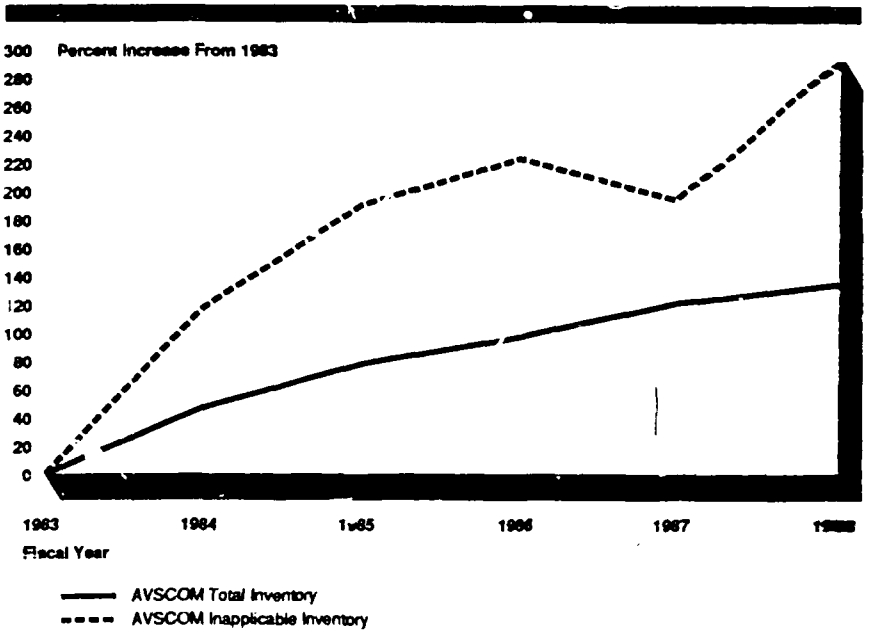
Our work was conducted primarily at AVSCOM and at the Army Materiel Command from August 1988 to September 1989 in accordance with generally accepted government auditing standards.

Chapter 2

Reasons for Inapplicable Inventory

The rate of growth in inapplicable inventory at AVSCOM for the 5-year period ending September 30, 1988, was more than twice the rate of growth in AVSCOM's total inventory. Inapplicable inventory increased from $207 million to about $804 million, a 289-percent increase, and total inventory increased from $1.7 billion to $4 billion, an increase of 134 percent. Figure 2.1 shows the rates of growth in AVSCOM's total and inapplicable inventories.

Figure 2.1: Growth Rates of the Total and Inapplicable Inventories at AVSCOM for the 5 Years Ending September 30, 1988



Note: These rates apply to inventory acquired with procurement appropriations.

The reasons that inventory becomes inapplicable are varied, and each item has a somewhat unique story behind it. However, for the 45 items in our review, which accounted for $531 million of AVSCOM's inapplicable inventory as of September 30, 1988, there were certain recurring reasons that the inventory had been classified as inapplicable:

- Inventory was being retained to support end items that were being phased out of the Army system.
- Demand rates for certain items had not materialized.

- Inaccurate requirements data had been used to establish the requirements levels.

While inapplicable inventory may not always be preventable, early and timely recognition of these causes can help to reduce it.

Table 2.1 shows the value of and causes for inapplicable inventory, as reported by AVSCOM, for the 45 items in our review.

Table 2.1: Causes for and Value of Inapplicable Inventory for 45 Items (as of September 30, 1988)

Dollars in Thousands

Causes of inapplicable inventory	Number of items	Inventory value		
		On hand	On contract	On commitment
Support for items being phased out	21	$453,048	0	0
Overstated demand rates	13	6,907	$13,176	$3,757
Inaccurate requirements data	6	13,289	12,685	0
Other	5	8,660	9,252	537
Total	**45**	**$481,904**	**$35,113**	**$14,294**

About $482 million, or 91 percent, of the inapplicable inventory for the 45 items is made up of on-hand inventory. These figures are consistent with figures on AVSCOM's total inapplicable inventory: 87 percent, or about $697 million of the $804 million, was made up of on-hand inventory. Additionally, most of the on-hand inapplicable inventory related to weapon systems that were being phased out of the inventory.

Inventory Retained for End Items Being Phased Out

Our analysis showed that inapplicable inventory for 21 of the 45 items reported by AVSCOM was related to aircraft systems and major assemblies that were being phased out. All of the inapplicable inventory for the 21 items was on hand (rather than due in).

Table 2.2 shows the amount and value of on-hand inapplicable inventory by weapon system and major assembly.

Table 2.2: Inapplicable Inventory On Hand for Weapons Systems Being Phased Out of the Army's Inventory

System assembly	Number of line items	On-hand inapplicable inventory
CH-47 helicopter	15	$377,487,408
CH-54 helicopter engine	1	15,288,351
T53 helicopter engine	3	49,162,446
UH-1 helicopter	1	5,830,675
OV-1B and C helicopters	1	5,279,899
Total	**21**	**$453,047,779**

The following examples illustrate cases in which inapplicable inventory was being retained to support end items being phased out of the Army's inventory.

- As of September 30, 1988, AVSCOM had 680 rotary-wing blades (with a unit price of $42,199) on hand, while the AFAO requirement for this item was 46. This item is used on the 11 remaining CH-47C helicopters, which are being phased out of the inventory.
- As of September 30, 1988, AVSCOM reported 74 turboshaft engines (with a unit price of $392,009) on hand to support an AFAO requirement of 35 engines for the CH-54A helicopter. The 72 CH-54As in service are scheduled to be phased out of the Army's inventory by 1993.

Our examination of available procurement history for the 21 items showed that the most recent procurement on any item occurred in 1980, over 8 years ago. A logistics management official said that he was not aware of any special management procedures used for the phase-out of the older weapon systems. It was his understanding that the phase-out was to be handled through the reduction of flying hours. In other words, as the flying hours are reduced, the automated requirements system will compute a reduced requirement, which in turn, reduces the number of inventory items required to support the systems.

We asked AVSCOM item management officials why there was such a large amount of inapplicable inventory for weapon systems being phased out of the Army's inventory. They cited the following reasons:

- The 1984 moratorium on the disposal of inventory related to end items still in service precluded them from disposing of unneeded items. Although the moratorium has been lifted, the Army has been reluctant to dispose of unneeded inventory for fear that it may dispose of something that is needed in the future.

- The Army's inventory retention policy essentially allows them to retain any or all items as either economic, contingency, or numeric retention level stocks.

Our previously completed and ongoing work has shown that after the moratorium was imposed, the Army was reluctant to dispose of any item and that the Army's retention policy allows a great deal of flexibility in determining what and how much inventory can be retained over and above the AFAO requirement.

Forecasted Demands Overestimated

In our review of the 45 items, we identified 13 instances in which the reported inapplicable inventory of $33.8 million had resulted because forecasted demands did not materialize. Because actual demands were less than the estimates used in the requirements computation process, assets procured to support the forecasted demand were not needed and became inapplicable.

Table 2.3 shows the reasons for the overestimated demands and the amounts of inapplicable inventory attributed to each.

Table 2.3: Overestimated Demands That Resulted in Inapplicable Inventory (as of September 30, 1988)

Reason	Number of line items	Value of inapplicable inventory
Depot overhaul factor overstated	2	$1,456,607
Estimated demand rates did not materialize	6	12,299,551
Supply support agreement canceled	1	191,362
Overhaul program reduced or canceled	2	406,470
Requirements levels manually adjusted	2	19,485,485
Total	**13**	**$33,839,745**

The following examples illustrate how the overestimated forecasted demands resulted in inapplicable inventory.

Depot Overhaul Factor Overstated

A centrifugal diffuser, with a unit price of $7,042, is used to overhaul the T700-GE-701 engine for the AH-64 helicopter. A May 1986 supply control study computed a requirement for 141 diffusers based on an estimated need for 35 diffusers per 100 engines overhauled. A contract was awarded in September 1987 for 88 diffusers. In March 1987, 6 months before contract award, the depot overhaul factor was reduced

to 10 diffusers per 100 engines, but no action was taken to reduce the planned procurement.

As of September 30, 1988, AVSCOM reported an inapplicable inventory of diffusers valued at $668,990; of this amount, $619,696 was due in from procurement.

Estimated Demands Did Not Materialize

An electrical indicator with a unit price of $2,506 is used on the AH-64 helicopter. In August 1987, a contract was awarded for 200 indicators, based on an engineering estimate of 10 demands per month. Because deliveries could not be made to meet all the early needs, issues were restricted to (1) supplying levels negotiated with retail customers and (2) meeting emergency situations that would otherwise ground the aircraft. The restriction was lifted in April 1988, and 1 year later, actual demands were averaging three per month. As of September 30, 1988, AVSCOM reported an inapplicable inventory for this item valued at $165,396, all of which was due in from procurement.

In another case, AVSCOM awarded a contract in August 1987 for 258 shipping and storage containers (with a unit price of $367) for the UH-60 input gearbox. The determination of the quantity procured was based on the assumption that one container would be required for each gearbox spare.

Delivery of the 258 containers began in August 1988 and was completed in December 1988. As of May 21, 1989, all 258 containers remained unissued. The item manager for the gearbox said that the current requirement for containers had been reduced. The item manager said that, because the overhaul contract for the gearboxes called for the repair of the containers in which the gearbox had arrived, a one-for-one replacement was not likely. As of September 30, 1988, AVSCOM reported 258 units, valued at $94,686, as inapplicable inventory for this item.

Supply Support Agreements Canceled

In July 1987, AVSCOM contracted for 136 circuit card assemblies, with a unit price of $826. Of this total, 120 cards were for a supply support agreement with the United Kingdom. About 1 month before the contract was awarded, the support agreement for this item was canceled. However, this information was not entered into the automated supply control study database until May 1988—about 1 year after contract award. The item manager said that a 100-percent termination charge would have been incurred anytime after contract award. As of September 30,

1988, AVSCOM reported inapplicable circuit card assemblies valued at $191,632. Assemblies valued at $104,076 were due in from procurement.

Overhaul Repair Program Canceled

AVSCOM awarded a contract on February 8, 1988, for 149 electrical actuators (with a unit price of $1,758) used on the CH-47C helicopter. The overhaul program in which the actuators are used was canceled in October 1986. Even though the supply control studies for this item had consistently recommended procurement reductions since January 1986, no actions had been taken on the recommendations for the 2 years prior to the 1988 contract award. As of September 30, 1988, AVSCOM reported $258,426 worth of inapplicable actuators, all of which were due in from procurement.

In another case, AVSCOM awarded a contract in September 1986 for 115 turbine engine cooling plates with a unit price of $2,008. The plate is used almost exclusively in overhauling T700 engines. Prior to the procurement, programmed overhaul requirements for fiscal years 1988 through 1991 were estimated at 431 plates. Programmed overhaul requirements for these same 4 years were reduced as of February 1987 to 72 plates. At that time, the automated supply control study recommended a cutback of 136 units on order. However, no efforts were made to cancel the procurements. As of April 25, 1989, there were 237 serviceable cooling plates in inventory to satisfy a 40-month requirement objective of 107. As of September 30, 1988, AVSCOM reported 73 units due in from procurement, valued at $148,044, as inapplicable inventory.

Requirements Levels Manually Adjusted

There are various factors involved in the calculation of a requirements level. In addition to factors that can be expressed in mathematical terms, the human element plays a major role in the total equation. The following examples illustrate how item management officials' decisions are influenced by information that exists outside the automated system.

A solenoid valve, used in T53 engines, was reported as being in an inapplicable inventory position as of September 30, 1988. Solenoid valves valued at $13.7 million were reported as due in from procurement. Cancellation action was initiated for 1,584 units in August 1988, but the cancellation attempt was not reflected in the database used to prepare the September 30, 1988, report.

The changing demand pattern for this item is reflected in the differing procurement recommendations made in supply control studies from 1985 to 1988, as shown in table 2.4. Also illustrated is the manager's decision to buy or not to buy.

Table 2.4: Procurement Recommendations for a Solenoid Valve

Study month	Automated study's recommendation	Manager's decision	Reason for decision
December 1985	Buy 1,424	Buy 300	Programmed requirements overstated.
June 1986	Reduce by 770	No cutback	Potential cancellation of overhaul as source of supply.
November 1986	Buy 2,109	No buy	Programmed requirements overstated.
March 1987	Reduce by 1,334	Buy 1,584	Procurement due-ins overstated by 1,935 units; unserviceables needed for over-haul; production lead time understated.
January 1988	Buy 1,515	No buy	Programmed requirements overstated.
August 1988	Reduce by 1,053	Reduce by 1,584	Safety level, reorder cycle, and programmed requirements reduced.

As can be seen in table 2.4, the item management team in each case used its knowledge and judgment regarding what was in the database. This led to changes and even contradictions to the automated recommendations. These manual interventions, though a necessary part of the supply control study process, can lead to decisions that generate inapplicable assets.

In another case involving the vane assembly used in T53-L-13B turbine engines, AVSCOM computed a safety level requirement of 1,296 units (with a unit price of $4,945). The supply control study for March 1987 recommended a buy of 2,261 units and a buy for 2,000 units was approved in April 1987.

The July 1987 supply control study recommended a cutback of 775 units primarily because the administrative lead time had decreased from 9 months to 3.5 months. The item manager did not concur with the

recommendation and stated that the assets would be used in future rebuild programs. The division chief concurred with the item manager's decision and stated that a buy during the next year would be required if the cutback were made. The item manager then manually adjusted the study to reflect the 9-month administrative lead time.

The contract for 2,000 units was awarded on September 18, 1987. Between November 1987 and June 1988, the supply control studies consistently recommended cutbacks ranging from 578 to 2,095 items. The July 1988 study recommended a cutback of 1,312 units due primarily to a reduction of the safety level requirement. In August 1988, item management officials unsuccessfully attempted to cancel 1,000 of the due-ins. However, because the termination costs would have been 90 percent of the contract costs, no cutback was made. As of September 30, 1988, AVSCOM reported $5,736,950 of inapplicable inventory for this item, all of which was due in from procurement.

The item manager said that the safety level decrease from 1,296 units in March 1987 to 0 in September 1988 was the primary reason that the inapplicable inventory was reported in September 1988 and that fluctuations in administrative lead time, production lead time, and reorder cycle had contributed to a lesser extent. The item manager also said that, while he has the authority to adjust some lead time factors, he cannot override safety level computations.

Requirements Levels Based on Inaccurate Data

Inaccurate data in the automated requirements determination system resulted in the overstatement of some requirements and the understatement of others. In cases in which the requirements levels were overstated, the inventory applied to these requirements was subsequently determined to be inapplicable when the incorrect data was found. In cases in which the requirement levels were understated because of inaccurate data, the inventory applied to these requirements was erroneously reported as inapplicable inventory.

Table 2.5 shows the types of inaccurate requirements data and the value of inapplicable inventory reported by AVSCOM as of September 30, 1988, for the items included in our review.

Table 2.5: Types of Inaccurate Requirements Data and the Resulting Inapplicable Inventory Reported by AVSCOM (as of September 30, 1988)

Type of inaccurate data	Number of line items	Value of inapplicable inventory reported by AVSCOM
Inaccurate war reserve rates	1	$7,212,930
Unmatched prime and substitute stock numbers	2	7,618,528
Incorrect ownership codes	2	11,030,735
Programmed requirements not entered into database	1	112,344
Total	**6**	**$25,974,537**

The following examples illustrate how the use of inaccurate requirements data can result in items' being reported as inapplicable.

Inaccurate War Reserve Rates

In 1984 AVSCOM computed war reserve requirements for the tailboom assembly used on the F model of the AH-1 helicopter. The automated system failed to recognize that each aircraft model had a different war reserve rate. The automated system computed a single war reserve requirement for the F model based on the total number of all aircraft models.

The system computed a war reserve requirement of 55 tailboom assemblies for the AH-1F helicopter when only 4 were needed to meet AFAO requirements. On the basis of this computation, item managers procured 32 assemblies in September 1985. The error was discovered in January 1986; however, no action was taken to cancel or reduce the procurement. As of September 30, 1988, AVSCOM reported 102 assemblies, valued at $7,212,930, as inapplicable inventory.

Prime and Substitute Stock Numbers Not Matched

The collective servo assembly (with a unit price $10,000) for the UH-60 helicopter was incorrectly identified as an obsolete item in May 1988. This action resulted in the prime stock number's being coded as obsolete in the requirements system and the substitute stock numbers' being identified as prime items.

The item manager said that, although he had identified all the stock numbers needed to relate the prime item and its substitutes and to consolidate the assets for both the prime and substitute items, the database had not been fully corrected. As of September 30, 1988, inventory valued at $2,460,000 was reported as inapplicable, of which $2,430,000 was due in from procurement.

In a similar case, AVSCOM reported 382 OH-6 tail rotor subassemblies, valued at $5,158,528, as inapplicable inventory as of September 30, 1988. The item manager said that this item had been in an inapplicable status since 1985. He stated that he believed the reason for this was that technical data needed to consolidate the substitute items and the prime stock number items in the database had not been gathered. As a result, separate requirements were computed for the prime and substitute numbers, and procurements were made for each item.

Incorrect Ownership and Management Codes

T-700-GE-401 engines are owned and managed by the Navy, and the Army procures the engines. Thus, AVSCOM does not compute a requirements level for the engine. On September 30, 1988, however, the AVSCOM database showed 2 engines on hand and 14 due in from procurement. The database also showed the item as having an Army ownership code (that is, being owned by the Army). As a result, the 16 engines, with an inventory value of $7,005,600, were incorrectly reported as inapplicable inventory. Of this total, $6,129,900 was due in from procurement.

In another case, management responsibility for the Master Controller, which is used on the OH-58D helicopter, had been transferred from the Army Missile Command to AVSCOM in October 1987. However, the management code was not changed to show AVSCOM as having item management responsibility, and as a result, AVSCOM did not compute a requirement for the item. Consequently, the $4,025,135 of inventory for this item was incorrectly reported as inapplicable as of September 30, 1988. Of this total, $3,986,056 was due in from procurement.

Programmed Requirements Not in Database

An output shaft fixture, used for working on AH-64 and UH-60 engines, was reported as of September 30, 1988, as having 39 units due in from procurement. Of this total, 31 (valued at $3,624 each) were inapplicable. The item manager explained that this type of item is normally associated with initial issue and is not demand based. Instead, the item is a programmed demand item. He believed that programmed demands had been entered into the database but that there were problems in getting this type of demand data reflected in the studies. As a result, the September 1988 requirement for eight was based on an insurance quantity of two units plus six due out on requisitions.

Factors Affecting the Amount of Inapplicable Inventory Reported

Our review disclosed other factors, such as those discussed below, that can also cause inventory to be reported as inapplicable.

After the swashplate assembly for the AH-64 helicopter failed in flight, the program manager assumed responsibility for controlling issues of the item. As a result, demands were not recorded in the demand files of the automated requirements system, and the system forecasted reduced requirements. On September 30, 1988, the $3 million of inventory on hand and due in was incorrectly reported as inapplicable. When automated control of the issues was reestablished in February 1989, the automated system computed a buy requirement of $5,197,563.

In another case, an AH-64 transportability kit was coded as an obsolete item. Therefore, the automated system did not compute a requirement for it. At the time of our review, 11 kits on hand and 4 due in were reported as inapplicable inventory valued at $549,507. However, AVSCOM had decided to disassemble the kits and stock the individual kit components. These components were assigned stock numbers unrelated to the kit stock number. Thus, while the kits were technically inapplicable, the kit components did not represent inapplicable inventory.

In a third case, AVSCOM had transferred logistic support for the Army's U-21 aircraft and all serviceable engines to a contractor in March 1987. However, unserviceable engines are being retained by AVSCOM in case the 5-year support contract is not renewed and in case the engines are needed for foreign military sales. Because AVSCOM no longer managed the item, the automated system did not compute a requirement for the engine, and 60 on-hand unserviceable engines, valued at $6,341,640, were reported as inapplicable inventory.

Conclusions

The Army has experienced significant growth in the amount of inventory that is not currently needed to support operating requirements, and the reasons for the growth are varied.

At AVSCOM, the principal reasons for this growth are that (1) inventory is being retained for weapon systems that are being phased out of the system, (2) inventory was acquired to support demand rates that did not materialize, and (3) errors existed in the requirements database.

Chapter 3

Actions Needed to Prevent or Reduce the Amount of Inapplicable Inventory

The DOD Inspector General, the Army Audit Agency, and others have previously reported on the need for AVSCOM and the other Army buying commands to improve the accuracy of the requirements database and to take aggressive and timely action to cancel or cut back unneeded procurements. However, as previously discussed, many of the same problems continue.

Need to Aggressively Pursue Procurement Cutback and Cancellation Recommendations

The greatest single opportunity to prevent inventory from becoming inapplicable is for item management officials to take timely and aggressive actions to reduce or cancel planned procurements when the items are not needed.

During our review, we identified numerous instances in which prompt cancellation or cutback actions by AVSCOM officials could have prevented inventory from becoming inapplicable. In some cases, the supply control study had recommended a cancellation or cutback prior to the award of a contract, but timely action was not taken by item management officials. In other cases, in which officials had attempted to cut back or cancel planned procurements, they abandoned these attempts because the contracts were in the process of being awarded. In still other cases, officials abandoned attempts to cancel procurements already on contact because of contract termination charges that the contractor would have assessed against the government.

The following examples illustrate opportunities that item management officials could have taken to cut back or cancel procurements for unneeded items:

- A contract for 149 electronic actuators, costing $259,376, was awarded in February 1988. In November 1987, 3 months before contract award but 1 year after cancellation of the overhaul program in which these items were to be used, the item manager inquired about canceling the planned procurement. The item manager was advised by procurement personnel that the contract was already "out for bids." When the March 1988 automated supply control study recommended canceling procurement of the 149 units, the item manager deferred taking action because of her unsuccessful attempt in November.

  The branch chief stated that the item had been in a cutback position for 2 years and that "we should not have waited quite so long." The item

manager said that a subsequent inquiry to the contractor had determined that termination charges were too high, and as a result no cancellation actions were initiated.

- In August 1988, item management officials recommended the cancellation of two procurement requests for T53 engine solenoid valves that had been issued in 1987 but had not yet been placed on contract. One request for 709 units was canceled. However, the second request for 875 units, costing $653,625, was not canceled because procurement personnel stated that the contract award was in process, and therefore procurement could not be canceled.

  The item manager was later advised that, because of legal problems with the solicitation, the planned procurement could have been canceled. However, the item manager declined to pursue cancellation because the item was forecasted to be in a buy position in 4.5 months. Instead of pursuing cancellation, the item manager increased production lead time in the requirements computation system from 6.4 months to 36 months so the March 1989 stratification report would not show the assets in an inapplicable position.

- A contract for 2,000 vane assemblies, costing $9.5 million, was awarded in September 1987. From November 1987 through July 1988, the supply control studies recommended cutbacks of 578 to 2,095 units in the contract quantities. The July 1988 supply control study recommended a cutback of 1,312 units, and item management officials approved the cutback of 1,000 units in August 1988. However, the cutback was not effected because the contractor's termination charges were equal to 90 percent of the contract cost.

  The issue of delayed and inadequate efforts to cancel or reduce purchase requests and unneeded contract quantities was the subject of a March 1989 DOD Inspector General's report entitled Contract Terminations at Army Inventory Control Points. The overall conclusion of the report was that the Army did not have an effective process for making economical contract termination decisions and that the quality of documentation supporting termination decisions and internal controls over the process needed improvement.

  The report stated that the Army would not be able to establish an effective termination decision-making process until it could accurately quantify the value of excess assets on contract. The report also called into

question the absence of internal control over the completeness and timeliness of item managers' validations and contracting officers' termination decisions. The report estimated that if termination procedures and controls were implemented, over $1 billion could be saved, primarily through reduced inventories.

The failure to take aggressive action on cancellation actions recommended by the Army's wholesale automated supply control study system has been the subject of reports by the Army Audit Agency. In a December 1988 report on the Armament, Munitions and Chemical Command, the Army Audit Agency reported that item managers' actions were influenced by their general perception that it was better to have too much stock on hand than to risk not being able to satisfy customer demands. As a result of this perception, item managers frequently did not respond to automated study recommendations to reduce or cancel planned purchases. In its March 1989 report on supply management at the Army Missile Command, the Army Audit Agency stated that the Command's emphasis on meeting requirements should be balanced by a greater concern for the efficient use of resources. The report noted that item managers had not followed the automated system's recommendations to reduce purchases but, instead, had added requirements to the system. These unsupported requirements had been added mainly to avoid having the automated system show that excessive quantities were on hand and due in and that purchases should be reduced.

In our discussions with item management officials, we were told that the emphasis was on awarding contracts—not on canceling or cutting back contract quantities. Consequently, supply control studies recommending procurement actions receive top priority, and those recommending cutbacks or cancellations are reviewed and acted on if time permits.

One item manager stated that inventory becomes inapplicable because item managers cannot perform all of their duties due to their large work loads. He went on to say that getting contracts out to meet demands is an important criteria in an item manager's performance rating and that he is only able to completely review 37 to 87 studies a month for the 410 items for which he is responsible. He said that he has never reviewed all the studies on time and that, through inaction, an item can go into an inapplicable status. Another item manager, when asked about actions taken on a cutback recommendation, said that no action had been taken and that the study had not been reviewed because there was not enough time to review all of the studies.

The AVSCOM task force's findings on the requirements database were similar to ours. The task force's report pointed out that about 70 percent of the monthly supply control studies were not being reviewed primarily because of an insufficient number of personnel and the lack of proper training.

Although the lack of manpower and an item manager's work load can affect the actions or lack of actions taken on a supply control study recommendation, our review disclosed several instances in which information on supply control studies was available to the item manager, yet no action was taken, or action was not taken in a timely manner. As a result, opportunities to cancel or reduce unneeded procurements were missed.

Need to Dispose of Inapplicable Inventory

Over 55 percent of AVSCOM's total inapplicable inventory relates to end items being phased out of the Army. The continued retention of this inventory is guided by the Army's current retention policies, which essentially allow for the retention of any item the item manager wants to retain regardless of whether the item is needed to support an end item during its remaining life.

Our review identified instances in which inapplicable inventory was being retained for possible foreign military sales or in support of a possible contingency, even though the required documentation justifying the item's retention had not been prepared. We also identified instances in which the amount of inapplicable inventory being retained greatly exceeded what was needed to support current operating and war reserve requirements.

The Army's reluctance to dispose of inventory that is not needed to support current operating or war reserve requirements, according to Army studies, has contributed to the severe overcrowding of depots; it has also driven up storage and operating costs. Overcrowding and high costs, in turn, have necessitated re-warehousing and moving stock, thereby increasing the potential for misplacing needed stock.

Need to Improve the Accuracy of the Requirements Database

The need to improve the accuracy of the requirements database to ensure that procurements are based on accurate and up-to-date requirements data has been a long-standing issue.

The Army Audit Agency, in an August 1988 Report of Audit on Supply Control at AVSCOM, stated that the AVSCOM Director of Logistics had recognized, in May 1987, that drastic action was needed to correct data problems in the requirements system. The report also pointed out that the Commander had appointed an internal task force to review the database problems and make recommendations. The task force's report, in September 1987, identified the lack of training, inadequate and inaccurate system documentation, and high personnel turnover as major causes of the requirements system's database problems. In response to the task force's report, AVSCOM's Commander appointed personnel to work on the issues.

However, the lack of adequate and accurate data continues to be a problem, as evidenced by the number of cases we identified during our review in which inaccurate requirements data had resulted in overstated and understated requirements, which, in turn, caused inventory to be reported as inapplicable.

Assessment of Internal Controls

The Federal Managers' Financial Integrity Act requires that annual assessments of internal controls be made by subordinate organizations to identify weaknesses in the programs they manage.

The Army's annual report to the Secretary of Defense did not identify inventory growth as a material weakness. Neither did AVSCOM's fiscal years 1987 and 1988 reports on internal controls specifically address the Command's ability to control inventory growth. However, the reports did identify insufficient manpower to conduct supply control studies as a material weakness. They also discussed the impact of manpower shortages on the ability to perform inventory management functions. The reports pointed out that many supply control study recommendations to cut back procurement or declare items excess were not being implemented. Furthermore, the reports noted that budget stratifications, material requirements lists, and line item balance reviews were not being performed with the thoroughness required and that, as a result, supply availability and mission-capable rates had decreased.

Although the internal control reports did not specifically identify the lack of management actions on the supply control study's recommendations as a cause of inventory growth, the failure to cut back or cancel unneeded procurement or to declare unneeded stock excess does contribute to this growth.

Conclusions

A large portion of the inapplicable inventory relates to older Army weapon systems that are being phased out. Retention of inventory in excess of what is needed during the remaining lives of these systems adversely affects the management of inventory that is needed. Furthermore, the retention of inapplicable inventory adds to the warehousing requirement, the manpower to store and maintain the unneeded items, and the potential for not being able to find needed items.

Because investment in inventory that becomes inapplicable represents a less-than-optimum use of resources, the emphasis should be on preventing inventory from becoming inapplicable rather than on dealing with the problem after it occurs. In this regard, the need for accurate requirements data is paramount if managers are to accurately determine what and how much inventory is needed.

Efforts to improve the accuracy of the requirements database and more aggressive and timely actions to cancel the procurement of unneeded items would aid in reducing the amount of inventory that becomes inapplicable. Although previous audit reports have made recommendations to improve these areas, the problems continue. In this regard, a sound internal control program to monitor the implementation and progress of these recommendations is needed. In the absence of such actions, the Army must deal with the problem of inapplicable inventory after it occurs.

Recommendations

We recommend that the Secretary of the Army direct the Commander of the Army Materiel Command to take the following actions:

- Establish a systematic approach to aggressively canceling or reducing planned procurements when items are not needed to meet current requirements. This approach should also include a documentation trail to enable managers to evaluate the economic trade-offs involved in canceling or reducing planned procurements and taking delivery of unneeded items.

- Dispose of items that are not needed to support end items being phased out of the Army's inventory.
- Reemphasize to item managers the need to be more responsive to changes in forecasted demands and to update and correct the database that computes requirements.
- Report, as part of the Federal Managers' Financial Integrity Act process, the actions being taken to address the database problems and to cancel or reduce unneeded procurements.

Agency Comments

DOD agreed with all of our findings and recommendations and provided information on how the recommendations would be implemented.

Regarding our recommendation for a systematic, aggressive approach to canceling or reducing the planned procurements of items not needed to meet current requirements, DOD made the following comments:

- A computer model has been developed to assist item managers in making economic cutback or termination decisions. The model will compare the extra costs of holding inventory above the requirements objective to the costs of amending or canceling a contract. Training of the item managers on the use of the model was expected to be completed by February 15, 1990.
- Guidance was provided to contracting officers, in December 1989, that outlined the economic factors to be considered in making contract cutback and termination decisions.
- The Army Logistics Management College has incorporated instructions on contract cutbacks and termination procedures in its training courses for item managers.

In response to our recommendation to dispose of items in support of end items being phased out of the Army system, DOD said that the disposal of unneeded items has been intensified. Furthermore, a plan is being developed and should be completed by September 30, 1990, to permit a greater disposal of inapplicable inventory. Also, effective October 1990, procedures will be implemented to eliminate the return of low-dollar-value nonreparable excess materiel from the retail to the wholesale level.

DOD responded as follows to our recommendation that item managers be more responsive to changes in forecasted demands and update and correct the requirements database:

- Each inventory control point has established a Data Base Advisory Group. The charter of the Group is to identify database problems and monitor their resolution. Furthermore, if the identified problems are systemic, the Group can initiate changes to the requirements determination system.
- A new Supply Management Data Base is being developed and should be implemented in September 1992. It is expected that the new database will provide item managers with a highly useful management tool for maintaining required information on the items they manage.

Concerning our recommendation that the actions being taken to address database problems and to cancel or reduce unneeded procurements be reported as part of the Federal Managers' Financial Integrity Act process, DOD said that such information would be reported in the Army Materiel Command's September 30, 1990, report.

Appendix I

Value of Inapplicable Inventory for the 45 Items in GAO's Review (as of September 30, 1988)

Stock number	Nomenclature	Value of inapplicable inventory
1260-01-256-6924	Master controller	$4,025,135
1560-00-251-8754	Circuit card assembly	191,622
1615-01-224-6950	Swashplate assembly	3,056,124
1650-01-140-0967	Servo assembly	2,460,000
1680-00-443-1137	Actuator, electric	258,426
1740-01-279-1554	Transportability kit	549,507
2840-01-137-5482	Diffuser	668,990
2840-01-170-2912	Midframe assembly	787,617
2840-01-187-1558	Cooling plate	148,044
4920-01-112-5906	Test set, verdic	1,792,722
4920-01-212-5572	Output fixture	112,344
6620-01-161-1193	Electronic indicator	165,396
8145-01-129-7975	APU container	187,302
8145-01-128-1855	Ship container	175,565
8145-01-136-0844	APU container	607,200
8145-01-230-0189	Gearbox container	94,686
2840-00-855-6100	Turbine engine	6,341,640
1610-00-617-9735	Aircraft propeller	5,278,899
1615-01-014-6005	Driveshaft assembly	5,830,675
2840-00-102-3966	Engine	15,000,000
2840-00-102-3968	Engine	5,243,560
2840-00-924-3626	Vane assembly	5,736,950
2915-00-135-0105	Fuel control	28,918,886
4810-00-081-5670	Solenoid valve	13,748,535
1560-01-076-1540	Tailboom assembly	7,212,930
2915-01-224-9248	Main fuel control	8,314,735
2840-01-114-2211	Engine	9,463,982
2840-00-904-2461	Engine	15,288,351
1615-01-128-4399	Tail rotor sub/assembly	5,158,528
2840-01-140-6768	Engine	7,005,600
1615-00-001-6443	Aft rotary wing blade	26,754,166
1615-00-172-2102	Forward rotary wing blade	32,662,026
1615-00-756-0176	Rotary wing head	5,561,262
1615-00-781-6613	Transmission assembly	12,155,320
1615-00-839-0690	Transmission assembly	17,331,600
1615-00-919-1354	Rotary wing head	5,089,188
1615-01-112-2998	Transmission assembly	13,665,300
1615-01-113-0460	Rotary wing head	15,424,032
1615-01-231-1830	Rotary wing head	19,434,000

(continued)

Stock number	Nomenclature	Value of inapplicable inventory
1615-01-242-9201	Engine transmission	21,456,000
1615-01-244-4970	Rotary transmission	55,800,000
1615-01-244-4971	Rotary transmission	80,652,000
2835-00-809-8316	APU gas turbine engine	14,063,465
2840-00-000-0048	Engine	21,620,000
2840-00-937-0480	Engine	35,819,049
Total		**$531,311,369**

Appendix II

Comments From the Department of Defense

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D C 20301-8000

PRODUCTION AND LOGISTICS
L/SD

MAR 2[illegible] 1990

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) Draft Report, "ARMY INVENTORY: Growth in Inventories That Exceed Requirements," Dated January 5, 1990, (GAO Code 393310, OSD Case 8219). The Department concurs with the GAO findings and recommendations. Some of the issues raised in this report were previously addressed in a similar Inspector General Audit Report, "Contract Terminations at Army Inventory Control Point," dated March 29, 1989. Consequently, corrective actions are already underway to rectify many of the deficiencies addressed by the GAO.

The detailed DoD comments on the draft report findings and recommendations are provided in the enclosure.

The Department appreciates the opportunity to comment on the draft report.

Sincerely,

David J. Berteau
Principal Deputy

Enclosure

GAO DRAFT REPORT - DATED JANUARY 5, 1990
GAO CODE 393310 - OSD CASE 8219

"ARMY INVENTORY: GROWTH IN INVENTORIES THAT EXCEED REQUIREMENTS"

DEPARTMENT OF DEFENSE COMMENTS

* * * * *

FINDINGS

- FINDING A: Responsibility for Army Wholesale Level Inventory. The GAO observed that managing the wholesale level Army inventory is the responsibility of the Army Materiel Command and its six National Inventory Control Points. The GAO pointed out that these activities determine requirements and procure, store, maintain, and issue inventory items to Army users. According to the GAO, as of September 30, 1989, the six activities had management responsibility for about $12 billion of Army wholesale level inventory.

  The GAO noted that the portion of the total inventory that is needed to meet current operating and war reserve requirements is referred to as the Army's "Approved Force Acquisition Objective." The GAO explained that the difference between the Approved Force Acquisition Objective and the total inventory is referred to as "inapplicable inventory."

  The GAO asserted that investment in inventory that is unneeded represents a less-than-optimum use of resources. The GAO observed, therefore, that the objective of any inventory management system should be to buy and maintain a sufficient, but not excessive, amount of inventory to meet current operating requirements. (pp. 2-3, pp. 12-15/GAO Draft report)

  Now on pp 1, 8-9

  DOD RESPONSE: Concur.

- FINDING B: Inventory Retained For End Items Being Phased Out. The GAO analysis showed that the inapplicable inventory for 21 of the 45 items reported by the Aviation Systems Command were related to aircraft systems and major assemblies that were being phased out. According to the GAO, all of the applicable inventory for the 21 items was on hand (rather than due in). The GAO estimated the total value of the inapplicable inventory for these items at $453 million.

The GAO examined the available procurement history for these 21 items and found that the most recent procurement on any item was in 1980--over 8 years ago. The GAO referred to a logistics management official, who said that he was not aware of any special management procedures used for the phase-out of the older weapon system. According to the GAO, it was his understanding that the phase-out was to be handled through the reduction of flying hours. The GAO explained that this meant that as the flying hours are reduced, the automated requirements system will compute a reduced requirement, which in turn, reduces the number of inventory items required to support the systems. The GAO stated that Aviation Systems Command management officials indicated that the reason for such a large amount of inapplicable inventory for weapons systems being phased out was (1) a 1984 moratorium on the disposal of inventory related to end items still in service precluded them from disposing of unneeded items (the GAO noted that the moratorium had been lifted but the Army has been reluctant to dispose of unneeded inventory for fear that it may dispose of something that may be needed in the future); and (2) the inventory retention policy of the Army essentially allows them to retain any or all items as either economic, contingency, or numeric retention level stocks.

The GAO also stated that prior and ongoing reviews have shown that, after the moratorium was imposed, the Army was reluctant to dispose of any item--and that the Army retention policy allows a great deal of flexibility for determining what and how much inventory can be retained over and above the approved force acquisition objective requirement. (pp. 3-8, pp. 18-20, p. 31/GAO Draft Report)

Now on pp. 2-3, 12-14.

DOD RESPONSE: Concur. The problem of inapplicable inventory growth has been recognized in many audits and reports and much management attention and many initiatives within the Department are focused on reversing this trend. However, premature disposal of inapplicable stocks could compound the problem rather than correct it.

- FINDING C: Forecasted Demands Overestimated. The GAO review of 45 items at the Aviation Systems Command with inapplicable inventories identified 13 instances in which the reported inapplicable inventory of $33.8 million had resulted because forecasted demands did not materialize. The GAO stated that, since the actual demands were less than the estimates used in the requirements computation process, assets procured to support the forecasted demand were not needed and became inapplicable. The GAO provided examples of (1) an overstated depot overhaul factor, (2) cases where estimated demands did not materialize, (3) supply

Now on pp. 2, 4, 14-18.

support agreements that were canceled, (4) an overhaul repair program that was canceled, and (5) incorrect manual adjustments to requirements levels. (pp. 3-8, pp. 21-26, p. 31/GAO Draft Report)

DOD RESPONSE: Concur.

- FINDING D: Requirements Levels Based on Inaccurate Data. The GAO found that inaccurate data in the automated requirements determination system resulted in the overstatement of some requirements and the understatement of others. The GAO noted that, in cases where the requirements levels were overstated, the inventory applied to these requirements was subsequently determined to be inapplicable (when the incorrect data was found and corrected). The GAO reported that in those cases in which the requirement levels were understated because of inaccurate data, the inventory applied to these requirements was erroneously also reported as inapplicable inventory. The GAO cited examples of (1) inaccurate war reserve rates, (2) instances where prime and substitute stock numbers were not matched, (3) incorrect ownership and management codes, and (4) instances where programmed requirements were not in the data base. (pp. 3-8, pp. 26-30, p. 31/GAO Draft Report)

Now on pp. 2, 4, 18-20.

DOD RESPONSE: Concur.

- FINDING E: Factors Affecting the Amount of Inapplicable Inventory Reported. The GAO identified other factors that cause inventory to be reported as inapplicable. The GAO described an example of a swashplate assembly for the AH-64 helicopter that failed in flight. According to the GAO, after the swashplate failed, the program manager assumed the responsibility for controlling issues of the item. The GAO stated that, as a result of this decision, demands were not recorded in the demand files of the automated requirements system and the system then forecasted reduced requirements. The GAO pointed out that, as of September 30, 1988, the $3 million of inventory on hand and due in was incorrectly reported as inapplicable. According to the GAO, when the automated control of the issues was reestablished in February 1989, the automated system computed a buy requirement of $5,197,563.

  The GAO discussed another example where an AH-64 transportability kit was coded as an obsolete item. The GAO found that because, of this coding error, the automated system did not compute a requirement of it. The GAO found that, in this case, the item manager decided to disassemble the kits and stock the individual components. The GAO concluded that, while the kits were

Now on pp. 4-5, 21

technically inapplicable, the kit components did not represent inapplicable inventory. The GAO also cited a third example where the Aviation Systems Command incorrectly reported U-21 unserviceable engines valued at $6,341,640 as inapplicable. (pp. 3-8, pp. 30-31/GAO Draft Report)

DOD RESPONSE: Concur.

- FINDING F: Need to Aggressively Pursue Procurement Cutback and Cancellation Recommendations. The GAO reported that the greatest single opportunity to prevent inventory from becoming inapplicable is for item management officials to take timely and aggressive actions to reduce or cancel planned procurements when the items are not needed.

The GAO identified numerous instances in which prompt cancellation or cutback actions by the Aviation Systems Command could have prevented inventory from becoming inapplicable. According to the GAO, in some cases the supply control study had recommended a cancellation or cutback prior to the award of a contract--however, timely action was not taken by item management officials. The GAO also cited other instances where officials had attempted to cut back or cancel planned procurements, but they abandoned these attempts because the contracts were in the process of being awarded. Finally, the GAO cited cases where officials abandoned attempts to cancel procurements already on contract because of contract termination charges that the contractor would assess against the Government.

The GAO explained that the issue of aggressive action to cancel or reduce purchase requests for unneeded items has also been pointed out in Inspector General, DoD, and Army Audit Agency reports. The GAO reported that, according to item management officials, the emphasis was on awarding contracts--not on canceling or cutting back contract quantities. The GAO concluded that this is the reason why supply control studies recommending procurement actions receive top priority, while those recommending cutbacks or cancellations are reviewed and acted on only if time permits.

In summary, the GAO concluded that efforts to improve the accuracy of the requirements data base and more aggressive and timely actions to cancel the procurement of unneeded items would aid in reducing the amount of inventory that becomes inapplicable. The GAO emphasized that, although previous audit reports have made recommendations to improve these areas, the problems continue. The GAO generally concluded that a sound internal control program to monitor the implementation and

Now on pp. 3, 5, 22-25

progress of these recommendations is needed. (pp. 3-8, pp. 33-37, pp. 39-40/GAO Draft Report)

DOD RESPONSE: Concur.

- FINDING C: Need to Dispose of Inapplicable Inventory and Improve the Accuracy of the Requirements Data Base. The GAO found that over 55 percent of the Aviation Systems Command's total inapplicable inventory relates to end items being phased out of the Army. The GAO further found that continued retention of this inventory is guided by the current Army retention policies which essentially allow for the retention of any item the item manager may want to retain regardless of whether the item is needed to support an end item during its remaining life.

  The GAO observed that the need to improve the accuracy of the requirements data base to ensure that procurements are based on accurate and up-to-date requirements data has been a long-standing issue. The GAO referred to Army Audit Agency audit reports citing this deficiency, but concluded that lack of accurate data continues to be a problem. The GAO pointed to the number of cases it identified in which inaccurate requirements data had resulted in overstated and understated requirements--which, in turn, caused inventory to be reported as inapplicable. (pp. 3-8, pp. 37-40/GAO Draft Report)

Now on pp. 3, 5, 25-26

DOD RESPONSE: Concur.

- FINDING H: Assessment of Internal Controls. The GAO observed that the Federal Managers Financial Integrity Act requires that annual assessments of internal controls be made by subordinate organizations to identify weaknesses in the programs they manage.

  The GAO pointed out that the Army's annual report to the Secretary of Defense did not identify inventory growth as a material weakness. The GAO also noted that the Aviation Systems Command annual reports for FY 1987 and FY 1988 did not specifically address the Command's ability to control inventory growth. The GAO did find, however that the reports identified insufficient manpower to conduct supply control studies as a material weakness.

  The GAO concluded that, even though the internal control reports did not specifically identify the lack of management actions on supply control studies as a cause of inventory growth, the failure to cut back or cancel unneeded procurement or to declare

Now on pp. 26-27.

unneeded stock excess does contribute to this growth. (pp. 3-8 pp. 38-40/GAO Draft Report)

DOD RESPONSE: Concur.

* * * * *

RECOMMENDATIONS

Now on pp. 5 and 27.

- RECOMMENDATION 1: The GAO recommended the Secretary of the Army direct that the Commander of the Army Materiel Command establish a systematic, aggressive approach to cancel or reduce planned procurements when items are not needed to meet current requirements. (According to the GAO, this approach should include a documentation trail to enable managers to evaluate the economic trade-offs involved in canceling or reducing planned procurements and taking delivery of items not needed.) (p. 9, p. 40/GAO Draft Report)

  DOD RESPONSE: Concur. Corrective measures were instituted to improve the contract cutback and termination process at Army Inventory Control Points subsequent to the period (August 1988 - September 1989) in which the GAO audit was conducted. These measures include the following:

  - A computer model called "TACOM Economic Cutback Model" has been implemented at all Army Inventory Control Points to assist item managers in making economic cutback or termination recommendations. The computer program provides information on how much, if any, to reduce the quantity of an item on contract by comparing the extra holding costs of assets above the requirements objective - if not cutback - against the cost of amending or canceling a contract if assets are cutback. Training to item managers in the use of the model has been completed at five Inventory Control Points and will be completed at the remaining Inventory Control Point by February 15, 1990.

  - Procuring contracting officers and other personnel were provided interim guidance on December 19, 1989, by issuance of a draft Army Materiel Command Federal Acquisition Regulation Supplement which outlines economic factors that must be considered in making contract cutback and termination decisions.

  - The Army Logistics Management College has incorporated instructions on contract cutbacks and termination procedures

in appropriate programs of instructions covering both intern and journeyman level training for item managers. Additionally, the Army Logistics Management College has been requested to incorporate required instruction in the basic procurement course, Management of Defense Acquisition Contracts, covering contract cutback and termination procedures.

- The Army Materiel Command issued supplemental guidance to Inventory Control Points on July 13, 1989, governing the use of excess on-order and on-hand assets as Government-Furnished Material.

- The Army Materiel Command instituted a quarterly report to require Army Inventory Control Points to ascertain cost avoidances that have been realized through contract cutbacks and terminations of on-order excess materiel and by use of excess materiel as Government-Furnished Material.

- RECOMMENDATION 2: The GAO recommended that the Secretary of the Army direct that the Commander of the Army Materiel Command dispose of items not needed to support end items being phased out of the Army's inventory. (p. 9, p. 40/GAO Draft Report)

Now on pp. 5 and 28.

DOD RESPONSE: Concur.

- Since December 1988, the Army has intensified efforts to dispose of unneeded stocks. The value of disposals generated by Army Inventory Control Points during FY 1989 was $583.6 million, a 63 percent increase over the FY 1988 value of $357.2 million.

- A Defense Management Review Decision 927 will permit greater disposal activity of inapplicable Stocks. A detailed plan for implementing the DMRD is currently being developed and is expected to be completed by September 30, 1990.

- Effective October 1990, the Army will implement procedures in the Standard Army Information Systems at the intermediate level to eliminate the return of low dollar value non-reparable excess stock returns to the wholesale level.

- RECOMMENDATION 3: The GAO recommended the Secretary of the Army direct that the Commander of the Army Materiel Command reemphasize to item managers the need (1) to be more responsive to changes in forecasted demands and (2) to update and correct the data base that computes requirements. (p. 9, p. 40/GAO Draft Report)

Now on pp. 5 and 28.

DOD RESPONSE: Concur.

- A similar recommendation in DODIG Audit Report on Contract Terminations at Army Inventory Control Points resulted in issuance of an Army Materiel Command headquarters memorandum on July 21, 1989, which directed establishment of a Data Base Advisory Group at each of Army Materiel Command's Inventory Control Points. The Advisory Groups are chartered to surface data base errors and other problems and monitor the resolution of the problems. Where problems are systemic, the Groups may initiate changes to prescribed Commodity Command Standard System procedures. Other missions include enforcement of supply control study reviews and assuring that item managers and their supervisors maintain complete records of all attempts to reduce or terminate contract quantities.

- A new Supply Management Data Base is currently under development which when implemented, will provide a highly useful on-line management tool to item managers for maintaining required information on the items they manage. The data base will replace current hard copy outputs which must be manually manipulated off-line. Subject to funds availability, this new data base is expected to be implemented during September 1992.

- RECOMMENDATION 4: The GAO recommended the Secretary of the Army direct that the Commander of the Army Materiel Command report, as part of the Federal Managers' Financial Integrity Act process, the actions beings taken to address the data base problems, as well as the actions to cancel or reduce unneeded procurements. (p. 9, p. 40/GAO Draft Report)

Now on pp. 5 and 28.

DOD RESPONSE: Concur. The Army Materiel Command Federal Managers' Financial Integrity Report of September 30, 1989, addressed a general material weakness, which included excess inventory and inventory growth. The Army Materiel Command Federal Managers' Financial Integrity Report of September 30, 1990, will address the data base actions and actions to cancel or reduce unneeded procurements.

Major Contributors to This Report

National Security and International Affairs Division, Washington, D.C.	Robert J. Lane, Assistant Director
Kansas City Regional Office	Milton E. Roedder, Evaluator-in-Charge Robert C. Sommer, Technical Assistant for ADP Services Howard H. McGee, Evaluator Mark T. Amo, Evaluator