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Report to the Chairman, Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, House of Representatives

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DEFENSE INVENTORY

Status of Inventory and Purchases and Their Relationship to Current Needs

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

As part of our ongoing analysis of the Department of Defense's (DOD) secondary inventory, we have updated our prior analyses of DOD's reported on-hand and on-order inventory.[1] As requested, we determined whether DOD (1) had on-hand inventory exceeding current requirements as of September 30, 1996, and 1997, and (2) was buying inventory for which it had no current requirement as of those same dates. Our analyses are based on reported secondary inventory data relating to spare and repair parts, clothing, medical supplies, and other items to support DOD's operating forces. The scope and methodology of our work are described in appendix I.

Results in Brief

DOD reported reducing the secondary inventory we analyzed from about $69.7 billion as of September 30, 1996, to $65.8 billion as of September 30, 1997. About $39.4 billion of this inventory exceeded DOD's requirements and represented about 60 percent of DOD's total on-hand inventory. The percentage of inventory that exceeded current requirements remained about the same for the two periods we analyzed and was about the same as of September 30, 1995.[2]

DOD could potentially reduce inventory that exceeded current requirements where economical to do so. The Department had no demand for about $11 billion, or 29 percent, of $37 billion of the inventory that exceeded current requirements as of September 30, 1997, but did have customer demands for the remaining $26 billion. Assuming customer demands remain unchanged, $3.4 billion of this inventory would last 20 or

[1]Defense Logistics: Much of the Inventory Exceeds Current Needs (GAO/NSIAD-97-71, Feb. 28, 1997) and 1998 DOD Budget: Operation and Maintenance Program (GAO/NSIAD-97-239R, Aug. 21, 1997).

[2]In commenting on our past reports, DOD disagreed with our definition of current requirements. We believe that the inventory DOD needs to prevent out-of-stock situations and to meet funded war reserves represents current requirements. DOD adds inventory to cover unfunded war reserves and demand for the time frame covered by the budget--2 years from the end of the fiscal year. About $22.7 billion, or 34 percent, of on-hand inventory exceeded DOD's measure as of September 1997.

more years and $658 million would last more than 100 years. Some portion of this inventory is more economical to retain than to dispose of and possibly repurchase. However, to the extent it is economical to dispose of the inventory, DOD's cost of operations could be reduced.

DOD must continue to purchase additional inventory to replenish supply shortages. However, DOD also ordered inventory that, if received, would add to the amount that exceeded current requirements as defined by DOD and us. As of September 30, 1997, DOD did not need about $1.5 billion, or 18 percent, of the inventory it had ordered to meet current requirements. The requirements for these inventories frequently change after the items are ordered. However, while the services cancel some of the on-order inventory that is not needed, they miss many opportunities to cancel additional orders.

We have made a number of recommendations in the past that DOD take actions to improve its inventory management processes and to adopt leading edge business practices. Therefore, we are making no additional recommendations in this report.

Background

In 1990, we identified DOD's management of secondary inventory as a high-risk area because levels of inventory were too high and management systems and procedures were ineffective. While some improvements have been made, we reported in 1999[3] that these conditions still exist. Our August 1997 report stated that DOD had $8.6 billion of inventory on contract or on purchase requests as of September 30, 1996, of which $1.6 billion, or 18.8 percent, exceeded current requirements. Our prior work shows that in some cases purchases (1) were not based on valid needs, (2) were excess to needs because the requirements changed after orders were placed, and (3) occurred even though contracts could have been canceled.[4] Notwithstanding these conditions, DOD must continue to purchase other inventory items to support the needs of its customers because some items are in short supply.

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

[4] Navy Inventory Management: Improvements Needed to Prevent Excess Purchases (GAO/NSIAD-98-86, Apr. 30, 1998) and Defense Logistics (GAO/NSIAD-97-71, Feb. 28, 1997).

We have previously recommended that DOD adopt leading-edge practices, such as prompt repair of items, supplier partnerships, and third-party logistics, to improve its logistics operations. In our prior work, we found that DOD recognized that it must improve its inventory management and had initiated some pilot projects. To further this goal, DOD set out objectives for continued inventory improvements in the 1998 Logistics Strategic Plan. The plan includes objectives to reengineer business practices to increase efficiency and reduce logistics resource requirements and minimize levels of inventory, consistent with readiness objectives.

We reported in February 1997 that DOD had achieved some inventory reductions; however, about 60 percent of the on-hand inventory exceeded current requirements as defined by us. In that report, we recognized that DOD is always going to have inventory that exceeds current requirements and that some should be retained for economic or contingency reasons. However, our data showed that DOD had potential for further reductions.

The inventory that we refer to as current requirements in this report and our previous reports represents the maximum authorized amount of inventory required to prevent out-of-stock situations. DOD defines this amount as its requirements objective. The major components of the requirements objective are

- war reserves that are authorized to be purchased to ensure fast mobilization in the event of war,
- customer requisitions that have not been filled,
- a safety level to be on hand in case of minor interruptions in the resupply process or unpredictable fluctuations in demand,
- items to be issued during the period between when a need to buy an item is identified and when it is received (lead time),
- minimum quantities for designated items (insurance items),
- items to be issued during the repair period for repairable items, and
- an economic order quantity to ensure the quantity ordered results in the lowest total costs to order and hold inventory.

DOD matches on-hand and on-order inventory by individual item to their requirements objective to determine if there is an excess or shortage of inventory. In this report, we present summaries of our analyses of the item-level and summary-level budget stratification reports that the military services and Defense Logistics Agency (DLA) use to prepare budget requests and to review funding.[5] We address the on-hand and on-order inventory items that exceed the requirements. This report does not address DOD's shortages of items that it uses to support its budget request. We did not independently determine the reliability of the data; however, our prior evaluations show that some of the data used by DOD and the services were not entirely accurate and reliable. Notwithstanding the concerns we have about the data reliability, we believe that the records and reports can be used to monitor the status of on-hand and on-order inventory at the macro level.

Much of DOD's Inventory Is Above Current Requirements

DOD reported reducing the secondary inventory we analyzed by $3.9 billion, from $69.7 billion as of September 30, 1996, to $65.8 billion as of September 30, 1997. However, $39.4 billion of the $65.8 billion in secondary inventory for September 30, 1997, exceeded the current requirements shown in DOD's requirements objective. In other words, based on the requirements at September 30, 1997, DOD would not have bought $39.4 billion, or about 60 percent, of the inventory it had on hand. The percentage of inventory that exceeded current requirements was about the same as of September 30, 1995.

Although the requirements objective represents the maximum amount of inventory authorized to sustain current operations, including the funded war reserves, DOD officials prefer to use the approved acquisition objective as the measure of requirements for on-hand inventory. The approved acquisition objective is generally the requirements objective plus inventory to cover unfunded war reserves and to meet demand for the time period that DOD is budgeting--2 years from the end of a fiscal year. Using DOD's calculation of approved acquisition objective, we calculated that $22.7 billion, or 34 percent, of the $65.8 billion in inventory exceeded DOD's requirements as of September 1997. The following table compares the on-hand inventory with both the requirements objective and the approved acquisition objective.

[5]We use DOD's budget stratification reports to make our analyses because item-level information is available from each service and DLA. DOD also reports summary statistics on the status of its on-hand inventory in the Supply System Inventory Report. See appendix III for summary statistics and methods of valuing inventory.

Table 1: DOD Inventory That Exceeded Current Requirements as of September 30, 1996, and 1997

Dollars in billions

		On-hand inventory exceeding			
	On-hand inventory analyzed[a]	Requirements objective		Approved acquisition objective	
Year ending	Value	Value	Percent	Value	Percent
Sept. 30, 1996	$69.7	$41.3	59	$25.4	36
Sept. 30, 1997	65.8	39.4	60	22.7	34
Change	**($3.9)**	**($1.9)**		**($2.7)**	

[a]We reviewed most of the inventory in the budget stratification records for the Army, the Navy, the Air Force, and DLA but not for the Marine Corps. We did not analyze data for in-transit stock, some retail inventory, and some consumable inventory, including fuel, because the inventory either was not stratified or represented a small portion of the total inventory. The items are priced at latest acquisition cost.

The detail by DOD component is shown in tables II.1 and II.2 of appendix II.

We previously reported[6] that DOD's on-hand inventory exceeded current requirements for many reasons. Some of the reasons were demands decreased, fluctuated, or did not materialize; items became obsolete when weapon systems became obsolete or were phased out of service; and some of the initial requirements and demand forecasts were not accurate.

DOD officials told us that once the inventory exceeds current requirements, they must decide whether to keep it or dispose of it. To make this decision, DOD uses models to determine how much of the inventory will be needed beyond the 2 years of demand shown in the approved acquisition objective. On the bases of these models, DOD divides its inventory into groupings that (1) are more economical to retain than dispose of and possibly repurchase, (2) are held to support specific contingencies, and (3) have potential for reutilization or disposal. While it may need to retain some of this inventory, DOD has the potential for further inventory reductions, as the following sections indicate.

[6]See Related GAO Products at the end of this report.

Some Items Have No Projected Demands

DOD reported reducing the amount of inventory that exceeded current requirements and did not have demands from $12.5 billion as of September 30, 1996, to $10.9 billion as of September 30, 1997. However, the amount that had no projected demand still represented about 30 percent of DOD's inventory that exceeded the current requirements. (See table 2.)

Table 2: Comparison of Items Without Projected Demand and the Value of Inventory Exceeding Current Requirements

Dollars in billions

	On-hand inventory exceeding requirements objective[a]	Inventory exceeding requirements objective that had no demand	
Date	**Value**	**Value**	**Percentage**
Sept. 30, 1996	$39.8	$12.5	31
Sept. 30, 1997	37.0	10.9	29
Change	**($2.8)**	**($1.6)**	

[a]The amounts in this table differ from table 1 primarily because we excluded inventory called numeric stockage objective items that DLA manages based on criteria other than demand. In addition, data were not available to make the analysis for the approved acquisition objective for all services.

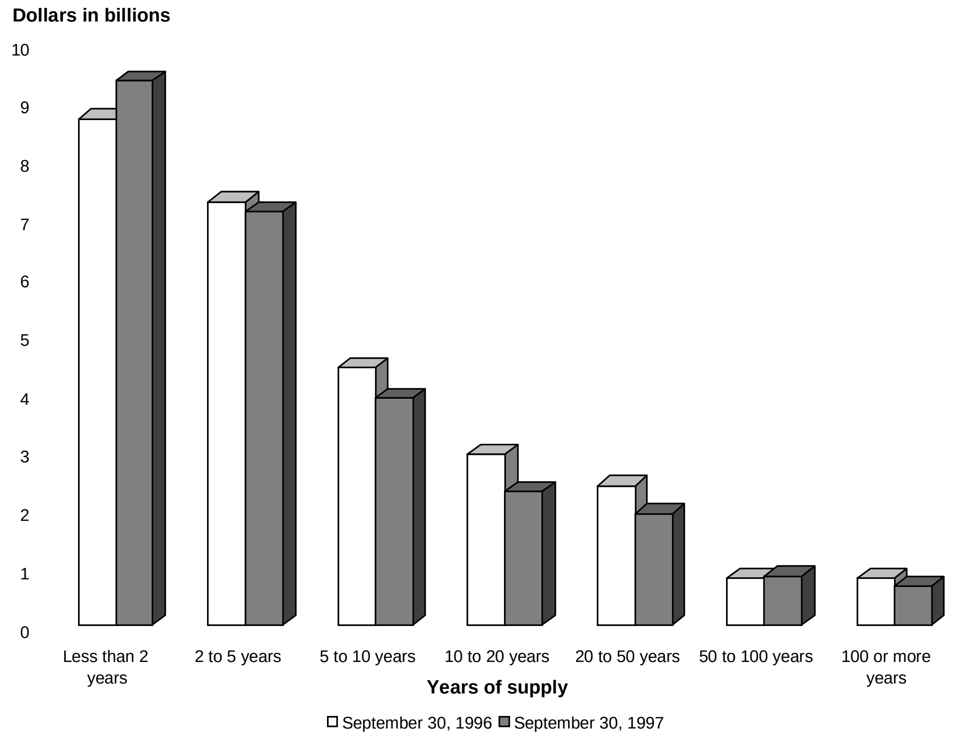
We further analyzed this inventory by service (see tables II.3 and II.4 of app. II) and found that the Navy and the Air Force held about $11.8 billion of the $12.5 billion in inventory with no projected demand as of September 1996 and $10.4 billion of the $10.9 billion in inventory as of September 1997. While this macro measure shows that all of this inventory has no projected customer demand, it does not show the extent that DOD has determined it is more economical to keep the inventory rather than dispose of and possibly repurchase. We provided, however, in our February 1997 report, several examples where items with no demand may never be used.

We excluded about $3 billion of DLA's inventory that exceeded the requirements objective from each year of this analysis because DLA does not manage these items based on demand. Although these items are not managed based on demand, they are similar to items with no demand and have potential for inventory reductions. According to a DLA official, the services transferred about 60 percent of this inventory to DLA. He said that these items have infrequent and erratic demands, making forecasting extremely difficult and disposal somewhat problematic.

Inventory Exceeding Current Requirements Represents Many Years of Projected Supply Needs

Of the $37 billion in secondary inventory that exceeded current requirements as of September 30, 1997, $26 billion had projected customer demands. Using the projected demand data, we grouped the $26 billion to show years of supply based on current demand data (see fig. 1). This analysis assumes demand patterns across the summary of items will remain unchanged. Increases or decreases in actual demand by item do occur; consequently, this data is only an indicator of potential excess inventory held by DOD.

Figure 1: Value of Items With Inventory Exceeding the Requirements Objective Shown by Years of Supply for September 30, 1996, and 1997



Note: The amounts in this figure also exclude the DLA inventory items that are not managed based on demand.

The detail by DOD component is shown in tables II.7 and II.8 of appendix II.

These data show

- about $9.3 billion (36 percent of $26 billion) represented the first 2 years of demand that exceeded the requirements objective but would generally be included in the approved acquisition objective,
- the remaining items represented about $16.7 billion (64 percent of $26 billion) that would last more than 2 years after the requirements objective was met, and
- about $3.4 billion would last 20 or more years and $658 million would last 100 or more years after the requirements objective was met.

Some Inventory on Order Exceeds Current Requirements

DOD must order inventory on a routine basis to meet supply shortages. To do this, DOD orders inventory based on the requirements objective. We found that as of September 30, 1996, and September 30, 1997, some of the on-order inventory was no longer needed. We previously reported in February 1997, August 1997, and April 1998 that ordering inventory that was beyond requirements was a continuing problem. For example, our work showed that in some cases purchases (1) were not based on valid needs, (2) were excess to needs because the requirements changed after orders were placed, or (3) were for weapon systems that had not been activated. We reported that some of the changes could not have been anticipated, but DOD could have done a better job of canceling those purchases that exceeded requirements.

A DOD official told us that while the services cancel some orders that exceed current requirements, sometimes it is more economical to receive the orders than to cancel them. However, we reported in April 1998 that ineffective and inefficient inventory management practices result in purchasing resources being applied to items where there is already sufficient inventory to support needs. Furthermore, to the extent that DOD receives these orders, it increases the on-hand inventory that exceeds current requirements and DOD must determine whether it is more economical to keep or dispose of.

As of September 30, 1997, the services and DLA had $8 billion of inventory on order, of which $1.5 billion would not have been ordered based on current requirements. This is slightly better than September 30, 1996, when the amount was $8.9 billion of inventory on order or on purchase request, of which $1.7 billion would not have been ordered based on current requirements. In both cases, the portion that exceeded current requirements stayed at about 18 percent. Using DOD's approved acquisition objective, $609 million, or 8 percent, of its purchases exceeded current requirements as of September 30, 1997. (See table 3.)

Table 3: Inventory on Order That Exceeded Current Requirements as of September 30, 1996, and 1997

Dollars in millions

	On-order inventory analyzed	On-order inventory exceeding			
		Requirements objective		Approved acquisition objective	
Date	**Value**	**Value**	**Percent**	**Value**	**Percent**
Sept. 30, 1996	$8,852.2	$1,711.6	19	$708.4	8
Sept. 30, 1997	8,002.7	1,470.6[a]	18	608.9	8
Change	**($849.5)**	**($241.0)**		**($99.5)**	

[a]Eighty percent of the $1.5 billion as of September 1997, was "on-order: contract," which is due in from procurement for which funds have been obligated, and 20 percent was "on-order: commitment," for which a procurement request had been initiated but a contract had not been awarded.

Tables II.5 and II.6 of appendix II detail our analysis for each of the military services and DLA.

This analysis does not show how much of the on-order inventory could economically be canceled. In our April 1998 report on the Navy's purchases, we provided reasons that on-order inventory became excess to current requirements.

- Some requirements to purchase items were not valid.
- Customer demands decreased or did not materialize after the order was placed.
- Engineering estimates for requirements had not materialized.
- The item or system on which the item was used became obsolete.

We reported that in some cases, the changes could not have been anticipated. However, in other cases, better management could have eliminated or reduced the accumulation of inventory that exceeded requirements. For example, we reported that while the Navy canceled some orders, it missed many opportunities to cancel additional orders for inventory that was no longer needed.

Conclusions

The data indicate that DOD has made some progress in reducing its total inventory; however, it still has substantial on-hand inventory that exceeds current requirements. The portion that exceeded current requirements stayed at about 60 percent of total inventory for the time periods we analyzed. In addition, about $11 billion of on-hand inventory that exceeded current requirements had no demand, and more than $3 billion of on-hand inventory would last 20 or more years after current requirements were met. DOD uses models to evaluate this inventory to determine if it should be kept for economic reasons, for contingencies, or disposed of. However, our data indicate the potential for further reductions.

DOD must continue to routinely order inventory to meet supply shortages. However, DOD ordered some inventory that, if received, would add to the amount that exceeded current requirements. Our April 1998 report indicates there are opportunities to improve DOD's buying practices to avoid buying items that may not be used.

We have previously recommended that DOD take actions to improve the effectiveness and efficiency of its inventory activities and to adopt new leading-edge business practices. DOD has identified various initiatives in response to these recommendations. Therefore, we are making no recommendations in this report. We will continue to review DOD's inventory management practices to identify further actions to improve the inventory management systems.

Agency Comments and Our Evaluation

DOD provided comments to clarify its position on the contents of our draft report. (See app. IV for DOD's complete comments.) DOD's comments focused on our approach to considering inventory requirements when measuring inventory levels and an explanation of the just released Supply System Inventory Report (SSIR) for the end of fiscal year 1998.

DOD expressed disagreement with our approach to measuring inventory against requirements. DOD noted that to discuss the budget stratification reports used to determine purchase requirements and the SSIR used to report inventory on hand is not an accurate comparison. Also, DOD stated that the draft report refers to overages in budget stratification reports but does not address the shortages in those same reports. According to DOD, ignoring the shortages, while citing the overages, does not give a balanced picture of what the stratification reports actually show.

DOD also stated that the SSIR should be the only source for inventory data. However, we noted that DOD uses both the budget stratification and the SSIR reports to make management decisions. Our report recognizes the differences in the two reports. Item-level analysis is needed to identify the characteristics of inventory that exceeds current requirements, such as (1) inventory that has no projected customer demand, (2) years of supply that exceeds current requirements, and (3) inventory on order that is no longer needed to meet current requirements. To do that analysis, we used the item-level records that are the basis for both the budget stratification and the SSIR reports. The analyses in our report cannot be made from the SSIR, which is a summary level report.

Our report was revised to more clearly recognize that DOD has supply shortages. Although we concentrated on inventory that exceeds current needs, we realize that DOD must continue to purchase other inventory items to support the needs of its customers because some items are in short supply. Replenishing inventory is a normal part of the supply system process and DOD uses analyses of these needs to support budget requests.

Additionally, DOD stated that the SSIR is its official report on inventory and provided just released statistics showing $61.2 billion of secondary inventory in current dollars for the end of fiscal year 1998--$3.6 billion better than DOD's National Performance Review goal. Our review focused on the 1997 inventory because that was the most recent data available at the time of our work. Appendix III shows the SSIR statistics for the end of fiscal year 1997.

We are sending copies of this report to the appropriate congressional committees; to the Honorable William S. Cohen, Secretary of Defense; the Honorable Louis Caldera, Secretary of the Army; the Honorable Richard Danzig, Secretary of the Navy; the Honorable F. Whitten Peters, Acting Secretary of the Air Force; Lieutenant General Henry T. Glisson, Director, DLA; and the Honorable Jacob J. Lew, Director, Office of Management and Budget.

Please contact me at (202) 512-8412 if you have any questions. The major contributors to this report are listed in appendix V.

Sincerely yours,

David R. Warren, Director
Defense Management Issues

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Abbreviations

DLA	Defense Logistics Agency
DOD	Department of Defense
SSIR	Supply System Inventory Report

Scope and Methodology

We analyzed September 30, 1996, and September 30, 1997, inventory stratification reports for the Army, the Air Force, the Navy, and the Defense Logistics Agency (DLA) to determine whether the Department of Defense (DOD) bought and retained more inventory than it needed to meet current requirements. We used analyses that we had developed in two prior reviews to determine the extent that DOD's inventory exceeded its current requirements as defined by the requirements objective and the approved acquisition objective. We determined the percentage of each category to overall inventory and measured the change between the two time periods. We analyzed records of inventory valued at $69.7 billion for September 30, 1996, and $65.8 billion for September 30, 1997. Appendix III explains how this inventory is valued and the relation between the two reports that DOD uses to manage secondary inventory.

We reviewed $65.8 billion of secondary inventory stratified by the Army, the Navy, the Air Force, and DLA for September 30, 1997. We did not analyze about $17.3 billion of the secondary inventory, including (1) the Marine Corps' secondary inventory; (2) in-transit stock; (3) retail inventory; and (4) DLA's fuel supply, subsistence, and base operating support inventory. The Marine Corps' inventory represented a small part of the universe and the retail inventory, in-transit stock, and fuel are not stratified. All of the inventory items were priced at latest acquisition cost.

Generally, we used computerized individual item records and summary stratification reports for the two time periods. However, to make a detailed analysis of demand rates, DLA provided us computerized data that were as of August 31, 1996, and June 30, 1998, rather than the September dates requested. The information represents the requirements, demand rates, and asset positions of the inventory as of these specific points in time. Although the information can change daily for individual items, our analyses over more than one time period indicate that the position of the total inventory is relatively stable. We revalued Army and Navy inventory to the latest acquisition cost by removing surcharges prescribed by the Defense Finance Accounting Service to cover the costs to operate the supply system. Air Force and DLA inventory were already priced at latest acquisition cost.

To make our analysis, we did the following.

- Compared requirements reported for individual items with on-hand assets to identify inventory in excess of requirements. We used both the requirements objective and the approved acquisition objective whenever possible. The Army and DLA did not provide us sufficient information to make some of the analyses for the approved acquisition objective.

- Determined whether the reported on-hand inventory that exceeded the requirements objective had projected demand in the automated item records. We reported the value of the items without demand; however, we excluded DLA's inventory items that have intermittent demands but it considered essential to stock (numerical stock objective). To determine the years of supply for the items with demand, we divided the total inventory on hand by the annual demand.
- Determined how much of the inventory on-order contract and on-order commitment exceeded the requirements objective and approved acquisition objective.

We discussed inventory requirements and procurement issues and inventory reduction initiatives with inventory management officials at the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management), and the Army, the Navy, the Air Force, and the DLA headquarters.

We did not validate the accuracy of the inventory items, requirements, or asset quantities and values DOD reported in the computerized records or summary stratification reports. While neither we nor DOD made a comprehensive assessment of the databases underlying the stratification reports, we knew from this review, and our previous reviews of DOD inventory management, that the stratification reports contained some inaccurate data. Our previous evaluations show that DOD has a history of some data accuracy problems with its inventory and requirements information.[1] Thus, while the data DOD and the services use in the day-to-day management of secondary inventory are not entirely accurate and reliable, it is the basis for DOD's budget requests for all of the services, and the reports were the best source of data available to us at the time of our review. Notwithstanding these concerns about data reliability, the records and reports can be used to monitor the status of on-hand and on-order inventory at the macro level.

[1]We reviewed 46 of our reports and found that we questioned some aspect of the accuracy of information in over 50 percent of the reports. The information was either directly from the inventory stratification database or from other inventory records that directly or indirectly provided input to the inventory stratification.

We performed our review between January 1998 and December 1998 in accordance with generally accepted government auditing standards.

Inventory Analyses by Service and DLA for September 30, 1996, and 1997

Table II.1: DOD Inventory That Exceeded Current Requirements by Component as of September 30, 1996

Dollars in billions

	On-hand inventory analyzed	On-hand inventory exceeding			
		Requirements objective		Approved acquisition objective	
Component	Value	Value	Percent	Value	Percent
Army	$8.1	$3.9	48	$2.3	28
Navy	18.2	11.1	61	7.3	40
Air Force	35.0	22.0	63	12.9	37
DLA	8.4	4.3	51	2.9	35
Total	**$69.7**	**$41.3**	**59**	**$25.4**	**36**

Table II.2: DOD Inventory That Exceeded Current Requirements by Component as of September 30, 1997

Dollars in billions

	On-hand inventory analyzed	On-hand inventory exceeding			
		Requirements objective		Approved acquisition objective	
Component	Value	Value	Percent	Value	Percent
Army	$7.5	$3.5	47	$1.6	21
Navy	16.6	9.7	58	6.1	37
Air Force	32.7	21.3	65	11.8	36
DLA	9.0	4.9	54	3.2	36
Total	**$65.8**	**$39.4**	**60**	**$22.7**	**35**

Table II.3: Items Without Projected Demand and the Value of Inventory Exceeding Current Requirements by Component as of September 30, 1996

Dollars in billions

	On-hand inventory exceeding requirements objective[a]	Inventory exceeding requirements objective that had no demand	
Date	**Value**	**Value**	**Percentage**
Army	$3.9	$0.6	15
Navy	11.1	4.0	36
Air Force	22.0	7.8	35
DLA[a]	2.8	0.1	4
Total	**$39.8**	**$12.5**	**31**

[a]DLA's data exclude inventory called numeric stockage objective items that are managed based on criteria other than demand.

Table II.4: Items Without Projected Demand and the Value of Inventory Exceeding Current Requirements by Component as of September 30, 1997

Dollars in billions

	On-hand inventory exceeding requirements objective[a]	Inventory exceeding requirements objective that had no demand	
Date	**Value**	**Value**	**Percentage**
Army	$3.5	$0.3	9
Navy	9.7	2.9	30
Air Force	21.3	7.5	35
DLA[a]	2.5	0.2	8
Total	**$37.0**	**$10.9**	**29**

[a]DLA's data exclude inventory called numeric stockage objective items that are managed based on criteria other than demand.

Table II.5: Inventory on Order That Exceeded Current Requirements by DOD Component as of September 30, 1996

Dollars in millions

	On-order inventory analyzed	On-order inventory exceeding			
		Requirements objective		Approved acquisition objective	
Component	Value	Value	Percent	Value	Percent
Army	$1,443.9	$78.3	5	$52.9	4
Navy	1,647.6	120.6	7	45.7	3
Air Force	2,435.5	843.6	35	359.2	15
DLA[a]	3,325.2	669.1	20	250.6	8
Total	**$8,852.2**	**$1,711.6**	**19**	**$708.4**	**8**

[a]DLA did not provide us records for on-order inventory that is held to meet numeric stock objectives.

Table II.6: Inventory on Order That Exceeded Current Requirements by DOD Component as of September 30, 1997

Dollars in millions

	On-order inventory analyzed	On-order inventory exceeding			
		Requirements objective		Approved acquisition objective	
Component	Value	Value	Percent	Value	Percent
Army	$1,300.2	$171.8	13	$124.8	10
Navy	1,322.9	76.7	6	34.5	3
Air Force	1,732.9	408.9	24	136.8	8
DLA[a]	3,646.7	813.2	22	312.8	9
Total	**$8,002.7**	**$1,470.6**	**18**	**$608.9**	**8**

[a]DLA did not provide us records for on-order inventory that is held to meet numeric stock objectives.

Table II.7: Years of Supply That Exceeded Current Requirements as of September 30, 1996

Dollars in millions

Years of supply	Army	Navy	Air Force	DLA	Total
Less than 2	$595.4	$2,016.5	$5,556.5	$517.9	**$8,686.3**
2 to 5	1,239.6	2,196.4	3,144.9	687.0	**7,267.9**
5 to 10	780.6	1,375.5	1,890.7	372.9	**4,419.7**
10 to 20	316.1	702.4	1,476.5	426.5	**2,921.5**
20 to 50	247.1	507.9	1,309.8	325.7	**2,390.5**
50 to 100	44.3	174.7	444.9	143.6	**807.5**
100 or more	70.4	143.0	376.1	211.4	**800.9**
Total	**$3,293.5**	**$7,116.4**	**$14,199.4**	**$2,685.0**	**$27,294.3**

Table II.8: Years of Supply That Exceeded Current Requirements as of September 30, 1997

Dollars in millions

Years of supply	Army	Navy	Air Force	DLA	Total
Less than 2	$827.2	$1,918.7	$6,119.4	$478.5	**$9,343.8**
2 to 5	1,195.7	2,268.5	3,137.5	497.1	**7,098.8**
5 to 10	703.2	1,256.3	1,487.3	443.4	**3,890.2**
10 to 20	199.0	650.9	1,063.1	373.4	**2,286.4**
20 to 50	138.7	406.6	1,080.2	282.7	**1,908.2**
50 to 100	27.7	145.9	570.6	91.2	**835.4**
100 or more	36.9	150.8	328.6	141.8	**658.1**
Total	**$3,128.4**	**$6,797.7**	**$13,786.7**	**$2,308.1**	**$26,020.9**

DOD Secondary Inventory Reports

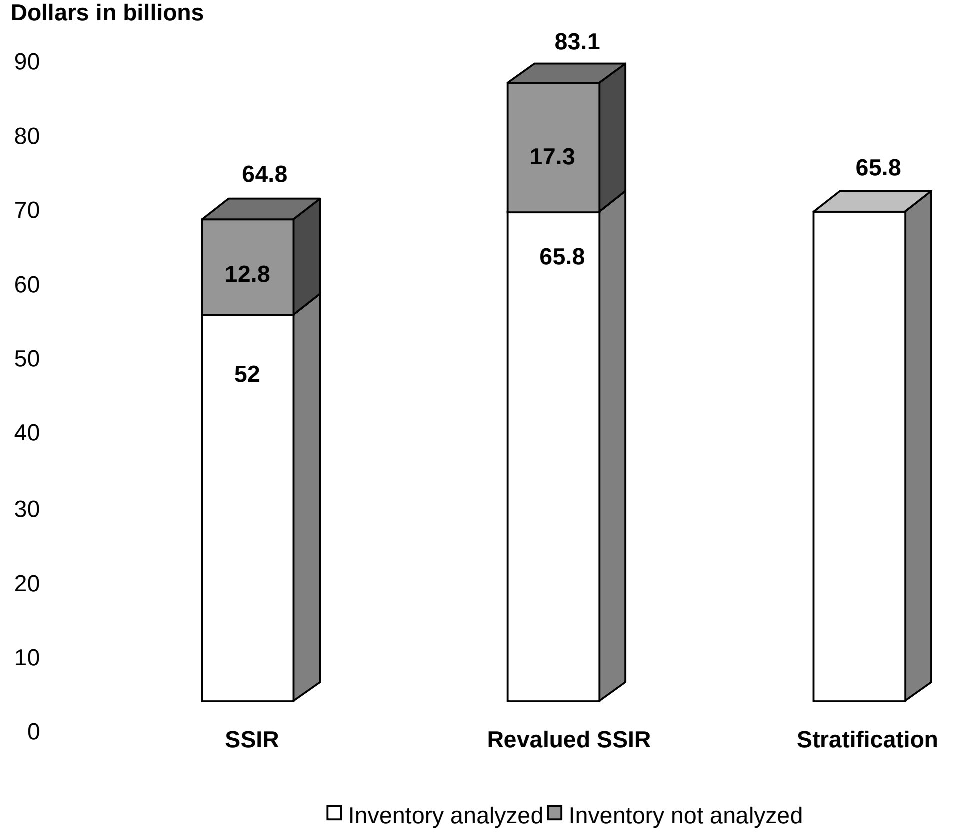
DOD uses the Supply System Inventory Report (SSIR) to monitor on-hand inventory and the budget stratification report to support its secondary item inventory budget and to perform reporting and funding reviews. Although both are developed from the same source records, the items are valued differently and not all items in the SSIR are stratified. The following sections show (1) the relationship of the value of items in the two reports and (2) the dollar value of DOD's inventory reduction goals and actual reductions as shown in the SSIR for September 30, 1996, and 1997.

Relationship of SSIR and Budget Stratification Reports

In the SSIR, DOD values serviceable inventory that is ready for issue at latest acquisition cost; repairable inventory that is not ready for issue at the latest acquisition cost less the expected repair cost; and inventory that can be disposed of at an annual salvage rate, which was 2.7 percent of latest acquisition cost in 1997. On the other hand, the value of items we reviewed in the stratification reports (also called Central Secondary Item Stratification Report), including those needing repair and potential disposal, was at latest acquisition cost.

The data that the services and DLA provided to us did not include all the items in the SSIR. (See additional detail in scope and methodology section.) Figure III.1 shows the comparison of the value of the inventory reported in the SSIR to the inventory reported in the stratification reports that we used for our analysis. We determined that the full latest acquisition cost of the $64.8 billion in the SSIR as of September 30, 1997, was about $83.1 billion. The services and DLA provided us budget stratification records for $65.8 billion of the $83.1 billion of items at latest acquisition cost.

Figure III.1: Relationship of the SSIR to the Budget Stratification Records Provided to Us as of September 30, 1997



Legend

Bar 1: SSIR inventory with latest acquisition cost values discounted for repair costs and potential excess. We analyzed about $52 billion of the $64.8 billion of inventory in the SSIR.

Bar 2: SSIR inventory valued at full latest acquisition cost was about $83.1 billion. We analyzed about $65.8 billion of the inventory reported in the SSIR at full value.

Bar 3: $65.8 billion of inventory in the budget stratification reports provided to us at full value.

DOD Inventory Reductions as Measured in SSIR

DOD uses the SSIR to measure the extent it meets its logistics goals for on-hand inventory. In its 1998 Logistics Strategic Plan, DOD set objectives across a broad range of areas to reduce the total cost of logistics. One of the guiding principles is that inventories and inventory costs at all echelons will be established at the minimal levels that are required to meet customer-driven support objectives. Specifically, it set a goal to reduce secondary inventory by $3 billion per year from September 1996 to September 1997. DOD set this goal in fiscal year 1995 constant dollars to remove the impact of inflation.

The SSIR showed that DOD exceeded its goal by reducing its secondary item inventory by $4.7 billion in fiscal year 1995 constant dollars ($3.7 billion in current-year dollars) from September 30, 1996, to September 30, 1997. DOD reported that (1) some inventory reductions were made using a number of better business practices, such as direct vendor deliveries; (2) demand for items decreased as the force structure was reduced; (3) inventory was held for shorter periods in retention categories before being transferred to disposal; and (4) less inventory was bought with smaller budgets. A DOD official also told us that much of the reductions prior to fiscal year 1996 were based on reduced demands from a smaller force structure. However, starting in fiscal year 1996, the reductions must be made by changing the criteria for buying or retaining stock or through reduced budgets.

About 60 percent of DOD's inventory value exceeds current requirements (requirements objective) using the latest acquisition cost. About 50 percent exceeds current requirements, assuming the reduced costs shown in the SSIR.

The following table shows the change in inventory value by service for September 1996 and September 1997 in fiscal year 1995 constant dollars.

Table III.1: DOD Reduces Secondary Inventory—Fiscal Year 1995 Constant Dollars

Values in billions

Component	Sept. 1996	Sept. 1997	Change
Army	$10.6	$10.1	($.5)
Navy	18.0	16.3	(1.7)
Air Force	28.8	26.3	(2.5)
DLA	9.4	9.5	0.1
Marine Corps	0.5	0.4	(0.1)
Total	**$67.3**	**$62.6**	**($4.7)**

According to the accomplishments section of the DOD 1998 Logistics Strategic Plan, the Navy reduced its inventory by $1.7 billion by decreasing safety levels and retention levels, transferring some consumable items to

DLA for management, implementing management improvements such as direct vendor deliveries, and taking other budget reductions. The Air Force made a significant reduction of $2.5 billion by changing its inventory retention criteria in calculating the amount of inventory it considers more economic to retain than surplus from 13 years to 8 years and by reducing war reserves and other changes. The other services did not make significant reductions. DLA officials said they made $1.2 billion in reductions that were offset by $1.3 billion in transfers from the military services.

The SSIR is published with values in current-year dollars. The following table, as shown in the September 30, 1997, report, shows a $3.7-billion reduction in current-year dollars.

Table III.2: DOD Reduces Secondary Inventory—Current-Year Dollars

Values in billions

Component	Sept. 1996	Sept. 1997	Change
Army	$10.8	$10.5	($.3)
Navy	18.3	16.8	(1.5)
Air Force	29.3	27.2	(2.1)
DLA	9.5	9.8	0.3
Marine Corps	0.5	0.4	(0.1)
Total	**$68.5**[a]	**$64.8**[a]	**($3.7)**

[a]Numbers do not add due to rounding.

Comments From the Department of Defense

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ACQUISITION AND TECHNOLOGY

(L/MDM)

MAR 12 1999

Mr. David R. Warren
Director, Defense Management Issues
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, GAO/NSIAD-99-60, "DEFENSE INVENTORY: Status of Inventory and Purchases and Their Relationship to Current Needs," dated February 10, 1999 (GAO Code 709307/OSD Case 1749). While there are no recommendations in the report, the Department provides the following comments to clarify its position.

The DoD disagrees with the GAO approach to measuring inventory against requirements. To talk simultaneously of the stratification reports used to determine purchase requirements and the Supply System Inventory Report (SSIR) used to report inventory on hand is not an accurate comparison. The stratification reports include both materiel on-hand and on-order, and result in estimates of both overages and shortages. The draft report refers to overages in stratification reports, but does not address the shortages in those same reports. Ignoring the shortages while citing the overages does not give a balanced picture of what the stratification reports actually show.

The SSIR is the official report of the Department on inventory—that is, materiel on hand that is held for sale—and should be the only source cited concerning inventory. The just-released SSIR for the end of Fiscal Year 1998 shows secondary item inventory at $61.2 billion in current year dollars—$3.6 billion better than our National Performance Review goal. This represents a 46.3% decrease between 1989 and 1998 (from $107 billion to $57.5 billion in constant 1995 dollars).

More than $43 billion of the $61.2 billion was included in the Approved Acquisition Objective, which included both authorized war reserve materiel and materiel estimated to be sold within two years. About $4.1 billion is in-transit stock, which, along with materiel in the Approved Acquisition Objective, meets the DoD definition of "active inventory". An additional $13.5 billion is materiel not anticipated to be used in the next two years, but for which a future use is anticipated. This portion of the inventory is categorized as economic retention, contingency retention, or potential security assistance stock. For this stock, the judgment has been made that either it is more economical to retain the inventory than to dispose of it and reprocure at a later time, or that it is required for readiness or security assistance to our allies. Finally, $446 million of the inventory is categorized as "potential reutilization/disposal stock," meaning it fits none of the categories above and is awaiting disposal action.

Although the Department disagrees with the draft report's approach to measuring inventory against requirements, there are areas where DoD and GAO can collaborate to ensure future improvements. I recommend we meet soon to discuss those opportunities for future cooperation.

Sincerely,

Roger W. Kallock
Deputy Under Secretary
of Defense (Logistics)

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Related GAO Products

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

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

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Navy Inventory Management: Improvements Needed to Prevent Excess Purchases (GAO/NSIAD-98-86, Apr. 30, 1998).

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

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