

Testimony



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I am pleased to be here today to discuss the military services' and the Defense Logistics Agency's (DLA) management of their supply systems. We discussed some problems associated with these systems at a hearing before this Committee in 1987. Although the Department of Defense (DOD) has recently undertaken important initiatives aimed at correcting the problems, I am sorry to report that we do not see a great deal of progress. Indeed, since we last testified, problems have increased to the point where we have identified the defense supply system as 1 of 14 federal programs that are highly vulnerable to fraud, mismanagement, and abuse. You may recall, for example, that we expressed concern in 1987 that \$30 billion of DOD's inventory consisted of items for which there was no current requirement. Now that figure has grown to \$34 billion.

Because of the limited progress, we will place increased emphasis over the next couple of years on solving the long-standing problems in the defense supply system. Even though we do not have all the answers, we believe our efforts to date show that the way for DOD to correct the problems is through top management leadership, commitment, and a specific agenda for improvement. I am encouraged by the logistics-related defense management initiatives, and I have recently met with Deputy Secretary Atwood and we agreed to keep each other informed as the initiatives proceed.

With this overview, I will now turn to a discussion of some specific problems we have identified in the work you requested on inventory growth, inventory management practices, and what we see as the underlying management problems in the defense supply system.

SIGNIFICANT INVENTORY GROWTH IN SECONDARY ITEMS SINCE 1980

The total value of DOD's inventory increased by \$60 billion from 1980 to September 1988, for a new total of \$103 billion, as shown

in the first chart. DOD stores supplies for future wars and 24 months or more of peacetime operations. These are referred to as required stocks. Unrequired stocks are those supplies which are above required needs. We found that both required and unrequired stocks are being held for long term use. Over 90 percent of DOD's increase in inventory occurred in the three areas that are the highest bars on the second chart: (1) aircraft components and parts, (2) ship and submarine parts, and (3) construction, industrial, and general supplies. The third chart shows that, as of September 30, 1988, \$34 billion of DOD's inventory was in unrequired items, a 233-percent increase since 1980. In addition to the costs of this inventory, there are costs associated with holding it, and much of it is also likely to become obsolete, lost, or stolen.

Although we found no dominant reason that caused inventory growth, we believe the growth results from a tendency to stock far into the future. This is fostered by a management philosophy that rewards obligating funds and filling orders. There is no corresponding emphasis on economy or efficiency. I would like to present some examples of this from our recent work.

- -- The Air Force's required inventory to satisfy the need for aircraft parts beyond the current year has grown more than any other category. It grew from \$1.3 billion in 1980 to \$6.6 billion in 1988 and is now one-third of the Air Force's aircraft parts requirement.
- procedures which may reduce the visibility of unrequired stock, and thereby mask problems. This would allow them to reduce their terminations of orders of unneeded items and accumulate more long term stock, that it can classify as required.

- -- Because Navy records supporting past decisions were unavailable and/or item managers were not sufficiently familiar with items, neither GAO nor the Navy were able to determine why 54 of 100 sample items had unrequired stock. For example, the Navy had 53 reactor assemblies for a sonar system. Fifty one, valued at about \$160,000, were unrequired. Neither the item manager nor the branch chief had records or knowledge of why the items were in the unrequired category.
- -- Eleven of the 100 items in the Navy sample were not only unrequired, but could have been eliminated from the inventory under Defense Inactive Item Program criteria. Another 57 items had little potential for future use. The 57 items either had no users, no demands in the past 2 years, no forecast demands, or were being replaced. The Navy is spending millions of dollars annually to store and manage many items that may never be used. We believe this is partly due to overly restrictive criteria that must be met before an item manager can consider eliminating an item from the inventory. In this case DOD and the Navy agree and are adjusting the criteria.
- -- We noted cases where the requisition process was not stopped even though managers were notified before a contract was let that the items were not needed. For example, as of September 30, 1988, DLA reported over \$471 million of excess material on order at five of its supply centers. Management procedures exist for identifying and cancelling these orders, but actions were often not taken to cancel them. Managers frequently believed there may be some use for them in the future.
- -- At one of DLA's centers, the Construction Supply Center, contracts falling below \$25,000 were not even considered for termination due to excess orders. This excluded 98.5 percent of the center's contracts.

Attachments to my statement contain additional examples of these types of problems. These attachments are summaries of the three reports that are being released today and of work we have underway at your request. I would like to add that the problem may be greater than indicated by the reported \$34 billion of unrequired inventory. There are indications from our work that portions of the \$69 billion of inventory shown in the fourth chart that DOD identifies as required may be based on faulty requirements. We have found numerous cases where DOD added or is planning to add unnecessary requirements. For example, the Air Force is considering adding another year of requirements to its requirements computations to reduce the number of orders it would have to cancel, with the added effect of reducing the amount of inventory reported as unrequired. As you asked, we are doing more work to analyze DOD's required inventories.

CORRECTING THE PROBLEMS

Now let me turn to what we see as some necessary steps to correcting the problems I have been discussing.

Fundamental to this process is strong leadership and a change in management philosophy. A key element is a management agenda that places a greater value on economy and efficiency than exists today. The agenda should include a number of items.

- -- A commitment is needed to update the supply system and take advantage of management innovations and technologies that have taken place over the last 10 years.
- -- Accurate and useful management information should be available to managers. Inaccurate inventory records, coupled with poor physical security, make DOD's inventories highly vulnerable to theft, diversions, and other abuses. The Comptroller

General's recent testimony before this Committee on problems in DOD financial management systems is one illustration of the need for improvement.

- inventory. Our inventory growth work showed that buying large quantities of future stock is very risky. However, changing this propensity to buy large amounts of inventory will require a change in management philosophy. DOD's supply system responds to the operational imperative to fill orders within a specific time frame and to obligate the funds allocated to the supply mission. However, a corresponding emphasis on reducing costs and promoting economy and efficiency is lacking. DOD needs to change its mind-set and introduce a new culture into the way it manages its supply system. This means both requiring and rewarding efficient management practices while satisfying customer demands.
- -- Annual goals must be established for reducing existing inventory to minimize the system's overall vulnerability to fraud, waste, and abuse. The sheer size of the inventory complicates the management of an already cumbersome system.

These are a few of our broad ideas and require the commitment and involvement of senior defense managers and executives. The specific problem areas we have identified in DOD's supply system cover a wide range of issues, including inventory growth, inaccurate records, physical security, outdated computer systems, inadequate control over material and equipment furnished to government contractors, overflowing warehouses, and unnecessary levels of inventory. I must reiterate that DOD and services have recently undertaken initiatives that appear to be steps in the right direction.

We will be issuing a report in the next couple of weeks to the Secretary of Defense which summarizes the results of our large body of work on defense inventory management. We hope it will help DOD plan its approach to reforming the supply system. We believe it will complement the Defense Management Report initiatives and, as I said at the outset, we will be working with DOD as implementation progresses. I will be happy to answer any questions you might have.

GROWTH IN UNREQUIRED AIR FORCE AND NAVY AIRCRAFT PARTS

Principal items include such items as aircraft and ships, and secondary items include such minor end items as compressors and turbines and repair parts. DOD categorizes its secondary inventories into six classifications. Two represent current requirements, that is, required stocks held to meet war reserve and peacetime operating requirements over a 24-month period. The remaining four represent unrequired inventory—stocks that are not needed to meet current requirements but are held, in most cases, to satisfy potential future requirements and possible contingencies.

DOD's inventory of aircraft parts grew from \$17.3 billion in 1980 to \$53.6 billion in 1988. Some the increase was due to unrequired stock. We identified (1) the current and past causes for growth in unrequired stock, (2) DOD actions that could minimize growth in unrequired stock in the future, and (3) growth in required stock inventories that are not needed for wartime or current-year operations.

The inventory of unrequired aircraft parts has increased at a faster rate than required stocks. The Air Force's required stock grew 179 percent and the unrequired stock grew 295 percent, from \$2 billion in March 1980 to \$7.9 billion in 1988. The Navy's required stock grew 151 percent, and the unrequired stock grew about 240 percent, from \$1.5 billion in 1980 to \$5.1 billion in 1987.

Among the major causes of unrequired inventory growth for aircraft items, we found procurement management practices contributed to growth in unrequired stock. Moreover, some DOD and Air Force initiatives to improve their reports could reduce visibility over unrequired stock and, consequently, mask the need for management attention. Furthermore, required stocks held to meet other than

current-year requirements have grown significantly and are more likely to become obsolete or experience declining demand before they are needed.

Direct Causes for Unrequired Stock

Our evaluation of the growth in the unrequired inventories of 51 judgmentally selected secondary aircraft items showed that the most common causes for the growth were overestimated use rates and modifications of aircraft and equipment. Other contributing factors included faster than expected phase-out of older aircraft and decreasing war reserve and safety level requirements. Some of these factors have been the subject of prior reports by GAO and DOD.

Procurement Practices Contribute to Unrequired Stock

We examined 36 items which had recent contracts for replenishment buys where on-order quantities were later identified for potential termination because they were excess to requirements. Air Force guidance tended to discourage terminations. Also, the lack of an effective process to identify and act on potential terminations at one of the Navy's inventory control points also impeded terminations.

For five items the Air Force procured and received the materials sooner than required. This practice results in premature inventory investment and unnecessary holding costs and increased risks that material might become obsolete before it is used.

The Navy procured three consumable items in excess of requirements using DOD's technique for determining the purchase quantity that will result in the lowest total cost. We have previously

recommended that the Navy stop its practice of buying more than that quantity without specific justification because it contributes to the Navy's unrequired stock. DOD, however, disagreed.

Reporting Changes Impede Efforts to Reduce Unrequired Stock

Some Air Force and DOD inventory reporting initiatives may aggravate problems with unrequired stocks. The Air Force temporarily authorized adding items to stock requirements and therefore on-order material that should have been reported as unneeded was not reported. It is also considering adding an additional year of requirements to its system for determining requirements. Similarly, DOD proposed adding a year of requirements to its reporting system, and also requirements for purchases to obtain discounts or ensure parts for the life of a system. According to DOD and Air Force representatives, the actions are intended to recognize that obtaining unrequired assets can be in the government's best interest.

Identifying the reasons for buying unrequired stocks can help prevent unnecessary growth. However, the above changes to reporting criteria would mask the extent of growth. They could also reduce the quantities of unneeded orders eligible for termination.

Increases in Air Force Required Stock Could Cause More Unrequired Stock

The growth in the Air Force's required stock held to meet peacetime requirements beyond the current year may result in continued high levels of unrequired stocks. High levels increase the risk of reduced demand or obsolescence because requirements may decline when end items are phased out or are modified. The inventory

available to satisfy requirements beyond the current year has grown more than other requirements—from \$1.3 billion in 1980 to \$6.6 billion in 1988. One-third of the Air Force's required inventory is excess to wartime or current year operations.

Many of the problems contributing to unrequired inventories have also contributed to inventory growth in required stocks beyond current-year needs. Such items could become unrequired inventory.

GROWTH IN UNREQUIRED SHIP AND SUBMARINE PARTS

The Navy's inventory of ship and submarine parts increased by 249 percent, from about \$2.7 billion in 1980 to about \$9.3 billion in 1988. This attachment identifies (1) the major causes for unrequired inventory, (2) opportunities to minimize growth in unrequired stock, and (3) inventory with little potential for future use.

Under the Defense Inactive Item Program, the Navy reviews its inventory once a year to identify inactive items for possible elimination from the inventory. Items are identified as inactive when they have (1) been on the master data file for 7 years, (2) had no demand in the last 2 years, (3) no current requirement, and (4) no current application.

In 1988, 40 percent (\$3.7 billion) of the Navy's inventory of ship and submarine parts was unrequired. We sampled the 183,000 items that include such stocks and found that the major causes for the unrequired inventory were requirements that did not materialize, deactivation of older ships, and replacement and phasing out of equipment. However, we could not determine why unrequired inventory exists for over half the sample items, since (1) documents justifying past procurement decisions are not available, (2) the Navy has no record of events affecting the demand for these items, and (3) sometimes the managers are not familiar with the procurement or demand history of their items.

Unrequired inventory can be minimized by ensuring that items being replaced or phased out are not purchased or repaired unnecessarily.

We estimate that 109,000 ship and submarine parts which have unrequired inventory have little potential for future use because

the items have no users, past demands, or forecast demands. These parts meet some, but not all four of the DOD's criteria for being considered for elimination from the inventory. We believe the requirement to meet all four criteria is too restrictive.

We also estimate that another 31,000 ship and submarine items for which the Navy has unrequired stocks meet current Defense Inactive Item Program criteria for possible elimination from the inventory, but few items are being considered. The Navy's last inactive item review eliminated about 1,500 items and a special project eliminated another 3,200 items.

We estimate that the Navy is spending \$24 million annually to store and manage these 140,000 items which may be of no use.

REASONS FOR UNREQUIRED STOCK

We identified the causes of unrequired inventory for 45 of 100 randomly chosen items. We could not determine why an additional 54 sample items had unrequired inventory (one item was determined not to have unrequired inventory). Either records were not available or item managers were not sufficiently familiar with the 54 items to explain why the items had unrequired inventory.

Based on its sample, we estimate that about \$900 million of the unrequired inventory resulted from requirements that changed. Reasons for the changes included planned program requirements and demands that changed or did not materialize. We also estimate that about \$1.7 billion of unrequired inventory resulted from the Navy's fleet modernization efforts, which included replacing and phasing out equipment and deactivating ships.

We estimate that the Navy would not be able to explain why about \$1.2 billion worth of the inventory was unrequired. The Navy does

not require item managers to keep records justifying purchase decisions beyond when the material is received. In addition, many item managers have been responsible for their items for only a short period of time. As a result, information is not available to identify the basis for past purchases or to identify events causing items to have unrequired inventory.

We believe that the lack of information can hinder item managers in that they are not aware of why items were purchased, why the items have unrequired inventory, or even why the items are being retained. Having such information could help item managers to recognize causal factors and thus minimize the purchase of items that could become unneeded, and would help them to decide which items should be retained.

MINIMIZING UNREQUIRED INVENTORY

We found that the Navy does not systematically notify inventory control points that items are being replaced or phased out. Even when notified, inventory records often contained no information to alert the responsible item managers that items are being replaced or phased out. We believe that procedures to disseminate and record data on items being phased out are necessary to keep unrequired inventory to a minimum.

The purchase of one sample item was finalized after the inventory control point was notified that the item was obsolete. We believe that terminating that contract effort before the contract was finalized would have avoided acquiring unneeded inventory.

INACTIVE ITEMS

In 1988, the Navy only eliminated about 1,500 items under the

Defense Inactive Item Program and another 3,200 under a special project.

Our sample included 57 items that did not meet all four DOD criteria for being considered inactive for elimination, but had one or more characteristics that indicate little potential for future use. For example, 15 items had no users, 45 items had no demands in the past 2 years, and 33 items had no forecast demands. We estimate that of the 183,000-item population, about 109,000 items, valued at \$2.3 billion could be evaluated for elimination if items did not have to meet all four criteria to be considered inactive.

We found that 11 sample items met all four DOD criteria for being classified inactive and should be considered for elimination from the inventory. We estimate that an additional 31,000 items should be considered under existing criteria.

Based on DOD cost estimates, we estimate that it costs the Navy \$24 million to store and manage items that meet criteria to be considered for elimination and that could be considered if fewer criteria were required.

DLA SUPPLY MANAGEMENT ISSUES

Our work at DLA addressed issues which can contribute to inventory growth in excess of requirements. We have issued our report on excess material on order, and our work is almost complete on the Diminishing Manufacturing Sources Program, customer returns, procurement leadtimes, and items for which status is unknown.

DLA EXCESS ON ORDER

To avoid buying unneeded supplies, DLA's computer system identifies items for possible termination that are on order but, based on current information, may no longer be needed. When the computer identifies items that are potentially excess, item managers are to review the computer data and, if appropriate, direct the contracting officer to terminate the contract if no costs are involved. If termination costs are involved, the contracting officer is to obtain the costs from the contractor. Then item managers are to evaluate the costs and determine if terminating the contract or reducing the order is in the government's best interest.

Item Managers Make Few Termination Recommendations

Based on our random sample at three supply centers, we estimate that from a universe of \$683.1 million, the value of excess materiel on order for contracts over \$5,000 was between \$204 million and \$449.1 million. For these contracts, item managers requested terminations valued at only \$49.9 million. We found that these supply centers purposely avoided making some additional terminations. For example, if the Construction Supply Center had adopted a \$5,000-threshold similar to other supply centers, the

Center would have considered an additional 879 contracts valued at \$8.5 million for termination.

We also found instances when item managers questioned requirements but recomputed requirements using incorrect data. In these cases, supervisors either did not review or change the item manager's decision. These cases resulted in a 1-year to 33-year oversupply of such items as solenoid valves, hospital gowns, women's dress shirts, and utility trousers. Item managers also simply increased requirements to stop the computer from reporting items as being excess and on order. For example, the item manager increased requirements for fire retardant shirts to avoid computer identification of the item as excess. Consequently, the supply center purchased a 7-year supply of shirts valued at \$8.7 million.

Contracts Not Terminated When Some Costs are Involved

During the last half of fiscal year 1988, the six supply centers reported terminated contracts valued at \$65.8 million, even though item managers requested that \$253 million in excess materiel be terminated. The low termination rate is attributed in large part to the practice of not terminating contracts when costs are involved. Contracting officers are not providing information on estimated termination cost to item managers. For example, in May 1988, the aircraft yoke subassembly item manager recommended to the contracting officer that 586 subassemblies valued at \$251,980 be The contracting officer took no action on this terminated. recommendation because (1) the contract administrator was negotiating a delivery extension and (2) the contractor would not accept a no-cost termination. However, another option existed. The contract may have been terminated without cost to the U.S. government because the contractor could not meet the delivery terms of the contract. The unneeded subassemblies represented almost a 10-year supply.

Neither DOD nor DLA has developed adequate quidance for item managers to follow when evaluating the economics of contract terminations. Item managers need to consider such factors as amount of termination cost, the degree unneeded items exceed actual requirements, the cost of the items, and the storage cost for accepting unneeded items. Until item managers consider these factors in doing cost benefit analysis, supply centers will continue to purchase items not in the government's best interest.

DIMINISHING MANUFACTURING SOURCES AND MATERIEL SHORTAGES PROGRAM.

DOD's program objectives are to (1) minimize the impact of diminishing sources parts, (2) improve operational readiness by identifying and implementing the most effective solutions to diminishing sources problems, (3) ensure such parts are not designed into new systems, and (4) develop procedures to ensure an integrated approach to improve responsiveness to diminishing sources situations. Each DOD component was to set up focal points to implement the DOD policy.

DOD's solutions to minimize the impact of parts non-availability include encouraging the existing source to continue production, finding another source, substituting a part, redesigning or replacing the item on which the part is used, and making life-of-type buys (one-time buys for the total future requirement of parts only after all cost-effective and prudent alternatives have been exhausted).

When a life-of-type buy is the only alternative available to a diminishing supply situation, DLA requests the services to provide future requirements for the part. The services do not always

provide adequate information. Consequently, DLA buys based on past demands which does not ensure proper quantities are bought.

DLA used various ways to calculate life-of-type buy quantities. Some of these methods overstated the needs and resulted in too much stock being bought. From a random sample, we found that for 122 buys the Defense Electronics Supply Center made, it had an average of about a 58-year supply on hand. Much of this stock is potentially excess and may never be used. Attachment IV shows years of stock on hand that is managed by the center.

Procurement Leadtimes

Overstated leadtimes can cause increased investment for larger inventories, greater chances of buying excess materiel, and increased termination costs if requirements change. Understated leadtimes can cause shortages of needed supplies, which could affect the operational readiness of weapon systems or their components.

As of September 30, 1989, the average procurement leadtimes for DLA supply centers ranged from 4 to 17 months. This required DLA to maintain on-hand and on-order inventory levels valued at about \$5.4 billion.

Our preliminary results indicate that DLA has not implemented controls adequate to manage and minimize procurement leadtimes as directed by the DOD. Our sample items at the two supply centers had leadtimes that were either overstated or understated, thus increasing the risk of buying too much or too little stock.

Even though DLA has taken measures to reduce the time it takes to award contracts, it has not tried to reduce production and delivery times by obtaining the best delivery dates from contractors.

Production and delivery times account for 60 percent of total procurement leadtime.

Materiel Returns

Customer returns to DLA, excluding fuel and subsistence items, totaled \$3.1 billion for fiscal years 1981 through 1988 and averaged about 8.5 percent of its sales. For the same period, DLA's total inventory increased \$5.7 billion, from \$3.1 billion to \$8.8 billion, or about 184 percent. Stocks excess to its current operations and war reserve needs more than tripled from \$1 billion to \$3.5 billion. However, there is no way to determine how much materiel returns contributed to DLA's inventory growth and excess materiel because of the high number of transactions involved and the inability of the inventory and accounting systems to provide such data.

DLA and the services have implemented and have underway numerous initiatives to avoid excess and reduce returns. The initiatives are designed to reduce not only the returns but also excess materiel. In addition, the services have programs to improve their internal redistribution procedures for excess materiel.

We do not plan to make recommendations on material returns, because (1) the services' corrective actions are too new to evaluate their impact on returns to DLA and (2) the September 1989 DOD Inspector General's report contains recommendations, which if implemented, would require a DOD returns program managed by the wholesale inventory managers, which includes DLA.

Stock of Unknown Status

Stocks that cannot be issued because their condition is unknown do not contribute to military capability but still result in holding

costs. Also, DLA and the military services may purchase new items when items on hand could have filled their needs. Consequently, DOD has set deadlines for resolving the status of such stock. Resolution consists of determining the condition of the items and deciding on their disposition, such as placing them in inventories of usable items or disposing of them.

Our preliminary tests indicate that many items remain in an unknown status long past mandated deadlines. Inventory policies and procedures may not be fully adequate to ensure timely resolution of these suspensions, nor to ensure the use of such items once their status has been resolved. For example, defense policies and their implementation instructions do not address organizational responsibilities, criteria for assigning status codes, or priority for reduction of such stock. We did not find procedures to ensure following up on stock that has been suspended for a long time. Instead, each activity is directed to develop its own guidance for such matters. At the activities we visited, preliminary indications were that local guidance was sometimes weak, and in some cases none had been prepared.

We will report our final results to you when our work is complete.

STOCK MANAGED BY THE DEFENSE ELECTRONICS SUPPLY CENTER

AS OF JUNE 25, 1988

Years of stock on hand	Number of parts	Percent of total	Total assets	Percent of total
0	662	9.51	\$ 107,692.94	0.04
.1 TO 1.0	373	5.36	2,061,399.18	0.68
1.1 TO 2.0	310	4.45	2,047,695.48	0.68
2.1 TO 3.0	330	4.74	2,728,920.37	0.90
3.1 TO 4.0	243	3.49	2,336,119.60	0.77
4.1 TO 5.0	244	3.50	4,590,229.03	1.52
5.1 TO 7.5	512	7.35	24,369,325.25	8.05
7.6 TO 10.0	468	6.72	31,558,508.57	10.42
10.1 TO 25.0	1,525	21.90	102,229,876.30	33.76
25.1 TO 50.0	913	13.11	55,753,763.84	18.41
50.1 TO 100.0	625	8.97	34,826,032.09	11.50
100.1 TO 200.0	374	5.37	15,275,239.34	5.04
200.1 TO 300.0	139	2.00	5,386,252.34	1.78
300.1 TO 700.0	157	2.25	8,662,441.22	2.86
700.1 TO 900.0	27	0.39	2,979,450.14	0.98
900.1 TO 1000	10	0.14	411,475.43	0.14
1000.1 TO 1500	24	0.34	1,674,819.25	0.55
1500.1 TO 2000	11	0.16	1,499,132.54	0.50
2000.1 TO 3000	12	0.17	1,479,411.26	0.49
3000.1 TO 4000	2	0.03	136,386.05	0.05
4000.1 TO 5000	0	0.00	0	0.00
5000.1 TO 7500	2	0.03	338,635.87	0.11
OVER 7500	<u>1</u> a	0.01	2,381,943.28	0.79
TOTAL	6,964	100.00	\$302,834,749.37	100.00

Source: DMSMS stock status report dated June 25, 1988.

^aThis part had about a 22-year supply on hand. The Center's report was erroneous because the computer data file did not reflect actual demand data for the part.