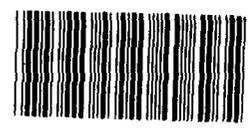


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Needed Improvements in the Army's Inventory  
Management System

Statement of  
Richard Davis, Director, Army Issues  
National Security and International  
Affairs Division

Before the  
Subcommittee on Readiness  
Committee on Armed Services  
House of Representatives



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Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to be here today to discuss needed improvements to the Army's inventory management system. This subject is likely to take on added importance in the years ahead as the services are faced with decreased budgets requiring that they do more with less.

The Army's inventory management system is large and complex, encompassing millions of items valued at several billion dollars, hundreds of supply activities, and thousands of people. Over the past several years, the value of the inventories has grown at a significant rate. At the same time, that portion of the inventory for which there are no current demands has also grown. This matter is further complicated by the fact that there is no single supply system. Instead, there are several systems that are interrelated but often operate quite independently of each other.

The focus of my testimony today will be to highlight inventory management issues that we believe need to be resolved so that the Army can more effectively carry out its inventory management responsibilities. More specifically, I will briefly discuss

- the structure of the Army's supply system and the inventory growth that has occurred over the past several years,
- the problems that arise as a result of having a supply system made up of segments that operate independently,
- the causes and extent of these problems, and
- the initiatives that the Army has undertaken and planned to address them.

Finally, I will summarize what we believe needs to be done to establish a more effective and efficient supply system.

## DESCRIPTION OF THE ARMY'S SUPPLY SYSTEM

The Army's supply system is divided into two major levels-- wholesale and retail. The wholesale level consists of six National Inventory Control Points (NICP), which are responsible for computing wholesale level requirements; buying the items; storing the items at depots; and issuing the items to Army posts, camps, and stations. The inventory that the wholesale system is responsible for has increased from about \$6.1 billion in fiscal year 1983 to over \$12.0 billion in fiscal year 1988. These figures only include secondary spare and repair parts<sup>1</sup> bought with the Army's procurement appropriations. They do not include items funded through the Army stock fund.

The retail supply level, often referred to as the "installation supply level," is responsible for computing requirements, requisitioning items from the wholesale system, storing the items, and issuing the items to user units. The value of the retail level inventory is difficult to determine because no central records are kept of the inventories at the hundreds of installations. However, the value of the retail level inventory is estimated to be several billions of dollars.

When an item is issued from the wholesale level depot to an installation, it enters the retail level system. At that time, ownership, accountability, and control over the item pass from the wholesale level inventory manager to the retail level inventory manager, and the wholesale level manager generally loses visibility of it. As a result, wholesale level managers are not in a position to identify excesses at the retail level and redistribute items to locations where a need exists.

The matter is further complicated by the fact that, even within the retail level, visibility does not extend from one level to another.

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<sup>1</sup>Secondary items consist of piece parts, assemblies, and subassemblies as opposed to end items such as tanks, trucks, etc. Examples of secondary items include engines, transmissions, differentials, etc.

For example, items at the direct support units (DSU), which are division-level units, are not visible to the Director of Logistics (DOL) units, which are corps-level units and vice versa. The only linkage that exists between the two levels in the retail system is the link established when a DSU declares an item excess and physically moves it to the DOL level. In addition, with a couple of exceptions, the only linkage that exists between the DOL level and the wholesale system is the link established when the DOL declares an item excess and reports it to the wholesale level inventory manager. However, item managers at all retail levels are generally reluctant to report items as excess.

PROBLEMS THAT ARISE IN NOT HAVING  
A SINGLE SUPPLY SYSTEM

The problems that arise as a result of the lack of linkage among various supply levels are revealed in the accumulation of excess items at units; shortages of the same items at other units; and procurement of the same items at the NICPs. This lack of communication can affect readiness. Additionally, inventory for which there are no current demands accumulates at the wholesale level depots.<sup>2</sup> Our recently completed and ongoing work has repeatedly demonstrated these conditions:

- In 1987, we reported that excesses at the DOL level had increased from \$85 million in 1984 to \$155 million in 1986, an increase of about 83 percent. Our analysis of these excesses at selected installations showed that many of them were not being reported to the NICPs for redistribution to other installations where there were corresponding shortages. At the same time, the NICPs either had procured or were in the process of procuring these same items to fill shortages at the installation level.

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<sup>2</sup>Includes items being retained for contingency retention, economic retention, numeric retention, and potential excess. By definition, these are items for which there is no forecasted demand.

-- In one of our ongoing assignments, which focuses on excesses at the DSU level, we are finding that the same types of problems are occurring at this level but at a greater magnitude. Preliminary information, based on our work at one installation, showed that the DSUs for two collocated divisions had excess items valued at about \$40 million.<sup>3</sup> Excess items at one division's DSU could have been redistributed to fill shortages at the other division's DSUs. However, because there is no linkage between the two divisions' supply systems, there was no systematic means to redistribute the excess items from one division to the other.

Specifically, of the 37 excess items we selected, we determined that in 13 cases, there was a need for the same items in the other division. In one case, a division had an excess quantity of 6 of an item on-hand (with a unit price of \$89,215), while the other division was awaiting receipt of 14 of the same item from the NICP. If redistribution had been practiced, the six excess items could have been transferred to the other division, and the due-in quantity could have been reduced by the same number.

Also, we determined that, of 66 excess items we selected on a judgmental basis at the two divisions, 46 of the items, valued at \$4.5 million, were being procured by the NICP. When the NICP is not aware of excesses that can be redistributed to other locations having a need for the items, readiness can suffer. On the basis of our sample of excess items, we determined that 11 of the 46 items being procured by the NICP had been assigned high priority by retail level installations. This is an indication that equipment was not mission-capable because it lacked necessary parts. To illustrate, two M-1 tanks in Germany

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<sup>3</sup>Only includes items where the amount of the excess was at least twice the requirements' objective. In addition, there were about \$11 million of items where the on-hand quantity was greater than the requirements' objectives but less than two times the requirements' objective.

were not mission-capable because they lacked a part (with a unit price \$1,169) even though that part was considered excess to the needs of the division where we were conducting our review.

- In another of our ongoing assignments, which focuses on the wholesale level, we are finding that a large percentage of the inventory is comprised of items for which there are no forecasted demands. Between fiscal years 1983 and 1988, the inventory value of Army procurement appropriation items maintained by the six NICPs grew from \$6.1 billion to over \$12.0 billion. During the same period, Army reports indicated that the inventory value of items for which there were no forecasted demands increased from \$.98 billion to \$2.6 billion.

#### CAUSES OF EXCESS AND NO DEMAND ITEMS

There is no single cause which results in excess items and items for which there are no current demand. Likewise, there is no single solution. The problem has many causes, which collectively generate vast amounts of items in these categories. Past Army studies have identified a host of problems throughout the supply system. Some of the more frequently cited problems include

- the provisioning of items based on overestimation of part failure rates;
- configuration changes that result in already purchased items becoming excess, while outdated items continue to be purchased;
- requisition errors that result in the release of overstated quantities of material that are later returned to the supply system;
- the retention of items intended for repair programs that are reduced or canceled;
- turbulence in the authorized stock lists caused by changes in the criteria for adding and retaining stock and by manual

intervention that requires units to stock items not based on demand; and

-- field level reparable items not being repaired in the field. Instead, these items are being processed as excess while new ones are being requisitioned through the supply system.

We have identified many of these types of problems during completed and ongoing assignments. We have also found several other problems that, we believe, contribute to the problem of excess items and items for which there are no current demand.

In 1984, the Department of Defense instituted a moratorium on the disposal of excess items. This action was taken in response to the finding that usable assets were being disposed of while new items were being procured. The Army's response to the moratorium was to adopt a policy that prohibited the disposal of any item that related to a system still in the active inventory. One method used to ensure that these types of items were not disposed of was to expand its use of the Automatic Return Item (ARI) system. The ARI system was designed to expedite the return of critically needed items from field locations to depots for repair and then to the wholesale supply system. Many field units took this opportunity to "clean house" by returning items to the depot level that were intended to be repaired at the retail level and returned to the retail level supply system. In 1984, just prior to the moratorium, the ARI list contained about 4,500 items. By the end of 1985, the list had grown to over 56,000 items. We estimate that about \$1.3 billion of these types of items were returned to the wholesale system. Because these items were not depot level reparable items, the wholesale system did not include a repair program for them. Consequently, the items accumulated at the depots in an unserviceable condition.

Another cause of excess inventory is related to the Army's policy of buying items before they are needed. These purchases are referred to as "premature buys." Our work at two NICPs showed that the Army had purchased about \$93 million of spare and repair

parts before they were needed. The Army's requirement system provides that a procurement will be initiated when the on-hand quantity reaches the reorder point. However, in some cases, the Army had initiated procurement action as early as 16 months before the asset position reached the reorder point. Buying items before they are needed is risky. If demand for the items decreases or if modifications to the items occur, the chances are increased that the items will exceed need. In fact, this is what often happened, and many of these items are now in excess. The Army, in August 1988, advised us that it has discontinued the practice of buying items ahead of time.

Another principal cause of excesses, particularly at the installation level, has to do with the reluctance of some field commanders to turn in excess items once they have them in their possession. They seem to believe that they might need the items someday. While it is not possible to quantify the effect of this attitude on the excess problem, it was readily apparent during our discussions with command officials at the installations we visited. For example, division officials at one location told us that their reason for retaining excess items was that the unit had to be ready to deploy at a moment's notice and they might need the items. The same division went so far as to issue policy guidance that authorized its units to retain a 1-year stock of items even though these items would not qualify to be stocked based on demand history. This practice is contrary to Army policy, which prohibits units from retaining stock not otherwise authorized.

At other locations, the same attitude was prevalent but expressed in different terms. For example, command officials told us that their units had paid for the items and that if they turned them in for redistribution, they might not receive credit, and the unit might have to repurchase the same items at a later date.

In contrast, other commanders have taken the position that excess items are "excess baggage" that will be hindrances if the unit has to deploy.

What is evident in many situations is that installation officials have a great deal of latitude in determining whether to declare an item excess and turn it in for redistribution. This latitude is made possible because managers of the wholesale system do not have visibility and control over items at the retail level. If they did, they would know when an item was not needed and could redistribute it to other locations where it was needed. In the absence of such visibility and control, the wholesale system is largely at the mercy of the possessing command in obtaining the excess items for redistribution.

#### ARMY INITIATIVES TO ADDRESS THE PROBLEMS

The Army is well aware of these problems and has ongoing or planned initiatives to address many of them. The Army and we recognize that it is not possible to completely eliminate the problem of excess and no demand items. Therefore, for these type items, the objective should be to use them in the most beneficial manner. However, to the extent that the causes of excess and no demand items can be eliminated, the supply system will become more efficient and effective, and finite resources can be conserved and devoted to other priorities.

One of the Army's ongoing initiatives is to develop a system that will provide corps-level visibility of inventory items maintained by units in the corps. This system will allow the corps to identify excess items in their units and redistribute them among other division units. The system, referred to as the "Standard Army Retail Supply System" (SARSS), is expected to be fully implemented in the mid-1990s. In the interim, the Army is pilot-testing another asset visibility system referred to as "The Objective Supply System" (TOSS), which includes some features similar to those of SARSS. Another asset visibility system, which has been developed by V Corps in Europe, is the "Corps Asset Visibility" (CAV) system. It also provides corps-level visibility of inventory in the corps' divisions.

While these systems constitute improvements over what previously existed, they do have limitations. For example, asset visibility in all of these systems is restricted to the corps level and does not provide redistribution capability among corps. Also, the systems do not provide total asset visibility to the wholesale system. The wholesale system will only have visibility of excesses that the corps decide to declare. And, as previously discussed, field commanders are generally reluctant to declare items excess. Consequently, managers of the wholesale system will not be totally aware of all excesses and will not be able to take these items into consideration in making procurement decisions.

Another initiative the Army has taken to improve its supply system is to use European Redistribution Facilities (ERF). These facilities serve as clearinghouses for excesses identified by units in Europe. When excess items are turned in, they are compared to items that are managed and repaired in the theater. Once this is accomplished, any remaining excess is reported to the NICP for inclusion in their accountability records. In effect, the ERFs are forward-based storage locations for the NICPs. While the ERFs are an effective means to redistribute excesses in Europe, they too have limitations. The major limitation is that the ERFs can only process excesses that the units report and turn in, and as discussed previously, units are often reluctant to declare items excess.

While the objective is to prevent items from becoming excess by taking actions to eliminate the causes of excesses, it must be recognized that some items will become excess regardless of the actions that are taken. The question then becomes: how can the excess items best be used?

The Army has a policy that provides that items for which there is no current requirement should be used, to the maximum extent possible, in carrying out maintenance programs. The intent is to use serviceable assets that are available rather than to repair unserviceable assets.

At five Army NICPs, there was about \$60 million of serviceable assets over and above current requirements that could be used in the Army's fiscal year 1989 maintenance programs. Using these assets would reduce Army repair costs about \$15 million and allow scarce repair labor hours to be devoted to reducing the Army's backlog of other items needing repair. Depot officials told us that it was cheaper for them to repair the unserviceable components than to purchase them from the supply system. From a depot's perspective, this may be true. However, from an Army-wide perspective, the fact remains that the Army has already invested in the serviceable items, and repairing additional items does not represent a prudent use of scarce resources.

WHAT NEEDS TO BE DONE TO  
IMPROVE THE SUPPLY SYSTEM

We support the Army's efforts to identify excesses at the retail and wholesale supply levels and to eliminate the causes of excesses. However, the full benefits of the Army's actions will not be realized until it adopts a supply system that enables managers at the wholesale level to have total visibility of the inventory down to and including the direct-support level. The technology for such a system has been proven by the Air Force which has world-wide visibility of reparable items down to the base level.

It is equally important that managers of the wholesale system also have the authority to redistribute excesses from locations where they exist to locations where there is a need. Achieving these objectives will enhance the responsiveness of the supply system, improve operational readiness, and reduce costs.

Giving visibility and redistribution authority to managers at the wholesale level is not intended to imply that the wholesale-level managers would arbitrarily redistribute excesses. Wholesale-level managers should redistribute items only after consulting with the possessing command, because there may be valid reasons that the

command needs to retain assets over and above its authorized level. Also, with increased visibility, wholesale-level managers would be in a position to make more informed procurement decisions because they would know the asset positions of items at the installation level. At present, these assets are not considered in procurement decisions, because managers have no assurance that assets can be redistributed.

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Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions.