**United States Government Accountability Office** 

**GAO** 

Report to the Subcommittee on Readiness and Management Support, Committee on Armed Services, U.S. Senate

**May 2006** 

# DEFENSE INVENTORY

Actions Needed to Improve Inventory Retention Management





Highlights of GAO-06-512, a report to the Subcommittee on Readiness and Management Support, Committee on Armed Services, U.S. Senate

#### Why GAO Did This Study

Maintaining the right amount and types of items in its inventory-a key aspect of supply chain management-has been a longstanding challenge for the Department of Defense (DOD) and has been on GAO's list of high-risk areas since 1990. DOD retains inventory above its normal operating requirements for various reasons including for contingency purposes or because it is more economical to keep items than dispose and repurchase them later. DOD's inventory levels have grown in recent years to almost \$80 billion in fiscal year 2005. GAO was asked to assess the management of contingency retention inventory to determine whether (1) the Army, Air Force, Navy, and Defense Logistics Agency have followed inventory guidance and (2) DOD is providing oversight of inventory across these components. Also, GAO provided an update on the progress DOD has made in implementing GAO's past recommendations on the components' management of economic retention inventory.

#### **What GAO Recommends**

GAO recommends that DOD direct the inventory centers to take the steps necessary to follow existing inventory management policies and procedures and provide oversight to ensure the components' compliance. In reviewing a draft of this report, DOD generally agreed with GAO's recommendations.

#### www.gao.gov/cgi-bin/getrpt?GAO-06-512.

To view the full product, including the scope and methodology, click on the link above. For more information, contact William M. Solis at (202) 512-8365 or solisw@gao.gov.

## **DEFENSE INVENTORY**

# **Actions Needed to Improve Inventory Retention Management**

#### What GAO Found

Some DOD inventory management centers have not followed DOD-wide and individual policies and procedures to ensure they are retaining the right amount of contingency retention inventory. While policies require the centers to (1) use category codes to describe why they are retaining items in contingency inventory, (2) hold only those items needed to meet current and future needs, and (3) perform annual reviews of their contingency inventory decisions, one or more centers has not followed these policies. For example, the Army's Aviation and Missile Command is not properly assigning category codes that describe the reasons they are holding items in contingency inventory because the inventory system is not programmed to use the codes. GAO found that items valued at \$193 million did not have codes to identify the reasons why they were being held, and therefore GAO was unable to determine the items' contingency retention category. GAO also found that some inventory centers have held items such as gears, motors, and electronic switches, even though there have been no requests for some of them by the services in over 10 years. Moreover, some centers are not annually reviewing their contingency retention decisions. Navy Inventory Control Point Mechanicsburg's officials, for example, were unaware that program managers had not conducted the required reviews until GAO brought this to their attention. Since GAO's work only focused on the centers it reviewed, it is unknown if these issues are occurring at other DOD inventory centers. By not following policies for managing contingency inventory, DOD's centers may be retaining items that are needlessly consuming warehouse space, and they are unable to know if their inventories most appropriately support current and future operational needs.

DOD has provided insufficient oversight of inventory retention management across the components. DOD's *Supply System Inventory Report*, which DOD uses to oversee the components' inventory management, only requires the components to report to DOD financial information about their inventories and does not capture if the components are following management policies. Without sufficient oversight of the components' inventory retention practices, DOD cannot be certain that the components have the correct amount or type of items in contingency retention inventory.

Lastly, DOD has made no progress to implement GAO's 2001 recommendations requiring the components to (1) establish milestones for reviewing their approaches for making economic retention inventory decisions, and (2) conduct annual reviews of these approaches, as required by DOD policy. At the time GAO issued its report, DOD agreed with the recommendations but stated that further review was necessary before it implemented changes. While subsequent studies reaffirmed the recommendations, DOD has still not taken action. GAO continues to believe that DOD should implement the recommendations to make meaningful improvements to its economic retention management practices.

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#### **Abbreviations**

DLA Defense Logistics Agency DOD Department of Defense

LMI Logistics Management Institute

OUSD AT&L Under Secretary of Defense for Acquisition, Technology,

and Logistics

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# United States Government Accountability Office Washington, DC 20548

May 25, 2006

The Honorable John Ensign Chairman The Honorable Daniel K. Akaka Ranking Minority Member Subcommittee on Readiness and Management Support Committee on Armed Services United States Senate

The Department of Defense (DOD) maintains a military force with unparalleled capabilities but continues to confront a pervasive, decadesold supply chain management problem that relates to retaining the appropriate amount of inventory. At a time when our forces are expected to perform missions in the homeland and abroad, it is necessary for DOD to retain those inventory items that are needed to sustain current military operations and dispose of those items that will no longer support current and future operations. DOD reported that, as of September 2005, it owned about \$80 billion of secondary inventory.<sup>2</sup> This represents a \$17 billion, or 27 percent, increase since fiscal year 2001, when the department had about \$63 billion in inventory. Because DOD is challenged to compete for available resources in an increasingly fiscally constrained environment and conduct high-level military operations, it is imperative that it has good stewardship over the hundreds of billions of dollars invested in its inventory. To ensure the sustainment of its missions, the Army, Navy, Air Force, and the Defense Logistics Agency (DLA)<sup>3</sup> each maintains separate

<sup>&</sup>lt;sup>1</sup> DOD's supply chain management comprises several major functions, including determining requirements; purchasing needed items; and storing, maintaining, distributing, and disposing of inventory.

<sup>&</sup>lt;sup>2</sup> Secondary inventory includes reparable components, subsystems, and assemblies, consumable repair parts, bulk items and material, subsistence, and expendable end items, including clothing and other personal gear.

<sup>&</sup>lt;sup>3</sup> Hereafter referred to as DOD's components.

inventories of spare and repair parts above and beyond normal operating requirements.  $\!\!^4$ 

Inventory that exceeds the normal operating requirements is divided into three categories:

- economic retention: excess inventory determined more economical to keep than to dispose of because it is likely to be needed in the future;
- contingency retention: inventory exceeding the economic retention level but retained for specific contingencies such as military (items needed to meet military contingencies), potential security assistance (items held for foreign military sales), and general contingency (items held based on potential usefulness, extreme reprocurement problems, or nonmilitary contingencies, such as civil emergencies or natural disaster relief); and
- potential reutilization and/or disposal materiel: inventory exceeding the contingency retention level but identified as either potentially reusable or disposable—typically through public sale.

While DOD's components each have their own policies and procedures for managing their secondary inventories, DOD has an overarching policy—the DOD Supply Chain Materiel Management Regulation<sup>5</sup>—that provides the components with overall guidance.

In 2001, we reported<sup>6</sup> that the components did not have sound analytical support for determining which items should be kept in economic retention inventory. We also reported that the components were not conducting annual reviews of the methodologies they used to make economic retention inventory decisions, as required by the DOD regulation.<sup>7</sup> At that time, we recommended that the components establish milestones for reviewing their economic retention approaches and that they conduct annual reviews of their approaches.

 $<sup>^4</sup>$  Operating requirements consist of the approved acquisition objective: items needed to meet current needs, items expected to be used within 2 years, and items to meet war requirements.

<sup>&</sup>lt;sup>5</sup> Office of the Deputy Under Secretary of Logistics and Materiel Readiness, *Department of Defense Supply Chain Materiel Management Regulation*, DOD 4140.1-R (May 2003).

<sup>&</sup>lt;sup>6</sup> GAO, Defense Inventory: Approach for Deciding Whether to Retain or Dispose of Items Needs Improvement, GAO-01-475 (Washington, D.C.: May 2001).

<sup>&</sup>lt;sup>7</sup> DOD 4140.1-R, Section C2.8.1.1.2.

As requested, this report focuses on DOD's inventory retention policies and procedures. Our objectives were to assess the management of contingency retention inventory to (1) determine the extent to which DOD components have followed departmentwide and individual components' policies and procedures to ensure they are retaining the appropriate amount of inventory, and (2) assess the extent to which DOD is providing oversight of inventory across the components. In addition, we are providing information on the progress that DOD has made in implementing our 2001 recommendations on the components' management of economic retention inventory.

To determine the extent to which DOD components have followed policies and procedures for retaining the appropriate amount of contingency retention inventory, we (1) reviewed the components' regulations and interviewed officials to determine how they implement these regulations; (2) obtained and analyzed secondary inventory (spare parts) retention records; and (3) visited four components' inventory management centers to assess their policies, procedures, and practices for managing contingency retention inventory. The results of our review cannot be generalized to the total contingency retention inventory population, due to the use of a nonprobability sample of 205 cases (national stock numbers) valued at \$890 million. We assessed the reliability of DOD's automated inventory management system data by (1) obtaining information from the components' management on their data reliability procedures and (2) interviewing components' officials knowledgeable about the data. We determined the data were sufficiently reliable for the purposes of this report. Further, to assess the extent to which DOD is providing oversight of contingency retention inventory management across the components, we reviewed DOD regulations and directives and interviewed officials from the Office of the Deputy Under Secretary of Defense for Supply Chain Integration on their roles and responsibilities for supply chain materiel management. Also, to assess the progress that DOD has made in implementing our 2001 recommendations on the components' management of economic retention inventory, we reviewed related policies and procedures and interviewed officials from the Deputy Under Secretary of Defense for Supply Chain Integration. We conducted our review from May 2005 through May 2006 in accordance with generally accepted government auditing standards. Further details on our scope and methodology are described in appendix I.

### Results in Brief

Some DOD inventory management centers have not followed departmentwide and individual components' policies and procedures to ensure they are retaining the appropriate amount of contingency retention inventory. To ensure DOD inventory management centers are retaining the appropriate amount and types of items, inventory retention policies require the components to (1) use category codes that describe reasons to retain items in contingency retention inventory, (2) hold items that correspond to current and future force level requirements, and (3) perform annual reviews of their contingency inventory decisions. It is also an objective of DOD's policy that items from the inventory that no longer support DOD's mission be removed. According to DOD policy, DOD places serious emphasis on purging from its inventory items which no longer support the mission and needlessly consume warehouse space. However, several inventory management centers are not following policy. For example, we identified that

- The Army's Aviation and Missile Command is not properly assigning category codes that describe the reasons they are holding items in contingency retention inventory. While the Army inventory retention policy requires the use of codes to identify the reasons to hold items in contingency retention inventory, we found that the Aviation and Missile Command does not consistently assign these codes to categorize the reasons for holding items in contingency retention inventory. We identified items valued at \$193 million that did not have codes to identify the reasons why they were being held, and therefore we were unable to determine the contingency retention category for the items. Furthermore, according to Command officials, the Army's current inventory management system is not programmed to categorize some contingency retention inventory items. However, we identified that the system does have codes that designate the reasons items are held in contingency retention inventory, but the Army is not currently using these codes.
- Some inventory management centers are retaining items in contingency retention inventory that have experienced little or no recent demands. For example, the Aviation and Missile Command is retaining items in

<sup>&</sup>lt;sup>8</sup> DOD 4140.1-R, Section C2.8.1.2.4. and C2.8.1.2.6.

<sup>&</sup>lt;sup>9</sup> DOD 4140.1-R, Section C2.8.1.1.2.

<sup>&</sup>lt;sup>10</sup> DOD 4140.1-R, Section C2.8.1.2.6.

 $<sup>^{11}</sup>$  DLA, Department of Defense, Defense Inactive Item Program, DOD 4140.32-M, Foreword (Aug. 13, 1992).

contingency retention inventory that (1) have experienced no demands since the mid 1990s and (2) no longer meet operational needs. For example, we found that the Command continued to retain items to support an early warning sensor that was phased out by the Army in June 2003. Command officials told us that they retained these items in contingency retention because they did not receive direction from the Army to remove them from the inventory.

• Some inventory management centers are not conducting annual reviews as required to verify reasons for retaining contingency retention inventory. For example, the Defense Supply Center Richmond had not conducted annual reviews since 2000 to verify the reasons for retaining some items in contingency retention inventory. We identified from the Center's entire population of contingency retention items that approximately 2,200 items had not been reviewed since 2000. According to Center officials, the reviews were not conducted because the items had no stock on hand or had experienced no recent demands or requests from customers. As a result of our review, the Defense Supply Center Richmond initiated disposal actions to potentially remove 40 stock numbers—a total quantity of about 26,000 items valued at over \$742,500.

Since some DOD inventory management centers are not following policies and procedures for managing their contingency inventories, they may be retaining unnecessary inventory, which results in the needless consumption of warehouse space. Moreover, while our work only focused on a limited number of inventory management centers, it is unknown whether these issues are occurring at other DOD inventory management centers. However, every inventory management center where we conducted audit work was not following policies. Furthermore, by not conducting annual reviews of their inventory retention decisions, the inventory management centers cannot be certain that they are retaining the appropriate spare parts to support military operations and readiness. Also, without complying with inventory retention policies and procedures, the DOD inventory management centers can accumulate high levels of inventory without knowing whether they meet warfighter requirements in the most efficient manner.

DOD is not providing sufficient oversight to ensure that components are conducting annual reviews of their contingency retention inventory. According to the DOD Supply Chain Materiel Management Regulation issued by the Office of the Deputy Under Secretary of Defense for Logistics and Materiel Readiness, components are required to annually review the contingency retention decisions. The regulation does not state,

however, who is responsible for ensuring the components conduct these reviews. Another policy, the DOD's Supply Chain Materiel Management Policy<sup>12</sup> requires that the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD AT&L) ensure that DOD materiel management policies are implemented in a uniform manner throughout the department. OUSD AT&L officials said they rely on DOD's Supply System Inventory Report<sup>13</sup> as their oversight mechanism to review DOD components' reported inventory retention levels and ensure the components are conducting the annual reviews. However, while the annual Supply System Inventory Report provides DOD with financial inventory information, it does not provide the department with the information it needs to ensure that all of the components are conducting annual reviews of contingency retention inventory decisions. For example, DOD's failure to recognize the inventory management centers' noncompliance with DOD's regulation requiring them to conduct annual reviews of their contingency retention decisions illustrates DOD's insufficient oversight. By not ensuring that the components are conducting annual reviews of their contingency retention decisions, DOD cannot be certain that all components are retaining the right amount of contingency retention inventory to meet the military's operating requirements in the most effective and efficient manner.

DOD had made no progress in implementing our 2001 recommendations concerning the components' management of economic retention inventory. We reported then that (1) components were not properly documenting their approaches in making economic retention decisions, (2) they lacked sound analytical support for the maximum levels of economic inventory they used in calculating how much inventory should be retained, and (3) they had not annually reviewed their approaches as required by DOD policy. After we issued our report, DOD determined that further review was necessary to determine appropriate approaches to economic retention inventory decisions and subsequently tasked the

<sup>&</sup>lt;sup>12</sup> Department of Defense Directive 4140.1, Supply Chain Materiel Management Policy (April 22, 2004).

<sup>&</sup>lt;sup>13</sup> This annual financial report summarizes DOD secondary inventory by component and inventory category and is used as a management tool to monitor changes in inventory levels.

<sup>&</sup>lt;sup>14</sup> GAO, Defense Inventory: Approach for Deciding Whether to Retain or Dispose of Items Needs Improvement, GAO-01-475 (Washington, D.C.: May 2001).

<sup>&</sup>lt;sup>15</sup> GAO-01-475.

Logistics Management Institute (LMI) in 2001 and again in 2003 to examine whether current economic retention policy requirements and procedures could be improved. While LMI's review yielded similar recommendations to ours, DOD's components are still not conducting annual reviews of economic retention decisions. According to some DOD component officials, they have not been conducting annual reviews of their economic retention decisions because of either the cost to conduct these reviews, manpower limitations, or other competing priorities. We continue to believe that DOD should implement the recommendations to make meaningful improvements to its economic retention management practices.

We are recommending that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to ensure the DOD inventory management centers properly categorize the reasons for holding items in contingency retention inventory, determine whether items no longer needed should be disposed, and conduct annual reviews of contingency retention inventory as required by DOD's Supply Chain Materiel Management Regulation and the components' policies. In addition, we are recommending that the Under Secretary revise DOD's Supply Chain Materiel Management Regulation to make clear who is responsible for providing recurring oversight to ensure that the inventory management centers are performing annual reviews of their contingency retention inventory decisions. In reviewing a draft of this report, DOD concurred with six of our recommendations and partially concurred with one. The Department's responses are reprinted in appendix II and our evaluation of them appears later in the report.

## Background

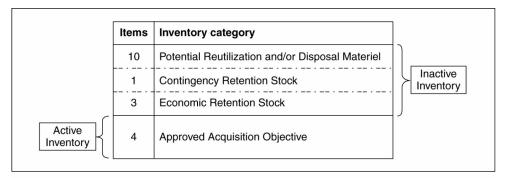
DOD divides secondary inventory into two categories: active inventory and inactive inventory. Active inventory is materiel that DOD budgets for and consists of the approved acquisition objective: items needed to meet current operating requirements, items that are expected to be used within the budget period (2 years), and items purchased to meet specific war reserve requirements. Items that exceed the approved acquisition objective are referred to as inactive inventory. Inactive inventory is materiel that is not expected to be consumed within the budget period but is likely to be utilized in future years. <sup>16</sup> These items preclude future

<sup>&</sup>lt;sup>16</sup> Office of the Deputy Under Secretary of Defense for Logistics and Materiel Readiness, Department of Defense Materiel Supply Chain Management Regulation, DOD 4140.1-R, appendix 1 (May 2003).

procurement and repairs and do not impact components' budgets because the costs were incurred when the items were initially procured. Inactive inventory levels are categorized as economic retention, contingency retention, and potential reutilization and/or disposal materiel.

An Air Force circuit card assembly used on the 968H Air Early Warning System, for example, illustrates DOD's inventory categories. On March 31, 2005, the Air Force had 18 of these circuit card assemblies on hand, each valued at \$2,172. As shown in figure 1, 4 of the circuit card assemblies satisfied the item's approved acquisition objective. Of the remaining 14 circuit card assemblies, 3 were held as economic retention stock, 1 was held as contingency retention stock, and 10 were categorized as potential reutilization and/or disposal materiel.

Figure 1: Categorization of Inventory for an Air Force Circuit Card Assembly



Source: GAO analysis of Air Force data

DOD Inventory Management Policies and Procedures Pertaining to Contingency Retention Inventory

The DOD Supply Chain Materiel Management Regulation provides the components with overarching guidance on how to manage contingency retention inventory. The DOD regulation requires that (1) components be able to provide the rationale for holding items in contingency inventory, (2) items are retained in accordance with current and future force level requirements, and (3) the methodology for making decisions to hold items in contingency retention be reviewed and validated annually. In addition, the regulation says that components should categorize the contingency retention items as (1) military contingency if the assets are retained to meet military contingencies for U.S. forces; (2) general contingency if the assets are retained due to their potential usefulness, for extreme

 $<sup>^{17}\,\</sup>mathrm{DOD}\,4140.1\text{-R},$  Section C2.8.1.1.1.3 and C2.8.1.1.2.

procurement problems or for other special considerations involving nonmilitary contingencies, such as civil emergencies or natural disaster relief; or (3) potential security assistance (also referred to as foreign military sales) if the assets are held in expectation of foreign military demand. <sup>18</sup> Each component has policies and procedures that describe how their respective personnel should manage contingency retention inventory.

While DOD components follow DOD's overarching guidance that defines contingency retention inventory, each of the components has its own policies and procedures for determining what items to retain for potential contingencies. Most DOD components categorize contingency retention inventory in one of these categories: military, foreign military, or general contingency. Also, they retain contingency retention inventory for additional reasons. For example, DLA<sup>19</sup> retains items with application to specific weapon systems to preclude them from disposal at the request of the military services. Military services use some of the following reasons for excluding items with application to specific weapons systems from disposal: aging weapon system not planned for phase-out in the near future; parts that have very infrequent use, but with expected demand; and out-of-production, sole source items. Additionally, the Air Force policy<sup>20</sup> allows for retention of assets in contingency retention inventory when a one-time buy has been made for an explicit reason or when the decision to retain was made by Headquarters Air Force Materiel Command. In addition to the three contingency categories described in the DOD policy, the Army's secondary item retention policy<sup>21</sup> authorizes item managers to retain chemical, biological, nuclear, or serviceable or unserviceable hazardous materiel based on the Department of the Army or DOD-level directives in contingency retention inventory. The Navy<sup>22</sup> uses several

<sup>&</sup>lt;sup>18</sup> DOD 4140.1-R, Section C2.8.1.2.4.

<sup>&</sup>lt;sup>19</sup> The *Defense Logistics Agency Inventory One Book* (DLAD 5025.30) (Aug. 22, 2003) provides the guidance for the agency's contingency retention activities.

<sup>&</sup>lt;sup>20</sup> The *Air Force Materiel Command Manual 23-1*, *Requirements for Secondary Items*, (Mar. 16, 2005), and the Air Force Manual 23-110, Volume 3, Part 1 (Jan. 1, 2006), provide the guidance for the Air Force's contingency retention activities.

<sup>&</sup>lt;sup>21</sup> Inventory Management: Centralized Inventory Management of the Army Supply System, Army Regulation 710-1 (Sept. 6, 2005) and the Memorandum, Headquarters U.S. Army Materiel Command, subject: Revised Secondary Item Retention Policy (Oct. 28, 2005), provide the guidance for the Army's contingency retention activities.

 $<sup>^{22}\,</sup>Ship\,Parts\,Control\,Center\,Instruction\,\,4400.47D,\,27$  (May 1994), provides the guidance for the Navy's contingency retention activities.

categories to retain and protect inventory from disposal. A few of the reasons include: retention of assets for cannibalization for lower assembly; retention of assets to support a weapon system throughout its expected life cycle (life of system buy); and retention of excess assets for nuclear reactor plans. In addition, the DOD components have policies and procedures to conduct annual reviews to ensure the decisions to hold items in contingency retention inventory are valid. The components also require justification for the retention decision to be maintained on file.

Unlike other categories of inventory such as economic retention, there are no prescribed methodologies to determine contingency retention inventory levels.<sup>23</sup> Instead, DOD component officials rely on subjective reasoning to determine and justify retaining items in contingency retention inventories in support of their missions. While there is no established DOD process for identifying and reviewing contingency requirements and decisions, the components follow similar processes. Typically an item manager will make the decision to retain assets in contingency, although in some cases, the decision may be made by a component's headquarters or another component. For example, a component's materiel commands or another service may request that certain assets be retained in contingency retention inventory to meet future needs. Upon identifying assets on hand that exceed an item's approved acquisition objective and economic retention requirement, the item manager determines if some or all of the assets need to be retained in contingency retention inventory for a specific reason. If so, the item manager will then determine the level of assets needed to be retained in contingency and establish a requirement. Some of the common criteria item managers use to determine the retention of items in contingency retention inventory include: the expected life span or age of the weapon system the asset supports; the wear-out rate of the item; the nonrecurring or unpredictable demand of an item; the potential sale or transfer of items to a foreign country; or diminishing manufacturing sources for an item.

Once a contingency requirement has been established for an item, the requirement is supposed to be reviewed at least once a year during each component's contingency retention review process. When conducting contingency retention reviews, the item manager reevaluates the item and

<sup>&</sup>lt;sup>23</sup> According to the DOD regulation, DOD 4140.1-R, Section C2.8.1.2.1, the methodology used to calculate economic retention levels should be based on an economic analysis that balances the cost of retention and the cost of disposal.

determines if there is a continued need to retain all or some of the assets in contingency retention. If the item manager makes the decision to retain assets in contingency retention, the item manager's rationale for the current retention decision must be available upon request and is maintained in the item file or inventory management system. If it is determined there is no longer a need for an item's contingency retention requirement, the assets that exceed the approved acquisition objective and economic retention requirement will be allocated as potential reutilization and/or disposal materiel.

## DOD Inventory Management Policies and Procedures Pertaining to Economic Retention Inventory

According to the DOD guidance, an economic analysis used to calculate whether to retain an inventory item or dispose of it should be based on an analysis that balances the cost of retention and the cost of disposal. In addition, the regulation states that the components should consider in their economic analysis the cost of retaining items, the potential long-term demand for the items, potential repurchase costs, and for items essential to the operation of a weapon system, the expected life of the weapon system, and the number of systems in use. As the amount of inactive stock increases, the cost of retention increases (more items cost more to hold) and the cost of disposal decreases (with greater amounts of an item on hand, the likelihood of having to repurchase the items becomes less). Equilibrium is reached when the additional cost of retention equals that of disposal. This equilibrium level of inventory is the economic retention level—the largest amount of an item that can be justified by economic analysis.<sup>24</sup>

## DOD's Inventory Management Agencies

DOD relies on a number of individual processes and activities, known collectively as supply chain management, to purchase, produce, and deliver items and services to the warfighter. The primary inventory agencies that provide this support to the warfighters are (1) the U.S. Army Materiel Command, (2) the U.S. Air Force Materiel Command, (3) the Defense Logistics Agency, and (4) the Naval Inventory Control Point. Table 1 shows each primary logistics agency and its inventory management centers.

<sup>&</sup>lt;sup>24</sup> Logistics Management Institute and Center for Naval Analysis, *Independent Study of Secondary Inventory and Parts Shortages*, LG009R1 (McLean, Va.: July 2001), and Logistics Management Institute: *Economic Retention Within the Department of Defense*, LG301T1 (McLean, Va.: December 2003).

#### **Table 1: Primary Logistics Agency and Its Inventory Management Centers**

#### Primary logistics inventory management centers agency

#### **Air Force Materiel Command**

Ogden Air Logistics Center

Oklahoma City Air Logistics Center

Warner Robins Air Logistics Center

#### **Army Materiel Command<sup>a</sup>**

Aviation and Missile Life Cycle Management Command

Communications-Electronics Life Cycle Management Command

Tank-automotive and Armaments Life Cycle Management Command

#### **Defense Logistics Agency**

**Defense Supply Center Columbus** 

Defense Supply Center Philadelphia

**Defense Supply Center Richmond** 

#### Naval Inventory Control Point<sup>b</sup>

Naval Inventory Control Point Mechanicsburg

Naval Inventory Control Point Philadelphia

Source: GAO analysis of DOD data.

<sup>a</sup>Sometimes these commands are referred to as the Aviation and Missile Command, the Communications-Electronics Command, and the Tank-automotive and Armaments Command.

<sup>b</sup>The Naval Inventory Control Point is carried out by a single command organization operating in two locations.

Some DOD Inventory
Management Centers
Are Not Following
Policies and
Procedures in
Managing Their
Contingency
Retention Inventories

Some DOD components' inventory management centers are not following policies and procedures in managing their contingency retention inventories. For example, we found some inventory centers do not properly categorize the reasons items are kept for contingency retention purposes, as required by DOD policy. Also, some inventory centers are retaining items that have not experienced any recent demands and no longer meet operational needs. In addition, some DOD inventory management centers have not complied with DOD's policy as well as their own policies, which require them to conduct annual reviews of contingency retention inventory to ensure the reasons for retaining inventory are valid. As a result, there is the likelihood for them to retain inventory for a number of years and accumulate high levels of inventory that may not be needed to meet current and future operational needs. Moreover, while our work only focused on the inventory management centers we reviewed, it is unknown whether these issues are occurring at other DOD inventory management centers.

Army's Aviation and Missile Command and Air Force's Ogden Air Logistics Center Are Not Properly Categorizing the Reasons to Hold Items in Contingency Retention Inventory

The Army's Aviation and Missile Command and Air Force's Ogden Air Logistics Center are not properly assigning category codes that describe the reasons they are holding items in contingency retention inventory. DOD policy requires DOD components to identify the reasons for retaining items for contingencies purposes and if requested, provide the rationale that identifies why contingency retention inventory should be in the military, foreign military sales, and general category. <sup>25</sup> Some DOD components use codes in their inventory management systems to identify the reasons to hold items in contingency retention inventory. The codes are reviewed to validate the contingency retention decisions.

We found, however, that the Army's Aviation and Missile Command does not consistently assign codes to categorize the reasons for holding items in contingency retention inventory. Of the 55 Army Aviation and Missile Command items we selected for review, 50 of the items valued at \$193 million did not have a code to identify the reasons for holding the items, and therefore we were unable to determine the contingency retention category for the items. Furthermore, according to Command officials, the Army's current inventory management system, the Commodity Command Standard System, is not programmed to categorize some contingency retention inventory.<sup>26</sup> However, according to Army Materiel Command officials, the contingency retention code was added to the Commodity Command Standard System<sup>27</sup> in the mid-1990s but the functionality to use the code in the system was not completed because of the planned replacement of the Commodity Command Standard System with the Logistics Modernization Program in 1999. Army officials stated that it is unlikely any updates or modifications to the current system to ensure the functionality of the coding feature will be approved to properly categorize contingency retention inventory. While the new system is expected to have contingency retention codes, the Army is not currently planning to complete fielding the Logistics Modernization Program until 2009, which means that it will not be using codes at least until then. As an interim solution, Army Material Command officials have indicated that they will reemphasize that item managers use the manual contingency retention

<sup>&</sup>lt;sup>25</sup> DOD 4140.1-R, Sections C2.8.1.1.1.3 and C2.8.1.2.6.

<sup>&</sup>lt;sup>26</sup> While the inventory management system does not allow the Command to use codes to categorize military and general contingency retention inventory, it does provide a code to identify items designated for foreign military sales.

 $<sup>^{27}</sup>$  The Commodity Command Standard System is also used at the Tank-automotive and Armaments Command.

approval forms that will include the codes. However, without the use of the codes in the inventory management system, the Army's Aviation and Missile Command will not be able to (1) readily identify the reasons for holding items in contingency retention inventory and know whether the items they are retaining are useful for current and future operations and (2) analyze trends in contingency levels that may require management scrutiny and attention.

Also, at the Army's Aviation and Missile Command, we identified 30 items that were retained for anticipated foreign military sales. Of the 30 items valued at \$134 million, only 5 had the proper coding. At the time of our review, several item managers responsible for managing foreign military items stated they were not aware of the Army policy which directs such items to be identified with a specific code. We informed Command inventory materiel management officials that some item managers were unaware of this policy. The officials identified this as a training issue and plan to develop a training module for item managers that will address this matter. However, at the time we completed our audit work in January 2006, the Command had not developed the training.

We also found that the Air Force's Ogden Air Logistics Center had some contingency retention inventory items that were not properly categorized and, as a result, the items had been inappropriately retained in contingency retention inventory. Specifically, we identified 3 out of 57 items we reviewed at the Ogden Air Logistics Center that the Air Force Materiel Command directed the Center to retain in contingency retention inventory that were not properly categorized. When we brought this to the attention of the Air Force Materiel Command, officials discovered that these 3 items were among a larger population of 974 items that had been improperly coded. Upon investigation, officials found that in 2001 the contingency retention codes were removed from the weapon systems that these items supported, but not from the items themselves. According to the Air Force Materiel Command, the 974 items are managed at the Ogden Air Logistics Center, as well as the Warner Robins and Oklahoma City Air Logistics Centers. The Command officials explained that due to a system deficiency in the Air Force's Application Programs, Indenture system, it did not remove the items' codes when the weapon systems' codes were removed and, as a result, the items continued to be categorized as contingency retention inventory. As a result of these items being inappropriately retained in contingency retention inventory, the contingency retention inventory level has been overstated. We estimated in 2006 that the Air Force's contingency retention inventory value included \$138 million worth of items, the value of the 974 contingency retention

items that should not have been included. As a result of our review, the Air Force Materiel Command system programming activity corrected the deficiency in March 2006 by removing the codes from the system.

According to Command officials, the items support some weapon systems that are still used in the Air Force, but some items support the F-111 aircraft that the Air Force retired in the mid-1990s. When the codes are removed for this aircraft, some of the 974 items that are no longer needed will be candidates for disposal unless the Air Force item managers decide to retain these items for foreign military sales. Air Force policy indicates that the failure to remove items from contingency retention inventory that are no longer needed can cause too much inactive inventory to negatively affect warehouse costs and spaces. Also, by not properly categorizing the reasons for holding items in contingency retention inventory, some DOD components are unable to determine the rationale for holding the items and do not readily know the potential usefulness of their contingency retention inventories and whether the items could meet components' operational needs.

Some Inventory Management Centers Are Retaining Items in Contingency Retention Inventory that Have Experienced Little or No Recent Demands

Some DOD inventory management centers are retaining items in contingency retention inventory that have experienced little or no recent demands. For example, we identified some items categorized as contingency retention inventory that had been in the inventory system for 50 or more years—some of which had not experienced any requests from customers in over 10 years. There is the likelihood for the inventory management centers to retain items that no longer meet operational needs. Table 2 shows for each inventory management center we reviewed examples of when items were placed into the inventory and the last reported demand through January 2006.

Table 2: Examples Illustrating When DOD's Items Were Placed into Inventory and the Last Reported Demand Date Through January 2006

Inventory management center	Name of item	Name of weapon system	Year item entered into inventory system	Number of years in inventory system	Year of last demand	Number of years from last demand
Air Force's Ogden Air Logistics Center	Electronic switch	Missile Warning and Defense Division System	1968	38	1984	22
Army's Aviation and Missile Command	Spur gear	Target Acquisition Designation Sight and Pilot Night Vision Sensor	1990	16	1995	11
Navy Inventory Control Point Mechanicsburg <sup>a</sup>	Rod assembly	Battleship Guns	1953	53	1999	N/A
Defense Supply Center Richmond	Direct current motor	Airlifter Aircraft	1971 <sup>b</sup>	35	2002	4

Source: GAO analysis of DOD data.

<sup>a</sup>The Navy's inventory management system does not retain demand (request) information beyond 5 years, and therefore, we were unable to determine when these items were actually last requested.

<sup>b</sup>Indicates the year Defense Logistics Agency assumed management of the item from a DOD component.

We also reported<sup>28</sup> in 2004 that some items had inventory categorized as either economic or contingency retention stock and had been in the inventory system for 15 or more years. Some of the items had been placed in service prior to 1989 and some placed during the 1960s. These items included antennae, aircraft rudders, auxiliary power units, propeller blades, and circuit card assemblies that were used on versions of the Air Force's C-130 and F-15 aircraft, the Army's UH-60 helicopter, and other weapon systems.

In addition, we found that the Aviation and Missile Command is retaining items in contingency retention inventory, which further demonstrates how components can retain items that have experienced (1) no recent demands and (2) no longer meet operational needs. DOD policies require that items held in contingency retention should correspond to current and future

<sup>&</sup>lt;sup>28</sup> GAO, Defense Inventory: Analysis of Consumption of Inventory Exceeding Current Operating Requirements Since September 30, 2001, GAO-04-689 (Washington, D.C.: Aug. 2, 2004).

force levels.<sup>29</sup> It is also an objective of DOD's policy that items from the inventory system that no longer support DOD's mission should be removed.<sup>30</sup> During our review, we identified 4 out of 55 contingency retention items that support an obsolete early warning sensor that was phased out by the Army in June 2003. According to Command officials these items were retained in contingency retention because officials did not receive direction from the Army to remove the obsolete items from the inventory. Also, Command officials stated that they are considering offering the weapon system and support items to the foreign military sales program. If the foreign military sales program does not assume management of the items, the Command officials said they will initiate the disposal process. While we do not know the extent to which this is a predominant condition at the Command because we only identified 4 items which the Command is retaining that do not support a current requirement and have not experienced any recent demands, it is possible that the Army may be retaining several other contingency retention items that no longer meet operational needs. According to DOD policy, items that no longer support DOD's mission needlessly consume warehouse space that will impact total supply operations and DOD places serious emphasis on the purging of unneeded items from the inventory. 31

Some DOD Inventory Management Centers Are Not Conducting Annual Reviews to Verify Reasons for Retaining Contingency Retention Inventory The Defense Supply Center Richmond, the Naval Inventory Control Point Mechanicsburg, and the Army's Aviation and Missile Command are not conducting annual reviews to verify the reasons for retaining items in contingency retention inventory. DOD's and the components' policies require the components to conduct annual reviews so that the components can validate their reasons for retaining items in this inventory category. Additionally, we found that one of the Defense Logistics Agency's centers, the Defense Supply Center Richmond, had not conducted reviews since 2000 on some contingency retention items. We found that no annual reviews had been conducted for 35 of the 48 items we reviewed from the Center's 2004 total population of contingency retention inventory. We later identified from the Center's total population of contingency retention inventory that approximately 2,200 items had not been reviewed since 2000. According to Center officials, the reviews were not conducted

<sup>&</sup>lt;sup>29</sup> DOD 4140.1-R, Section C2.8.1.1.2.

<sup>&</sup>lt;sup>30</sup> DOD 4140.32-M, Foreword.

<sup>&</sup>lt;sup>31</sup> DOD 4140.32-M, Foreword.

because the items had no stock on hand or they had experienced no recent demands from customers. Based on our review, the Defense Supply Center Richmond initiated actions to (1) review the stock numbers, (2) remove their contingency retention levels if required, and (3) establish a review cycle that would identify these types of items in the future. After the Center reviewed the items, it proposed disposal actions to remove 40 stock numbers: a total quantity of about 26,000 items valued at over \$742,500.

Also, the Naval Inventory Control Point Mechanicsburg had not conducted annual reviews for some contingency retention inventory established by the weapon system program manager. Like the other components, Navy policy requires an annual review of the reasons for retaining an item in contingency inventory. However, we identified 4 out of 45 items in our review for which weapon system program managers had not conducted annual reviews for the contingency retention inventory. At the time of our review, these items had not been reviewed since 2000. For example, one Navy program manager had not conducted annual reviews for 3 items in our review since 2000 because the date to conduct the reviews in the inventory management system was not set for every year. Navy inventory management officials were unaware that some weapon system program managers were not conducting annual reviews of contingency retention inventory. As a result of our review, the Naval Inventory Control Mechanicsburg revised the policy for weapon system program managers to conduct annual reviews.

Furthermore, we found that the Army Materiel Command has not conducted reviews of some items in contingency retention inventory specifically retained for foreign military sales. For example, we identified 10 out of the 55 selected Army Aviation and Missile Command contingency items (valued at \$10.1 million) that had not been reviewed annually by the component to verify the reasons for retaining the items in contingency retention. Army policy requires an annual review of contingency requirement decisions for all items including items retained for foreign military sales. These 10 items support the Hawk and Chaparral Missile Systems and are retained for the foreign military sales program. A 2003 memorandum of agreement between the Army's Aviation and Missile Command's Missile System Directorate and the Security Assistance Management Directorate directs the Army to retain management of the items until the quantities on hand have been depleted. Once this occurs, the Security Assistance Management Directorate assumes inventory accountability for the items. According to the Army Aviation and Missile Command officials, these items are managed by the Army because the

Security Assistance Management Directorate is not authorized to procure assets from the Command in anticipation of foreign military sales demands. Also, Command officials indicated that annual reviews were not conducted because the missile systems' items were retained due to direction of the memorandum of agreement. The purpose of these annual reviews would be to identify whether these items are still needed to support the weapon systems in the foreign military sales program. By not conducting annual reviews, the Command is not in compliance with DOD and Army policies and procedures.

DOD Is Not Providing Sufficient Oversight to Ensure That Components Are Conducting Annual Reviews of Contingency Retention Inventory DOD is not providing sufficient oversight to ensure that components are conducting annual reviews of contingency retention inventory across the components. According to the DOD Supply Chain Materiel Management Regulation issued by the Office of the Deputy Under Secretary of Defense for Logistics and Materiel Readiness, the DOD components are required to annually review and validate the contingency retention inventory. However, the regulation does not state who bears responsibility for ensuring the components conduct these annual reviews. The DOD's Supply Chain Materiel Management Policy requires the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD AT&L) to ensure that DOD materiel management policies are implemented in a uniform manner throughout the department. This policy applies to all phases of materiel management, from an item's introduction into the supply system to operational requirements through the weapon system phase-out and retirement. Also, the OUSD AT&L is responsible for monitoring the overall effectiveness and efficiency of the DOD logistics system, and for continually developing improvements. In addition, the Standards for Internal Control in the Federal Government recommend that ongoing monitoring occur in the course of normal operations to ensure policies and procedures are enforced. OUSD AT&L officials said that they rely on the DOD's Supply System Inventory Report as their oversight mechanism to ensure DOD components conduct annual reviews. While the annual Supply System Inventory Report provides DOD with financial inventory information, it does not specifically provide the information DOD needs to determine whether the components are conducting annual reviews of contingency retention inventory. OUSD AT&L officials said that if the report identifies noticeable changes in the components' contingency retention inventory levels, they would ask the components to explain those changes.

Also, OUSD AT&L officials said that several additional measures could be taken to determine why the components' contingency retention inventory levels have increased. For example, DOD officials said they may request

assistance from the Department of Defense Inspector General's Office, establish a joint process review team, or request contractor support to examine noticeable changes in the components' inventory levels. We found that the Department of Defense Inspector General's Office has not conducted any recent reviews on contingency retention inventory. According to DOD officials, they are currently using a contractor to determine why DOD components' inventory levels have increased. However, DOD's failure to recognize the inventory management centers' noncompliance with DOD's regulation requiring them to conduct annual reviews of their contingency retention decisions illustrates DOD's insufficient oversight of inventory management at the departmentwide level. There is no requirement for the components to report the results of their annual reviews to DOD, and the Supply System Inventory Report does not address the annual reviews. Because DOD does not provide the oversight to ensure that components are conducting annual reviews of their contingency retention decisions, DOD cannot be certain that components are retaining the right amount of contingency retention inventory to meet the military's operating requirements.

DOD Has Made No Progress in Implementing Our 2001 Recommendations on Economic Retention Inventory Management DOD has made no progress in implementing our 2001 recommendations<sup>32</sup> on economic retention inventory management. We recommended that DOD (1) establish milestones for reviewing their approaches for making economic retention decisions, and (2) conduct annual reviews of their approaches, as directed by the DOD regulation, 33 to ensure they have sound support for determining economic retention inventory levels. In 2001, we reported that components had not properly documented the approaches they have taken in making economic retention decisions, lacked sound analytical support for the maximum levels they used, and had not annually reviewed their approaches. We also reported that while DOD components, with the exception of the Air Force, developed individual economic models designed to place inactive inventory in economic status as early as 1969, they had not used the models since 1994. Instead, components lowered maximum levels of inventory—known as ceilings—to make economic retention determinations that would help achieve agency inventory reduction goals. We also reported that the components judgmentally developed their ceilings for economic retention

<sup>&</sup>lt;sup>32</sup> GAO, Defense Inventory: Approach for Deciding Whether to Retain or Dispose of Items Needs Improvement, GAO-01-475 (Washington, D.C.: May 2001).

<sup>&</sup>lt;sup>33</sup> DOD 4140.1-R, Section C2.8.1.1.2.

inventory, which differed and had yielded lower levels of economic retention inventory than the levels calculated by the economic retention models. In addition, we reported that while components' ceilings varied in the span of years of demand, they also varied in the total years of inventory covered.

During 1994-96, the components established different ceilings for items in economic retention. A ceiling imposes an upper constraint on years of demand—the quantity needed on an annual basis to meet requirements—and how much inactive inventory can be retained. For example, the Army ceiling is applied to inventories above active inventory requirements. The Air Force, Navy, and Defense Logistics Agency ceilings apply to their entire inventory requirements, including active inventory. The ceilings currently used by the components are summarized in table 3.

Component	Ceilings levels used to retain inventory			
Air Force	13 years of total maximum demand for all items			
Army (By Life Cycle Management Commands) <sup>a</sup>	CECOM, 7 years of demand above requirements for serviceable reparables, 6 years for unserviceable reparables, 5 years of demand above requirements for all other items			
	AMCOM and TACOM, 83.25 years of demand above requirements for serviceable and unserviceable reparables			
Navy	12 years of total attrition demand for new weapons systems			
	8 years of total attrition demand for "steady" weapon systems			
	4 years of total attrition demand for weapons systems approaching obsolescence			
Defense Logistics Agency	6 years of total demand			

Source: GAO analysis of DOD data.

DOD partially concurred with our 2001 recommendations, agreeing that its components needed to annually review the appropriateness of their economic retention inventory levels. In response to a 2001 congressionally mandated study, the Logistics Management Institute (LMI) examined whether the current economic retention policy requirements and

<sup>&</sup>lt;sup>a</sup>Army has three major subordinate commands that manage spare parts for major weapon systems. They include the Aviation and Missile Life Cycle Management Command (AMCOM), Communications-Electronics Life Cycle Management Command (CECOM), and the Tank-automotive and Armaments Life Cycle Management Command.

procedures could be improved.<sup>34</sup> Specifically, the study concluded that DOD could possibly achieve additional cost savings by determining economic retention levels using heuristics<sup>35</sup> based on years of no demand when determining economic retention levels rather than using economic retention models and years of supply. LMI attributed the problems of using a generalized economic retention model to the uncertainty of long-term demand, the negligible marginal cost of storage, and the small return from disposal. In addition, the LMI study suggested DOD employ a new standard of 7 years of inactivity to determine economic retention levels. DOD determined that further review was necessary to determine appropriate approaches to economic retention inventory decisions and subsequently tasked LMI to examine whether current economic retention policy requirements and procedures could be improved. LMI conducted a follow-up study on economic retention in 2003 and found that even though the economic retention models used by DOD components allow for demand variability, they assume the average demand for items is relatively stable from year to year. The study also stated that if the average demand is not stable, future demand cannot be predicted and retention limits will not be accurate.

Based on its 2003 independent study, LMI recommended that DOD procedural guidance for setting economic retention limits should call for the use of minimum-retention limits as a viable means of dealing with the uncertainty in forecasting long-term demand. In addition, LMI recommended that in accordance with the DOD regulation, the DOD components should review their retention methodologies at least annually and adapt the general models and options in the study's analysis to their specific items. <sup>36</sup> DOD did not advise the components to adopt recommendations from the 2003 LMI study because, according to an official with the Office of the Assistant Deputy Under Secretary of Defense, they were designed to show components how best to determine economic retention. A program director with LMI said DOD indicated that they were still looking at ways to implement recommendations from the

<sup>&</sup>lt;sup>34</sup> National Defense Authorization Act for Fiscal Year 2000, Pub. L. No. 106-65, § 362 (1999) directed the Department of Defense to sponsor an independent study on secondary inventory and spare parts.

 $<sup>^{35}</sup>$  Heuristics is a rule of thumb, simplification, or educated guess that is offered as a decision-making tool.

<sup>&</sup>lt;sup>36</sup> Logistics Management Institute, *Economic Retention Within the Department of Defense*, LG301T1 (McLean, Va.: December 2003).

2003 study, but competing demands from Operation Iraqi Freedom, the Base Realignment and Closure Act for 2005, the Quadrennial Defense Review, and other activities have taken priority. Furthermore, while DOD agreed with our 2001 recommendations to comply with DOD policy and perform annual reviews of the economic retention methodologies, we found that some of the components were not complying with the DOD regulation to review and validate their methodologies for economic retention decisions. For example, at the time of our review, the Army and Defense Logistics Agency had not reviewed and validated their methodologies for economic retention decisions within the last year, nor were they able to provide documentation illustrating when the last review had been conducted. A Defense Logistics Agency official stated that other competing priorities and a focus on the agency's new inventory management system have prevented them from conducting annual reviews. However, according to an official with the Defense Logistics Agency, a plan to revise their economic retention model and ceilings will begin in late 2006. We also found that the Air Force had not conducted annual reviews and validated its methodologies for economic retention decisions since 1991. According to Air Force officials, annual reviews of economic retention decisions are not conducted because it is an expensive undertaking and because of manpower limitations. The Air Force is currently conducting a study of its economic retention model. In addition, in 2005, the Navy conducted a review of its economic retention model and recommended the following actions: (1) find methods to improve cost estimates in retention decisions, and (2) explore reductions in minimum retention limits.

### Conclusions

DOD's inventory management centers are using subjective reasons to justify which items they retain in their contingency retention inventories in support of their missions. While each center has policies and procedures to review and validate their inventory retention decisions, they are not complying with these policies and therefore cannot ensure that they are retaining the appropriate amount of contingency retention inventory for current and future operations. For example, since some inventory management centers do not properly assign reasons for holding the contingency retention inventory, they do not know whether the justifications to hold items are consistent with the reasons prescribed in their existing policies and procedures. Similarly, until some DOD inventory management centers determine whether retained items support their operational needs, they could be retaining inventory that needlessly consumes valuable warehouse space for many years. Without periodic reviews that verify the reasons for holding items in contingency retention

inventory, there is the potential for the DOD centers to use this inventory category to justify accumulating high levels of inventory without knowing whether the items they are retaining are potentially useful for current and future force operating requirements. The components' inventory retention policies and procedures are in place to help meet the needs of the warfighter. Until the components comply with these policies and procedures, they will be unable to take meaningful steps to improve their inventory management processes to support the warfighter. Moreover, while our work only focused on the inventory management centers we reviewed, it is unknown whether these issues are occurring at other DOD inventory management centers.

DOD's insufficient oversight to ensure the inventory management centers are conducting annual reviews of contingency retention inventory shows the lack of DOD accountability to ensure materiel management polices and procedures are implemented in a uniform manner throughout the department. The lack of DOD's accountability stems from DOD's Supply Chain Materiel Management Regulation, which does not clearly assign responsibility for ensuring the inventory management centers conduct the annual reviews. Although DOD has several measures to monitor contingency retention inventory levels, they do not provide assurance that the reviews of contingency retention decisions are conducted. Without sufficient oversight, DOD does not have the information it needs to understand why components may not be following certain inventory retention policies or procedures. Furthermore, the department cannot be assured that it has a complete and accurate picture of its inventory retention management and may be unable to identify areas that need attention to improve the department's supply chain management.

## Recommendations

We are recommending that the Secretary of Defense take the following seven actions:

To ensure DOD inventory management centers properly assign codes to categorize the reasons to retain items in contingency retention inventory, direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to:

 Direct the Secretary of the Army to instruct the Army Materiel Command to modify the Commodity Command Standard System so it will properly categorize the reasons for holding items in contingency retention inventory. • Direct the Secretary of the Air Force to instruct the Air Force Materiel Command to correct the Application Programs, Indenture system's deficiency to ensure it properly categorizes the reasons for holding items in contingency retention inventory.

To ensure that the DOD inventory management centers retain contingency retention inventory that will meet current and future operational requirements, direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to:

• Direct the Secretary of the Army to instruct the Army Materiel Command to require the Aviation and Missile Command to identify items that no longer support operational needs and determine whether the items need to be removed from the inventory. The Army Materiel Command should also determine whether its other two inventory commands, the Communications-Electronics Command and Tank-automotive and Armaments Command, are also holding obsolete items, and if so, direct those commands to determine whether the disposal of those items is warranted.

To ensure that DOD inventory management centers conduct annual reviews of contingency retention inventory as required by DOD's Supply Chain Materiel Management Regulation, direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to:

- Direct the Director of the Defense Logistics Agency to require the Defense Supply Center Richmond to conduct annual reviews of contingency retention inventory. The Defense Logistics Agency should also determine whether its other two centers, the Defense Supply Center Columbus and the Defense Supply Center Philadelphia, are conducting annual reviews, and if not, direct them to conduct the reviews so they can ensure the reasons for retaining the contingency retention inventory are valid.
- Direct the Secretary of the Navy to instruct the Naval Inventory Control
  Point Mechanicsburg to conduct annual reviews of contingency retention
  inventory. The Naval Inventory Control Point should also determine if its
  other organization, Naval Inventory Control Point Philadelphia, is
  conducting annual reviews and if not, direct the activity to conduct the
  reviews so it can ensure the reasons for retaining the contingency
  retention inventory are valid.
- Direct the Secretary of the Army to instruct the Army Materiel Command to require the Aviation and Missile Command to conduct annual reviews of contingency retention inventory. The Army Materiel Command should also determine if its other two inventory commands, the Communications-Electronics Command and Tank-automotive and Armaments Command,

are conducting annual reviews and if not, direct the commands to conduct the reviews so they can ensure the reasons for retaining the contingency retention inventory are valid.

To ensure that DOD inventory management centers implement departmentwide policies and procedures for conducting annual reviews of contingency retention inventories, direct the Office of the Deputy Under Secretary of Defense for Logistics and Materiel Readiness to take the following action:

 Revise the DOD's Supply Chain Materiel Management Regulation to make clear who is responsible for providing recurring oversight to ensure the inventory management centers conduct the annual reviews of contingency retention inventory.

# Agency Comments and Our Evaluation

In written comments on a draft of this report, DOD concurred with six of our recommendations and partially concurred with one. Also, DOD cited specific actions it plans to take to implement the six recommendations. Specifically, DOD indicated that the Air Force has corrected the system deficiency in the Applications Program, Indenture, by removing all remaining system-deferred disposal codes from the system. Also, DOD stated that the Army will review contingency retention inventory for items that no longer support operational needs. Furthermore, DOD noted that the Army, the Navy, and the Defense Logistics Agency plan to conduct annual reviews of contingency retention inventories to ensure the reasons for retaining the items are valid.

DOD partially concurred with our recommendation to instruct the Army Materiel Command to modify the Commodity Command Standard System so it will properly categorize the reasons for holding items in contingency retention inventory. The department said that it does not plan to modify the current legacy system to include the contingency retention codes. Instead, the department prefers to devote its resources to implementing the Army's Logistics Modernization Program that will include the category contingency retention codes. However, we reported that the department does not plan to implement the new system until 2009, and as an interim remedy, it plans to have item managers use manual contingency retention approval forms that will include the codes. We do not believe this remedy will allow the Army to readily (1) identify the reasons for holding items in contingency retention inventory and (2) know whether they are retaining items that are useful for current and future operations. Therefore, we continue to believe that the Army should modify the current system to

properly categorize the reasons for holding items in contingency retention inventory.

While DOD concurred with our recommendation to revise DOD's Supply Chain Materiel Management Regulation to clarify who is responsible for providing recurring oversight to ensure the inventory management centers conduct the annual reviews of contingency retention inventory, its response focused on updating the regulation to rely on the military services and Defense Logistics Agency headquarters to ensure the reviews are conducted. The intent of our recommendation, however, was to clarify who bears responsibility for ensuring the components conduct annual reviews. We continue to believe that DOD (Under Secretary of Defense for Acquisition, Technology, and Logistics) should perform this oversight responsibility to obtain a complete and accurate picture of inventory retention management in the department.

DOD also provided a technical comment for our consideration in the final report and we incorporated changes as appropriate. DOD's formal comments appear in appendix II.

We are sending copies of this report to the Secretary of Defense; Secretaries of the Air Force, Army, and Navy; and the Director, Defense Logistics Agency. We will also provide copies to others upon request. In addition, this report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-8365 or solisw@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page

of this report. GAO staff who made major contributions to this report are listed in appendix III.  $\,$ 

William M. Solis

Director

Defense Capabilities and Management

# Appendix I: Scope and Methodology

The objectives of our audit were to (1) determine the extent to which Department of Defense (DOD) inventory components have followed departmentwide and individual component policies and procedures to ensure they are retaining the appropriate amount of contingency retention inventory, and (2) assess the extent to which DOD is providing oversight of contingency retention inventory management across the components. We also provided updated information on the progress that DOD has made in implementing our 2001 recommendations on the components' management of economic retention inventory. We obtained current DOD and component guidance on retaining inventory that exceed operating requirements. Also, we interviewed officials from Office of the Secretary of Defense (OSD) for Acquisition, Technology, and Logistics, Arlington, Virginia; Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio; Defense Logistics Agency, Ft. Belvoir, Virginia; Defense Supply Center Richmond, Virginia; U.S. Army Materiel Command, Ft. Belvoir, Virginia; Naval Inventory Control Point Mechanicsburg, Pennsylvania; and Ogden Air Logistics Center, Hill Air Force Base, Utah, and the U.S. Army Aviation and Missile Command, Huntsville, Alabama, to discuss their roles and responsibilities, as well as the criteria and guidance they used in performing their duties for managing, reviewing and validating reasons for retaining contingency retention inventory.

To evaluate whether the components have followed departmentwide and individual component policies and procedures with respect to contingency retention inventory, we obtained secondary inventory (spare parts) retention inventory records from the following DOD components' automated inventory management systems:

- Defense Logistics Agency's Standard Automated Materiel Management System;
- Navy's Uniform Inventory Control Point;
- Air Force's Central Secondary Item Requirement System; and
- Army's Commodity Command Standard System.

For each of the DOD component systems used in our work, we assessed the reliability of the data by (1) obtaining information from the component management on their data reliability procedures, (2) reviewing system documentation, (3) reviewing related audit agency reports, and (4) performing electronic testing of the contingency retention inventory data to identify obvious errors in accuracy and completeness. We verified database control totals, where appropriate. Based on these procedures, we determined that the DOD data were sufficiently reliable for purposes of our analysis and findings. The contingency retention inventory data we

obtained covered different periods, depending on the DOD component providing the data. Although the period for the components' data was from the years 2004 and 2005, the data we obtained had different cutoff dates as follows:

- For Defense Logistics Agency, the cutoff date was October 1, 2004.
- For the Army, the cutoff date was November 14, 2005.
- For the Navy, the cutoff date July 19, 2005.
- For the Air Force, the cutoff date was March 31, 2005.

To illustrate how inventory management centers establish and review contingency retention inventory, we conducted case studies of a nonprobability sample of inventory management centers including the Defense Supply Center Richmond, Virginia; Naval Inventory Control Point Mechanicsburg, Pennsylvania; Ogden Air Logistics Center, Hill Air Force Base, Utah; and U.S. Army Aviation and Missile Command, Huntsville, Alabama. We selected these centers for review based on the number of items and value of contingency retention inventory. At each center, we reviewed the population of inventory retention data, and developed a nonprobability sample of inventory retention items (spare parts) at each center for further review, based on the number, types, and costs of inventory at each location. For example, we selected for review spare parts with (1) highest and lowest dollar value, (2) date of earliest and latest request date, (3) earliest and latest date items placed into inventory record, and (4) highest and lowest quantity. The selection resulted in a review of 205 cases (national stock numbers) for the centers we visited, and equates to 1.6 million spare parts valued at \$890 million. Also, we used a data collection instrument to assist the team in gathering information and interviewing officials at the four locations. The purpose of the data collection instrument was to help the team ensure consistent, accurate, and complete recording of information at each location. Although the case study approach does not enable us to generalize findings to all centers, it does provide in-depth information about problems at selected centers, which may provide insight into problems with contingency retention inventory management in general.

To determine DOD's oversight responsibility for ensuring the DOD inventory management centers implement the contingency retention policies and procedures, we reviewed DOD regulations and directives and interviewed officials from the Office of the Deputy Under Secretary of Defense for Supply Chain Integration on their roles and responsibilities for supply chain material management. Also, we reviewed GAO's *Standards for Internal Control in the Federal Government*, which provides the

overall framework for establishing and maintaining internal control and for identifying and addressing major performance and management challenges.

To assess the progress that DOD has made in implementing the recommendations from our 2001 report on the components' management of economic retention inventory, we obtained copies of DOD's and the components' policies and procedures for retaining economic retention inventories and discussed this with DOD officials. We also analyzed DOD's and its components policies and procedures to determine their internal controls/oversight functions and responsibilities for validating and annually reviewing their methodologies for making economic retention decisions. Also, we reviewed reports from GAO and the Logistics Management Institute on economic retention inventory. In addition, we conducted interviews with component officials from each of the following offices: the Office of Secretary of Defense Acquisition, Technology, and Logistics, Arlington, Virginia; the Army Materiel Command, Fort Belvoir, Virginia; the Army's Aviation and Missile Command, Huntsville, Alabama; the Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio; the Air Force's Ogden Air Logistics Center, Hill Air Force Base, Utah; Defense Logistics Agency Headquarters, Fort Belvoir, Virginia; Defense Supply Center Richmond, Virginia; and, the Naval Inventory Control Point Mechanicsburg, Pennsylvania.

We performed our review from May 2005 through May 2006 in accordance with generally accepted government auditing standards.

# Appendix II: Comments from the Department of Defense



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

May 11, 2006

Mr. William Solis Director, Defense Capabilities and Management U.S. Government Accountability Office Washington, DC 20548

Dear Mr. Solis:

This is the Department of Defense (DoD) response to the GAO draft GAO-06-512, "DEFENSE INVENTORY: Actions Needed to Improve Inventory Retention Management," dated April 11, 2006 (GAO Code 350656). The GAO draft report highlights that the DLA, Army, and Navy have not completed annual reviews of its contingency retention methodology and levels, the Army and Air Force were not properly coding inventory being retained in contingency retention, and the DoD 4140.1R needs to clearly define who is responsible for performing oversight of policy implementation within the Military Services and DLA. The DoD concurs with the recommendations in the report and has already taken actions as needed to eliminate these deficiencies.

Detailed comments on the draft report recommendations are included in the enclosure. The DoD appreciates the opportunity to comment on the draft report.

Jack Bell Jack Bell

Enclosure: As stated

#### GAO DRAFT REPORT - DATED APRIL 11, 2006 GAO CODE 350656/GAO-06-512

"DEFENSE INVENTORY: Actions Needed to Improve Inventory Retention Management"

# DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to direct the Secretary of the Army to instruct the Army Material Command to modify the Commodity Command Standard System so it will properly categorize the reasons for holding items in contingency retention inventory. (p. 27/GAO Draft Report)

<u>DOD RESPONSE</u>: Partially Concur. The Commodity Command Standard System (CCSS) is a legacy system. Currently no systems changes are being made to the legacy system, so that resources may be applied to implementing the Logistics Modernization Program (LMP). The recommended change will be included in LMP when it is implemented. In the interim, AMC Life Cycle Management Centers (LCMCs) will manually record the appropriate and standardized contingency retention code for each item with a valid contingency retention requirement as part of their management processes for each item. No further direction is required.

RECOMMENDATION 2: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to direct the Secretary of the Air Force to instruct the Air Force Material Command to correct the Application Programs, Indenture system's deficiency to ensure it properly categorizes the reasons for holding items in contingency retention inventory. (p. 27/GAO Draft Report)

**DOD RESPONSE:** Concur. The HQ AFMC/A4 submitted an Information Systems Request on January 10, 2006 to correct the system's deficiency by removing all remaining system deferred disposal codes from the D200F application tables. This action was completed on March 31, 2006. A query of the system on April 17, 2006 confirmed that all of the erroneous system deferred disposal codes were removed from the database. No further direction is required.

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to direct the Secretary of the Army to instruct the Army Material Command to require the Aviation and Missile Command to identify items that are no longer supporting operational needs and determine whether the items need to be removed from the inventory. The Army Material Command should also determine whether its other two inventory commands, the Communications-Electronics Command and Tank-automotive and Armaments Command, are also holding

obsolete items, and if so, direct those commands to determine whether the disposal of those items is warranted. (p. 27-28/GAO Draft Report)

<u>DOD RESPONSE</u>: Concur. Retention levels, by United States Army Materiel Command (USAMC) command guidance, are deleted and re-approval is required annually. If reapproval is not obtained, the items will be stratified to DoD potential excess. Coordination with other Services is required prior to actual disposal. USAMC re-emphasizes this guidance as part of its fourth quarter budget stratification guidance each fiscal year, and the LCMCs review assets stratifying to potential DoD excess for disposal. Additionally, the dollar value of retention and potential DoD excess levels are monitored quarterly on applicable weapon systems at the LCMC and Command level. Unusual upward trends in these levels are reviewed and traced to the weapon system contributing to the aberration. AMCOM, as well as Communications-Electronics Command and Tank-automotive and Armaments Command will delete current retention levels. All contingency retention inventory loaded on any item will be approved and justified, according to the applicable reasons for retaining assets beyond the requirements objective, and the inventory will be properly coded in accordance with current guidance. This review will be conducted in Jun 2006 and annually after that at all three LCMCs. No further direction is required.

Specifically referring to page 20 of the draft GAO report: Currently, AMCOM is retaining CHAPARRAL, HAWK and TSQ-73 contingency retention items for (1) projected Foreign Military Sales (FMS) which will be reimbursed for Army Working Capital Funds (AWCF) and (2) the Security Assistance Management Directorate because they are not authorized to procure assets from AMCOM in anticipation of future FMS demands. Upon reimbursement for these items, funds will be utilized for future procurements on other systems. In addition, within the past two years AMCOM has experienced demands from other than FMS customers.

RECOMMENDATION 4: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to direct the Director of the Defense Logistics Agency to require the Defense Supply Center Richmond to conduct annual reviews of contingency retention inventory. The Defense Logistics Agency should also determine whether its other two centers, the Defense Supply Center Columbus and the Defense Supply Center Philadelphia, are conducting annual reviews, and if not, direct them to conduct the reviews so they can ensure the reasons for retaining the contingency retention inventory are valid. (p. 28/GAO Draft Report)

**DOD RESPONSE:** Concur. The DLA will be performing an annual review beginning September 2006 and annually thereafter as required by policy. This review will be completed across all DLA Defense Supply Centers. No further direction is required.

RECOMMENDATION 5: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to direct the Secretary of the Navy to instruct the Naval Inventory Control Point Mechanicsburg to conduct annual reviews of contingency retention inventory. The Naval Inventory Control Point should also determine if its other organization, Naval Inventory Control Point Philadelphia, is conducting

annual reviews and if not, direct the activity to conduct the reviews so it can ensure the reasons for retaining the contingency retention inventory are valid. (p. 28/GAO Draft Report)

**DOD RESPONSE:** Concur. NAVICP Mechanicsburg revised their policy for NAVICP weapon system program managers to conduct annual reviews of contingency retention inventory. The NAVICP Mechanicsburg policy revision was implemented in September 2005, as a result of the GAO review. The NAVICP Philadelphia site is currently conducting semi-annual reviews for all of their contingency retention inventory. No further direction is required.

RECOMMENDATION 6: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to direct the Secretary of the Army to instruct the Army Material Command to require the Aviation and Missile Command to conduct annual reviews of contingency retention inventory. The Army Material Command should also determine if its other two inventory commands, the Communications-Electronics Command and Tank-automotive and Armaments Command, are conducting annual reviews and if not, direct the commands to conduct the reviews so they can ensure the reasons for retaining the contingency retention inventory are valid. (p. 28/GAO Draft Report)

<u>DOD RESPONSE</u>: Concur. The Office of the Deputy Under Secretary for Defense for Logistics and Materiel Readiness, on behalf of Under Secretary of Defense for Acquisition, Technology and Logistics, will, by May 30, 2006, direct the Army Deputy Chief of Staff, G-4, to conduct annual reviews of contingency retention inventory, including its two inventory commands, Communications-Electronics Command and Tank-automotive and Armaments Command, so it can ensure reasons for retaining the contingency retention inventory are valid. No further direction is required.

**RECOMMENDATION 7:** The GAO recommended that the Secretary of Defense direct the Office of the Deputy Under Secretary of Defense for Logistics and Material Readiness to revise the DoD's Supply Chain Material Management Regulation to make clear who is responsible for providing recurring oversight to ensure the inventory management centers conduct the annual reviews of contingency retention inventory. (p. 29/GAO Draft Report)

**DOD RESPONSE:** Concur. The Military Services and DLA Headquarters are responsible for ensuring that the inventory management centers conduct reviews, as identified in policy, of contingency retention inventory. The next update of the DoD 4140.1R will clarify this responsibility. Estimated completion date of the policy update is May 2007. No further direction is required.

# Appendix III: GAO Contact and Staff Acknowledgments

GAO Contacts	William M. Solis, (202) 512-8365 or solisw@gao.gov
Acknowledgments	In addition to the contact named above, David Schmitt, Assistant Director; Sarah Baker; Carleen Bennett; Alissa Czyz; Curtis Groves; K. Nicole Harms; Latrealle Lee; Rebecca Shea; and Darby Smith made key contributions to this report.

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