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

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ARMY INVENTORY

A Single Supply System Would Enhance Inventory Management and Readiness

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

Dear Mr. Chairman:

This report is in response to a request by the former Chairman that we determine how effectively the Army's retail-level activities were managing their inventories and, more specifically, how effectively the retail-level activities were identifying and reporting excesses to the wholesale level so that they could be returned to the supply system.

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

This report was prepared under the direction of Richard Davis, Director, Army Issues, who may be reached on (202) 275-4141 if you or your staff have any questions. Other major contributors are listed in appendix II.

Sincerely yours,

Frank C. Conahan
Assistant Comptroller General

Executive Summary

Purpose

Concerns have been expressed about whether the overall growth of the Army's inventory means that it is buying and maintaining more inventory than it needs to meet its military requirements. Having too much inventory means that valuable resources are not used efficiently or effectively. Having too little may mean that units' equipment is inoperable, and readiness may suffer.

The former Chairman of the Subcommittee on Readiness, House Committee on Armed Services, asked GAO to determine how effectively the Army's retail-level activities were managing its inventory and, more specifically, how effectively the retail-level activities were identifying and reporting excesses to the wholesale level so that the excesses could be returned to the supply system.

Background

The wholesale and retail supply systems are independent systems. As a result, once an item is issued from the wholesale system, managers of the wholesale system lose visibility of it. Consequently, managers of the wholesale system are forced to make procurement and stockage decisions without knowing whether there are items in the retail system that could be returned to the wholesale system in order to reduce planned procurements or redistributed to other retail-level activities to meet their needs.

GAO and others have previously reported on the need for the Army to improve its inventory management processes. While these studies have covered a myriad of issues, one common theme has been that there is no interface between the wholesale and retail supply systems. This weakness has resulted in the accumulation and retention of excess inventories at certain retail-level activities, corresponding shortages at other retail-level activities, and unnecessary procurements at the wholesale level.

Results in Brief

The 13 retail-level activities (division-sized units) that GAO reviewed had over $184 million worth of spare and repair parts that were excess to their needs and had not been reported to the wholesale level. These units had $33 million of shortages, of which $8.4 million was for items that were excess at other locations. At the same time, managers at the three buying commands GAO reviewed were in the process of procuring $66.9 million for 1,669 of the same items that were excess at the retail level. The inability of the Army to redistribute the excesses impairs the

readiness of the units that need the items and results in unnecessary costs.

The alternatives the Army is pursuing to solve many of the problems do not provide for complete vertical integration between the wholesale and retail levels. Thus, these improvements will not fully address the excess inventory and redistribution problems identified in this report.

Despite the long-standing nature of the excess inventory issue and the lack of linkage between the wholesale and retail levels, the Army has not reported these problems as material weaknesses in its annual assessment on internal controls.

Principal Findings

Commands Resist Reporting Excess Inventory

Retail-level activities are generally not complying with Army regulations that require them to report excess inventory. Their reluctance to identify and report excess inventory to the wholesale level stems from an ingrained philosophy that if the items are turned in, the units may need them in the future and will have to buy them again. As a result, a mind-set has developed that it is better to have too much than too little.

Inability to Redistribute Excesses

The $184 million of excess inventory that GAO identified at the 13 divisions it reviewed consisted of about 24,000 line items. The divisions also had shortages totaling $33 million for about 6,300 of these items. However, neither the divisions that had a need for the items nor the wholesale level item managers were aware that the items were excess at other locations. The reason for this situation is that the wholesale system does not have visibility and control of retail-level inventory. As a result, the excess items could not be redistributed from where they existed to where the items were needed.

Officials at wholesale-level activities told GAO that even if they had visibility of the excesses at the retail-level activities, they could do little to redistribute them. The officials said that, because the items are considered retail-level assets, they cannot direct a unit to send its excesses to another unit. If they become aware of excesses at a particular retail-level activity, they can request that the unit transfer its excesses to other units, but it is up to the unit commander to honor the request.

GAO found that the Army's inability to redistribute excesses had adversely affected Army units' ability to maintain equipment in an operable condition. GAO identified 6,116 high priority requisitions outstanding at the wholesale level for items that were excess at the retail level. High priority requisitions, by definition, are for items that are causing equipment to be inoperable due to the lack of a part. Because managers at the wholesale level did not have visibility of excess items at the retail level, they were not able to redistribute the excesses to satisfy the outstanding requisitions.

Managers of the Wholesale System Are Procuring Items That Are Excess at the Retail Level

At the three buying commands responsible for buying 23 percent of the line items identified as excess at the retail level, GAO found that these commands had ongoing procurement actions, valued at $66.9 million, for 1,669 of the items in an excess position at the retail level. If managers of the wholesale system had visibility of the retail-level excesses and the authority to direct that excesses be returned to the wholesale supply system or redistributed to other retail-level activities, many of these procurements could have been avoided.

Army Efforts to Address the Excess Inventory Problem

The Army is aware of the excess inventory problem at the retail level and has ongoing and planned initiatives to address it. The Army's initiatives focus primarily on increasing the redistribution of excesses within the retail level. For example, the Standard Army Retail Supply System and the Objective Supply System both attempt to increase redistribution within a corps or a theater. However, the systems, as currently envisioned, will only redistribute assets within a corps or among units within a theater. The systems will not redistribute assets between corps in different theaters or among units in different theaters. Consequently, the problems GAO found with excesses in one corps and shortages in another corps or theater will not be resolved.

Problems With Inventory Not Reported as a Material Weakness

GAO and other audit organizations have repeatedly reported on the accumulation of excess inventory at retail-level activities. Despite the size and long-standing nature of the problem, the Army has not included the excess inventory issue as a material weakness in its annual report on internal controls to the Secretary of Defense.

Recommendations

GAO recommends that the Secretary of the Army report the accumulation and retention of retail-level excesses as material weaknesses in the

Army's next annual assessment of internal controls, as required by the Federal Managers' Financial Integrity Act.

Because the retail-level activities are not complying with Army regulations that require that excess items be reported and returned to the wholesale-level supply system, GAO recommends that the Secretary of the Army establish a single supply system that provides the inventory supply system manager with systemwide asset visibility and the authority to redistribute excesses from locations where they are not needed to locations where they are.

Agency Comments

The Department of Defense is in complete agreement with GAO's findings and recommendations. The Department agreed that a single integrated supply system will improve the efficiency and effectiveness of item management. The Department stated that (1) such a system will provide superior responsiveness to the supply system customers at reduced costs and (2) vertical inventory management—ensuring that the item manager has visibility of retail assets and the authority to direct the redistribution of assets among retail activities—is a fundamental goal of the Department as it moves from item/commodity management to weapon systems management.

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Abbreviations

AVSCOM	Aviation Systems Command
CONUS	continental United States
DLA	Defense Logistics Agency
DOD	Department of Defense
DS-4	Direct Support Standard Supply System
ERF	European Redistribution Facility
GAO	General Accounting Office
MICOM	Missile Command
NICP	National Inventory Control Point
RPP	Retrograde Processing Point
SARSS	Standard Army Retail Supply System
SIMS	Selected Item Management System
SIMS-X	Selected Item Management System-Expanded
TACOM	Tank-Automotive Command
USAREUR	U.S. Army, Europe

Introduction

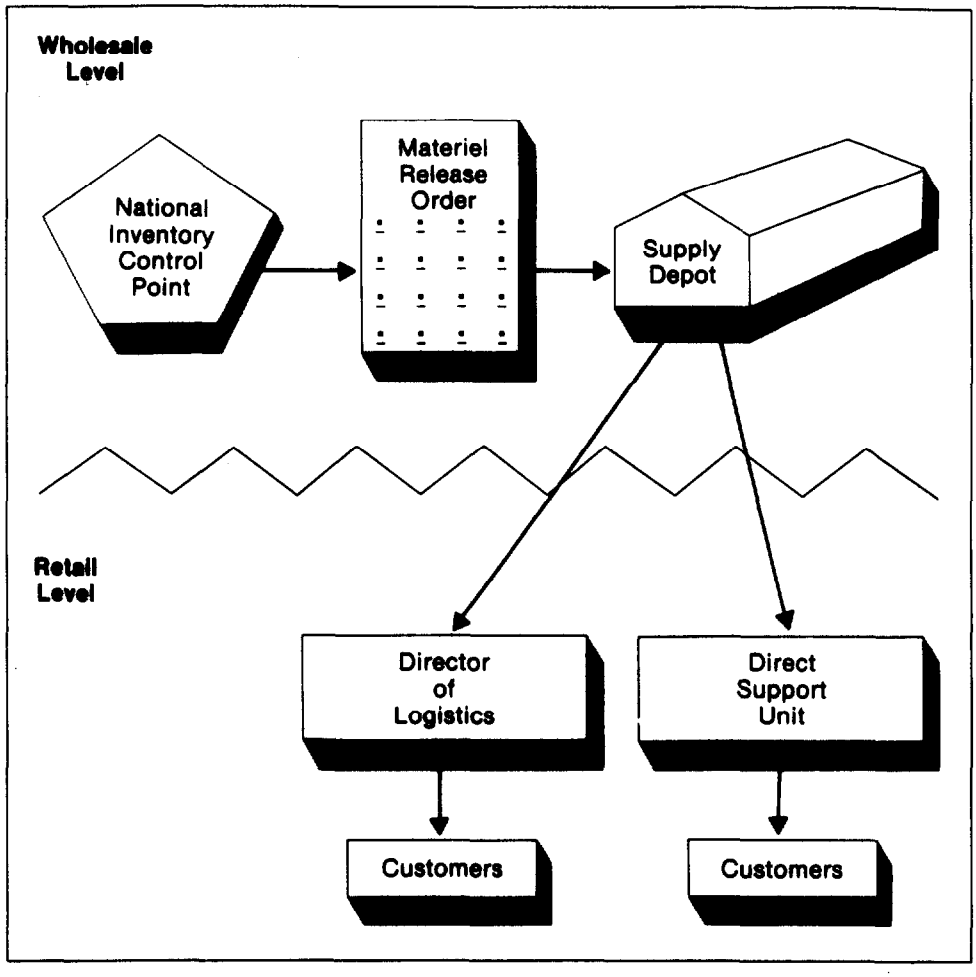
The Army's supply system consists of two major categories—wholesale and retail. The wholesale level is comprised of six National Inventory Control Points (NICP) and related depots that are responsible for determining requirements; buying the items; storing them at depots; and issuing the items to Army posts, camps, and stations. As of September 30, 1988, the wholesale-level inventory was valued at about $21 billion for several million secondary spare and repair parts.[1]

The Army's retail-level supply system—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, while difficult to determine, is estimated at several hundred million 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. Figure 1.1 shows a general description of the wholesale and retail-level supply systems.

[1]Secondary items consist of piece parts, assemblies, and subassemblies as opposed to end items such as tanks and trucks. Examples of secondary items include engines, transmissions, and differentials.

Figure 1.1: Illustration of the Army's Wholesale and Retail Supply Systems



The lack of linkage between the wholesale and retail supply levels is further complicated by the lack of visibility among the various supply levels that exist within the retail level. For example, items at the direct-support level, which are division-level units, are not visible to the corps-level units, and vice versa.

The corps only obtains visibility of excess items at the direct-support level after the direct-support unit identifies its excesses and physically moves the items to the corps. The wholesale system obtains visibility of corps-level excesses when the corps reports its excesses to the wholesale-level inventory manager. However, item managers at all levels are generally reluctant to report items as excess. This reluctance

stems from the philosophy that if they declare an item excess and turn it in, they might have to requisition it at a later date and pay for it again. Also, retail-level managers generally believe that it is better to have too much than too little.

Problems That Result From a Lack of Linkage Among the Supply Levels

The lack of linkage among various supply levels results in the accumulation of excess items at some units, shortages of the same items at other units, and procurement of these items at the wholesale level. This lack of linkage and visibility among the various supply levels affects operational readiness. For example, combat equipment is often inoperable due to the lack of parts that are excess at other units. However, because the unit needing the part and the wholesale-level manager are unaware that the part is excess at some other location, the equipment remains inoperable until the parts are requisitioned from the wholesale level and the wholesale level fills the requisition from stock or procures the part.

Prior Studies Addressed the Need for a Single Supply System

The lack of linkage between the wholesale and retail supply systems is a long-standing problem. Over the years, we have reported on the need for the Army to implement a supply system that would give managers at the wholesale level increased visibility and control over items in the retail system. Most recently, in 1987, we reported that excess items at the retail-level activities above division level had increased from $85 million in 1984 to $155 million in 1986, an increase of about 83 percent.[2] Our analysis of these excesses at selected installations showed that over 70 percent of the excesses were not being reported to managers of the wholesale supply system for redistribution to other installations where there were corresponding shortages. Furthermore, wholesale-level managers had either procured or were in the process of procuring many of these same items to fill shortages at the installation level.

The issue of excess items at the retail level was also the subject of a report issued by Logistics Operations, Incorporated, in March 1988 to the Army Deputy Chief of Staff for Logistics. The report, which discussed the causes of excess at the retail level, identified several reasons that excess items accumulate. While the individual reasons differed, there was a common theme to the findings. The report pointed out that

[2]Inventory Management: Army Needs to Reduce Retail Level Excesses (GAO/NSIAD-87-197, Sept. 2, 1987).

units were generally not following Army policies and regulations. In particular, the report noted that many of the unit commanders were manipulating the system in order to avoid having to report excess items. This finding supports our current finding that the general attitude of many commanders is that it is better to have too much than not enough.

The Department of Defense (DOD) has generally been supportive of our previous recommendation that the Army implement an inventory management system that gives wholesale-level managers increased visibility and control of items at the retail level. Also, the higher levels of Army management have been receptive to the idea of extending wholesale-level visibility of and control over retail-level inventories. As discussed in chapter 3 of this report, the Army has taken several initiatives toward implementing the concept.

Objectives, Scope, and Methodology

The former Chairman of the Subcommittee on Readiness, House Committee on Armed Services, asked us to determine how effectively Army retail-level units at the direct-support level were managing excess inventory, including how effectively retail-level units were identifying and reporting excess secondary repair parts so that these parts could be returned to the wholesale supply system and redistributed to other units. To accomplish this objective, we selected 13 divisions located in the United States and Europe (units under the command of U.S. Army Forces Command and U.S. Army, Europe) (see app. I).

Using the divisions' asset balance files as of January 13, 1989, we identified the parts that were in excess positions.[3] The asset balance file shows the inventory status for each item maintained by the direct-support unit, including its authorized level and inventory on-hand, due-in, and due-out balances.

We compared the excesses at each of the direct-support units to shortages of the same items at each of the other direct-support units to determine the extent to which shortages at one location could have been filled by the redistribution of excesses from other locations. Our methodology for performing this analysis was as follows:

- Shortages in the European-based divisions were matched with excesses at other European divisions.

[3]An item is considered to be excess when its on-hand and due-in balances exceed its authorized and due-out balances.

- The remaining shortages in the European-based divisions were matched with excesses at the continental United States (CONUS) based divisions.
- Shortages in the CONUS-based divisions were matched with the remaining excesses in the CONUS-based divisions.

We did not match CONUS-based shortages with excesses in the European-based divisions, because it is unlikely that the Army would redistribute items from its forward-deployed units to meet shortages at units in the United States.

A unit was considered to have shortages when the quantity on-hand plus the quantity due-in minus the quantity due out was less than the authorized level. However, in determining the extent to which shortages could be filled by the redistribution of excesses, we considered only on-hand assets as being available for redistribution. Consequently, our analysis takes a very conservative approach.

In order to determine whether the items that were excess at the retail level were being procured at the wholesale level, we obtained the procurement data tapes from three of the NICPs (Aviation Systems Command [AVSCOM], Missile Command [MICOM], and Tank-Automotive Command [TACOM]) that had responsibility for procuring items identified as excess. We then matched the listing of excess items to the list of items being procured as of January 1989.

We also compared the list of excess items to a list of high priority back orders[4] from the units deployed in Europe in order to determine whether the lack of redistribution was affecting readiness.

We held discussions with Department of the Army officials in the Office of the Deputy Chief of Staff for Logistics, the Office of the Secretary of Defense, and the Army Materiel Command to obtain their views on implementing a vertical management system and increasing wholesale-level managers' visibility and control over spare and repair parts at the retail level. At retail-level activities, we held discussions with officials on the same issue as well as on the reasons that excesses were being generated at their activities.

We also analyzed studies prepared for the Department of the Army and DOD by internal and external activities on the causes of excesses and the

[4]The high priority back orders consisted of priority 01 and 02 requisitions, meaning that these items were needed to repair equipment that was in an inoperable condition.

actions necessary to reduce the numbers of excess items at the wholesale and retail levels. Additionally, we discussed with DOD and Army officials their planned and ongoing actions to remedy the excess situation.

In order to assure ourselves that the data being generated by the various automated systems on the levels of excesses was accurate, we validated it on a selective basis. For example, we traced the information shown on the retail-level activities' asset balance files to inventory records maintained by the activities. We verified the procurement and back order data shown on the NICPs' procurement files through discussions with item managers at the NICPs and reviewed supply control studies on the items in question. Although there were some discrepancies, the level of accuracy was, in our opinion, sufficient to allow us to rely on the data used in the automated systems and to evaluate the status of the inventory at the wholesale and retail levels.

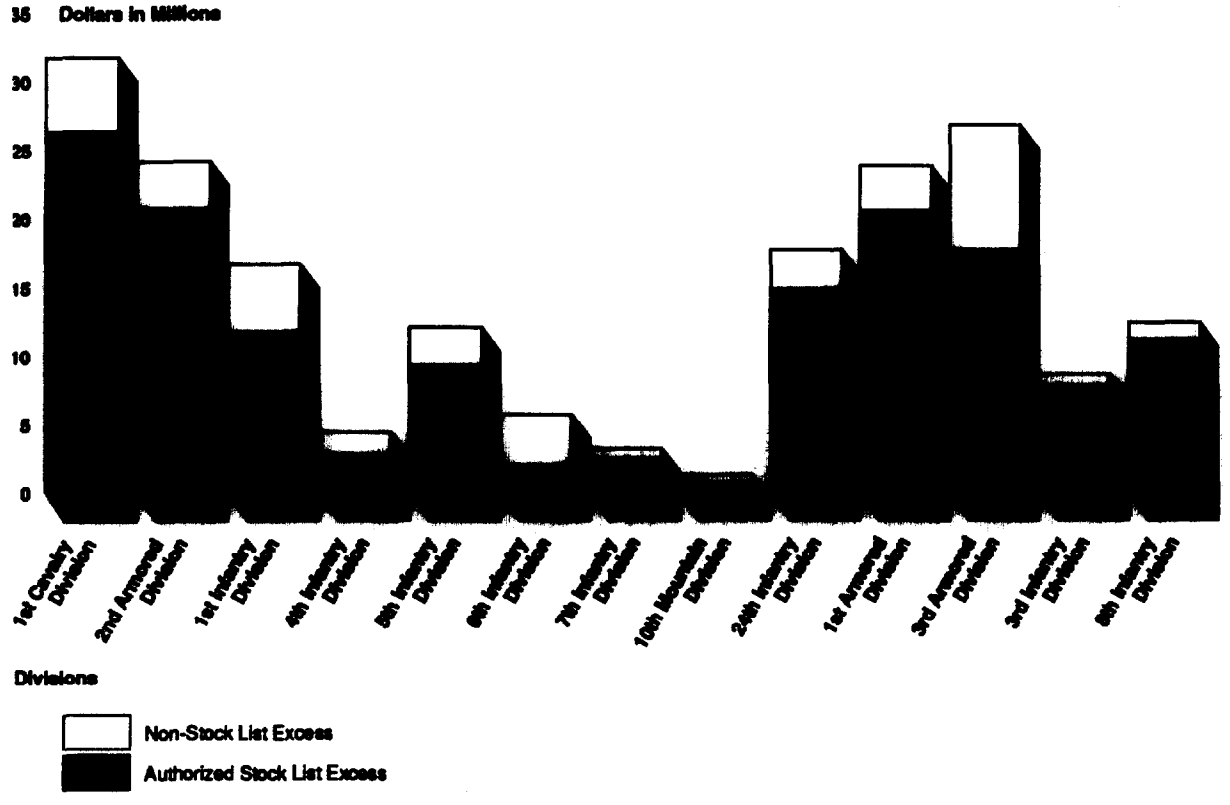
Our review was performed from June 1988 to June 1989 in accordance with generally accepted government auditing standards.

Retail-Level Excesses Degrade Supply Support and Result in Unnecessary Procurements

According to Army policy, divisions are expected to be able to perform their missions with spare parts inventories at prescribed authorized levels. When the amounts of on-hand and due-in inventory exceed authorized levels, the units are to report these excesses to managers of the wholesale system so that the items can be used to meet the needs of other Army units.

As of January 1989, the value of authorized inventory levels for the 13 divisions included in our review totaled about $349 million. However, these units had about $184 million of excess items. As shown in figure 2.1, most of the excess inventory consisted of items for which on-hand and due-in quantities exceeded the authorized inventory levels. To a lesser extent, the excesses consisted of items the units were not authorized to stock.

Figure 2.1: Excess Inventory Categorized as Authorized Stock List Excess and Non-Stock List Excess for the 13 Divisions as of January 13, 1989



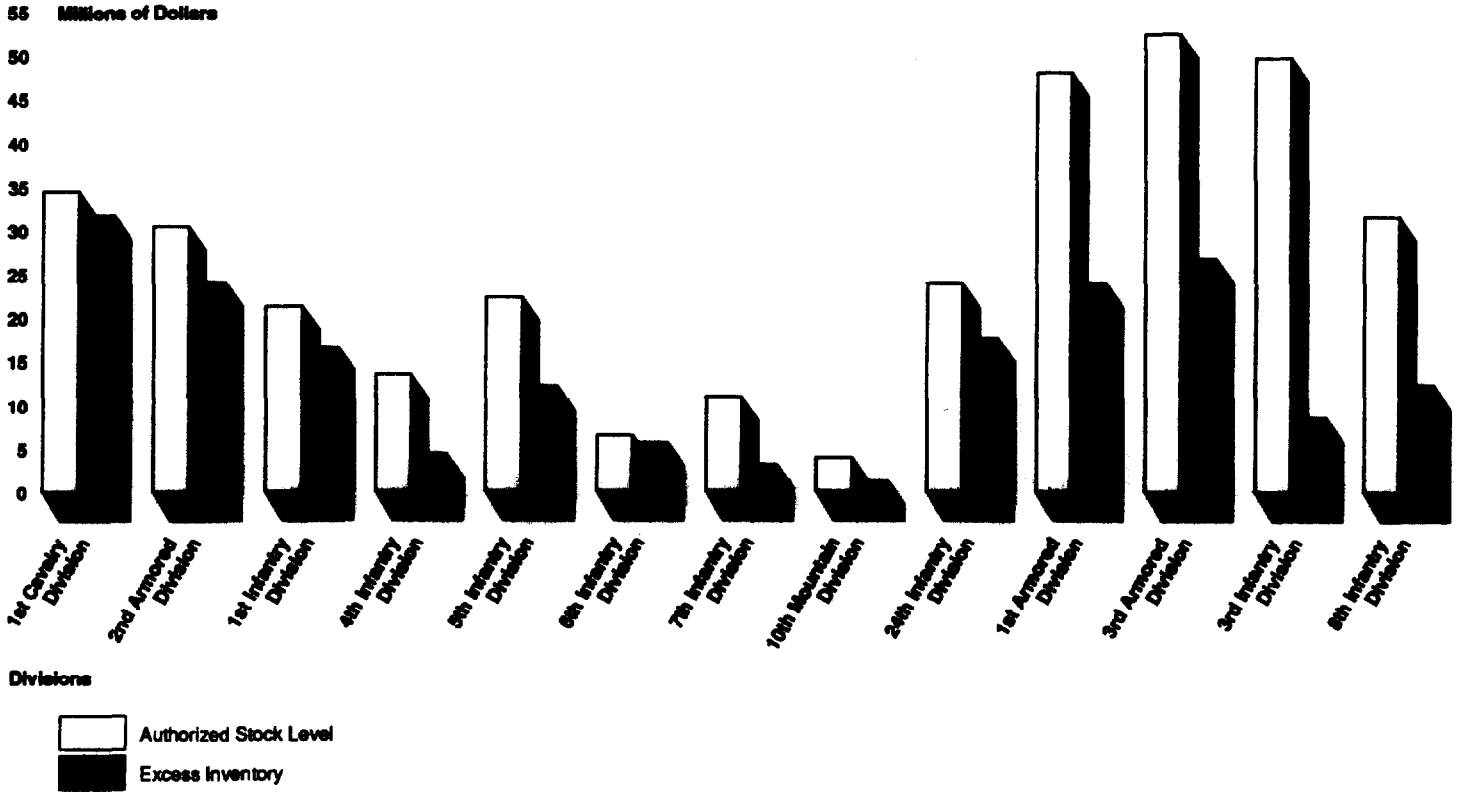
Retail-level activities had not reported the excesses, and the wholesale-level managers did not have visibility or control over these excesses. As a result, wholesale-level managers could not redistribute the excesses to locations where the items were needed. Additionally, managers of the retail system lacked the ability to identify situations in which shortages in one division could be filled by excesses at other units—an inventory management technique called "cross-leveling." As a result, the 13 divisions we visited were requisitioning items from the wholesale system when excesses existed in other divisions.

To compound the matter, because the wholesale-level managers do not have the authority to direct the redistribution of retail-level excesses, combat equipment can become inoperable due to the lack of parts that are excess at other locations.

Magnitude of the Excess Problem

The 13 divisions we reviewed were authorized to have total inventories valued at about $349 million. In fact, they had over $184 million of items on hand or on order that were excess to their needs. Of the total excess, $75 million related to items on hand, and $109 million related to items due in. Figure 2.2 illustrates, for each of the divisions, the amount of excess inventory compared to the division's authorized inventory level.

Figure 2.2: Excess Inventory Compared to Authorized Levels for the 13 Army Divisions as of January 13, 1989



Inefficiencies Resulting From Having Two Separate Supply Systems

Having two separate supply systems can result in inefficient supply operations. Our review disclosed numerous instances in which items that were excess to the needs of a division were needed by another division to repair or replace inoperable equipment. At the same time that these imbalances existed, the wholesale level was in the process of procuring the same items.

Items Excess at Some Divisions Are Needed by Other Divisions

Managers of the Army's retail logistics system currently do not have the capability to identify and move items that are excess in one division to fill shortages that exist in others. Instead, divisions that have shortages have but one alternative: to requisition the needed items from the wholesale system.

The 13 divisions, with $75 million of on-hand excess items, also had item shortages totaling $33 million. For example, one unit needed an M-1 tank engine valued at about $317,000. At the same time, other units had excess engines on hand. However, neither the unit that needed the engine nor the wholesale-level item manager was aware that the item was excess at other locations.

About 25 percent, or $8.4 million, of the shortages could have been alleviated by redistributing the excesses from other divisions. As shown in table 2.1, over $1.6 million of shortages in European divisions could have been filled from excess items held by the same divisions, and another $1.8 million of shortages could have been filled from excesses held by CONUS-based divisions. Additionally, $5 million in shortages in CONUS-based divisions could have been filled by excess items retained by other CONUS-based divisions.

Table 2.1: Repair Parts Shortages That Could Have Been Filled by Redistributing Excess Inventory

Dollars in millions

Division location	Number of divisions	Value of shortage	Shortages that could have been filled from Europe	Shortages that could have been filled from CONUS	Total
Europe	4	$19.0	$1.6	$1.8	**$3.4**
CONUS	9	14.0	[a]	5.0	**5.0**
Total	**13**	**$33.0**	**$1.6**	**$6.8**	**$8.4**

[a]Our methodology did not include determining which excess items could have been redistributed from Europe to satisfy shortages at CONUS-based divisions.

Items Excess at the Retail Level Are Being Procured at the Wholesale Level

Because the retail-level excesses had not been reported to the wholesale inventory managers and the managers were not aware of these excesses, many of the items were being procured at the wholesale level.

The $184 million of excess items identified during our review include at least 23,993 separate line items. As shown in table 2.2, AVSCOM, MICOM, and TACOM had management and procurement responsibility for 5,568 of these items and had ongoing or planned procurement actions for 1,669 of them. The value of excess items related to the 1,669 line items being procured was $66.9 million. With a few minor exceptions, the quantities being procured exceeded the quantities in excess positions. Therefore, if the item managers had been aware of excesses and had had redistribution authority, the excesses could have been used to offset the ongoing and planned procurements.

Table 2.2: Number and Value of Line Items That Are Excess at Retail-Level Activities and Are Being Procured by Three NICPs

NICP	Number of line items being procured	Value of retail-level excesses
AVSCOM	650	$3,886,000
MICOM	289	12,009,000
TACOM	730	50,922,000
Total	**1,669**	**$66,887,000**

Item managers and management officials at the wholesale level expressed support for a single supply system that would enable wholesale-level managers to have visibility and control over assets in the retail system. The officials stated that, with the exception of certain items managed in the Selected Item Management System-Expanded (SIMS-X), wholesale managers have no knowledge of the inventory levels of retail-level activities. They pointed out that SIMS-X data has historically been so inaccurate and out-of-date that they have discontinued receiving or reviewing it. Furthermore, even if the accuracy and credibility problems did not exist, the wholesale-level item managers do not have the authority to redistribute retail-level assets.

Inability to Redistribute Excess Degrades Readiness

The wholesale-level managers' lack of authority to redistribute retail-level excesses can result in equipment's being inoperable due to a lack of spare parts that are excess at other units.

Our analysis of unfilled requisitions at the wholesale level showed that there were 6,116 high priority requisitions[1] that were on order at the three NICPs for items that were excess at the retail-level activities.

The types of equipment that were inoperable due to the lack of parts included some of the newer major end-items of combat equipment, such as M-1 tanks and Apache helicopters.

Table 2.3 shows selected items that were needed for the M-1 tank and the Apache helicopter and the extent to which these needed items were excess at retail-level activities.

[1]The requisitions were of priority groups 01, 02, and 03. By definition, these requisitions are for items without which equipment is inoperable.

Table 2.3: Examples of Unfilled Requisitions Causing Equipment to Be Inoperable

National stock number/ (nomenclature)	Unit price	End item supported	Number requisitioned	Number excess
1560-01-253-0382 (Support structure)	$2,162	Apache	4	3
2835-01-216-8639 (Turbine engine)	316,912	M-1	1	18
5999-01-083-5741 (Circuit card)	538	M-1	7	225

Causes of Retail-Level Excesses

Differences in logistics policies and philosophies among the retail-level activities coupled with basic system weaknesses inhibit efforts to reduce the excesses generated and maintained at the retail level. More specifically, we found that excesses continue to accumulate at the units because

- the logistics philosophy of many units contradicts Army policy for managing retail inventories,
- some divisions are not preparing excess item reports that identify excess inventory,
- requisitions for certain types of items that are due in to units and are excess to the units' needs are not reported to management for cancellation, and
- some Army divisions are not using standard systems to manage major items.

Unit Philosophy Contradicts Army Policies for Managing Retail Inventories

Many of the divisional units we visited had two principal reasons for not complying with Army policy, which requires units to report and turn in excess items. First, the units must use their own funds to purchase repair parts from the Army stock fund system. When these items are turned in as excess, the units may receive full, partial, or no credits, depending on the stock status of the item at the next higher level of supply. Therefore, if they turn in excess items and receive less than full credit, they have wasted unit funds. Furthermore, if the same item is reordered in the future, the unit will have to pay full cost. As a result, many division logistics officials have adopted the philosophy that excess items will be retained indefinitely if there is a possibility that they may be needed in the future.

For example, one division we visited had adopted the policy of retaining all excess items for which there might be a future need. The division had

also adopted a policy to retain a quantity of non-stock listed[2] items equal to 1 year's demands, even though Army policy clearly provides that non-stock listed items are not to be retained. Division officials said that they did not believe it was cost-effective to turn in excess items for little or no funding credit if they might have to reorder the same item in the future. As of January 13, 1989, the division had $24 million worth of excess inventory.

The second principal reason cited by Army units for retaining excess items was a lack of trust that the Army's supply system would meet their supply needs in a timely fashion. One division had four excess M-1 turbine engines with a total value of $1.3 million. Division officials said that if they needed an engine and it was not readily available, the tank had to be reported as "not mission capable." Therefore, they had decided to retain the extra engines rather than turn them in to the supply system because of their concern that engines would not be available from the supply system when needed. As of January 13, 1989, the division had about $12 million of excess inventory.

Some Divisions Did Not Prepare Excess Item Reports

The Standard Army Retail Supply System (SARSS) has the capability to assist divisions in monitoring their supply levels and identifying excess on a daily basis.

We found that some divisions were not preparing excess item reports so that they would not have to identify excess items. For example, one division had not prepared an excess item report for almost a year, even though excess item reports are required monthly. As a result, management at the division level and higher had no way of knowing whether the units had excess items and, therefore, could take no action to have the items turned in for redistribution.

Due-Ins for Certain Types of Items Are Excluded From Computed Excesses

In January 1988, the U.S. Army's Logistics Center reprogrammed its Direct Support Standard Supply System (DS-4) to accommodate a number of changes to excess item reporting. In changing the system, however, the Center overlooked the logic table that dealt with on-order items to be repaired at the direct-support level. Before the system modification, direct-support reparable items with on-order excesses would have been reported to division managers with recommendations to cancel the

[2]Non-stock listed items are items that are not on the unit's authorized stock list.

unneeded items. However, after system modification, on-order excesses were not considered as part of the excess item computation.

Our review showed that not all direct-support reparable items with on-order excesses were being reported to division management. For example, the 1st Cavalry and the 2nd Armored Divisions had $1.5 million worth of direct-support reparable on-order excesses as of September 16, 1988. By February 13, 1989, on-order excesses of these types of items had increased to $1.6 million.

Some Army Divisions Are Not Using Standard Systems to Manage Major Items

The DS-4 system is one of the Army's standard systems for divisions to manage their inventories. However, some divisions have decided to manage their major subassemblies manually rather than through the automated DS-4 system. During our review we identified two divisions that were managing their major subassemblies inventories manually. These two divisions had inventories of about $9 million, including about $4 million of excesses that had not been included in the automated system and had not been reported to management.

Assessment of Internal Controls

The Federal Managers' Financial Integrity Act of 1982 placed increased emphasis on the need for effective internal controls. The act requires agencies to evaluate internal control systems and periodically report the results. Agencies are to make the evaluations according to Office of Management and Budget guidance and are to assess whether the systems meet the objectives of internal controls and comply with GAO standards.

According to our Standards for Internal Controls in the Federal Government, internal controls help to ensure that the use of resources complies with existing laws and regulations to safeguard against waste, loss, and misuse. Internal controls also provide a reliable database with which to evaluate the use of resources. Good internal controls help to facilitate management objectives by serving as checks and balances.

The Army did not report excess inventory or the lack of visibility over this inventory by the wholesale or retail-level managers as material weaknesses in its annual assessment to the Secretary of Defense. Furthermore, at many of the locations included in our review, the installations had either not assessed internal controls over excess material or considered excess material as low risk.

Army Actions to Reduce Retail-Level Excesses

Excess inventory has been a long-standing problem. Over the years, the Department of the Army and commanders at all levels have made various attempts to gain visibility of excess items and establish processes for redistributing excess items from where they are located to where they are needed. While some progress has been made, excess inventories and the Army's inability to redistribute them continue.

At present, the Army is focusing on developing systems that will result in the more effective identification and redistribution of excess items among the retail-level activities. The systems being developed and tested will improve the identification and redistribution of excesses within a division and among divisions within a corps. However, the systems will not address the issue of redistribution between corps or theaters.

While the Army's actions are a step in the right direction, the systems being developed will not provide centralized visibility and redistribution authority. Consequently, the problem of excesses at one location and shortages at another will continue.

Efforts to Address the Excess Inventory Problem

The Department of Defense and the Army have long recognized that the Army's inventory management system did not have the capability to redistribute inventory items among units at the retail level. As a result, units with item shortages had but one option: to requisition the needed items from the wholesale system. Units that needed an item had no systematic way of knowing that it was excess and available at other units.

The lack of visibility at the retail level is compounded when the requisitions are sent to the wholesale level, because managers of the wholesale system do not have visibility of retail inventories. Thus, the wholesale system manager has but two options to respond to demands from the retail level: to fill the shortage from wholesale inventory stock or to initiate procurement.

In recognition of these shortcomings, the Department of Defense tasked the Army, in April 1986, to develop and implement an integrated inventory management system to provide wholesale managers with visibility of and redistribution capability for inventory below the wholesale level.[1] The April 1986 plan described the benefits of enhanced asset visibility

[1]The taskings were included in a tasking statement signed by the Secretary of Defense in April 1986. The two taskings were part of an overall plan for secondary item management by weapon system rather than by commodity in order to enhance weapon system readiness.

and redistribution as enabling wholesale-level managers to better forecast materiel shortfalls on a systemwide basis and to recognize and deal with materiel maldistribution or bottlenecks in the system.

The Army, in response to the taskings, set out to develop an improved system to increase managers' asset visibility and the redistribution of inventory assets below the wholesale level. However, the Army's efforts do not specifically address the intent of the Secretary's tasking in that the initiatives do not provide the wholesale-level manager with asset visibility and redistribution capabilities. Instead, the Army's efforts are directed at increasing the visibility and redistribution capabilities of the retail-level activities.

Standard Army Retail Supply System

In March 1981, the Army began to replace its retail inventory management systems. The replacement system—the Standard Army Retail Supply System—was designed to provide near-real-time inventory data that would enable a corps to gain visibility and control of inventory in its units.

SARSS' initial implementation plan called for the system to be fielded from the bottom up. First, the direct-support units would receive the initial system (SARSS 1) to be fielded by September 1988. Divisions were scheduled to begin receiving SARSS 2A and corps to begin receiving SARSS 2B by June 1990. The current fielding plan shows that the SARSS system will not be totally fielded until the latter part of fiscal year 1993.

SARSS offers opportunities for improving the management of the Army's retail inventory. For example, when fully implemented, SARSS will allow a corps to have complete visibility and control of inventory items in its divisional units. When excesses occur in one unit, SARSS will alert the corps management team to the excesses so that they can redistribute them to other corps units that are experiencing shortages.

Notwithstanding this improvement, the system has some limitations that could result in many of the same problems that we identified during our review. While improving the capability of the individual corps, SARSS does not provide the capability to redistribute these excesses between corps. As discussed in chapter 2, $1.6 million worth of excess items being held by CONUS divisional activities could have been used to fill shortages in the four European divisions. SARSS will not remedy this type of situation.

Also, because SARSS will not be linked to the wholesale system, the procurement of excess items at the retail level will continue.

Selected Item Management Systems

The Army's efforts to provide wholesale managers with visibility of items in the retail system began with the creation of the Selected Item Management System (SIMS) in 1971. The SIMS was designed to provide wholesale managers with the capability to validate requisitions for selected items by providing information regarding an item's authorized and on-hand quantities as well as the quantities due in and due out. With this data, the item manager would be able to determine whether a requisition for the item was within authorized limits.

The SIMS information was prepared manually by retail activities and submitted to wholesale managers. However, the data was often outdated when it was received, and in some cases, it was incomplete. As a result, SIMS was viewed as ineffective in aiding wholesale system managers to validate requisitions. SIMS was subsequently modified and renamed the Selected Item Management System-Expanded (SIMS-X). The modification included the requirement that retail-level activities report all transactions on the selected items directly to wholesale managers on a daily basis. However, many of the same types of problems continued to plague SIMS-X.

In 1985, the Army proposed expanding SIMS-X to include not only requisition validation but also the identification and redistribution of excess items. However, our discussions with wholesale-level item managers revealed that SIMS-X data is still outdated and inaccurate. Also, the item managers said that they do not have the authority to direct a retail-level activity to redistribute excess items from one location to another. At best, they can request a retail unit to return its excess items to the wholesale system. As a general rule, item managers at the three NICPs we visited have discontinued using SIMS-X as a management tool.

The Objective Supply System

In May 1988, the Commanding General of the U.S. Army Material Command established the Objective Supply System Task Force to develop a concept for one supply system that would streamline administrative and financial processes and reduce the amount of time required to fill requisitions.

The Task Force's initial position was that the Army's supply system was less than responsive to its units. It noted that the Army requires a soldier to submit a request for supplies, wait several days to find out whether the request can be filled from his or her own support activity, wait several more days to find out whether the request was sent to the wholesale system, wait several more days to find out what actions the wholesale system was taking on the request, and then wait from 12 to 25 days to receive the item.

The Task Force also observed that the Army supply system's customers are forced to deal in two separate worlds—retail and wholesale. These involve separate stockpiles controlled by separate automated systems. The customer must exhaust all possibilities of receiving support from the retail level before placing the request at the wholesale level. The Task Force believed that this level of complexity should not exist. Instead, the Army should have one system that provides support to all of its units.

The supply concept developed by the Task Force envisioned the instantaneous routing of requisitions directly from the installation to the wholesale system if assets were not available at the requester's installation. The concept also envisioned providing the requisitioner with instant knowledge of the actions taken on the supply request, updating both supply and financial records automatically and simultaneously without impeding the flow of the requisition, and using guaranteed freight and overnight delivery direct to the customer's supply support activity.

In May 1988, the concept was presented to and approved by the Commanding General of the U.S. Army Materiel Command. Subsequently, the Commanding General of III Corps approved the concept and the development of a 60-day proof-of-principle demonstration at Fort Hood, Texas, using the 2nd Armored Division as the test division. In June 1988, the Director of the Defense Logistics Agency (DLA) agreed to participate in the test.

The test used a mainframe computer located at the Aviation System Command to capture installation asset inventory data from all divisional and corps-level supply activities located at Fort Hood, Texas. The inventory data was updated daily through transmissions of each activity's asset balance files. Wholesale inventory balances from the Red River Army Depot, which is the depot responsible for supporting the divisions

at Fort Hood, were provided to the mainframe computer, as were the asset balance files from the DLA's Memphis Defense Depot.

The proof-of-principle demonstration began at Fort Hood on September 30, 1988, and ended on November 30, 1988.[2] The demonstration began when the requisitions were received at the mainframe computer. If the requisition passed edits for stock number validity and local purchase eligibility, the needed stock number was checked against available stocks at all Fort Hood units. If stock was available, the requester was notified of the location of the stock.

If the stock was not available at Fort Hood, the system searched the inventory files at the Red River Army Depot. If the items were available, the system automatically issued a materiel release order, and the requester was notified that the item was being sent from Red River and would arrive in 1 to 3 days. If the item was not available at Red River, the requisition was passed to the appropriate NICP with notification to the requester that the action had been taken and that requisition status would be reported through the normal system.

For DLA-managed items, the system searched the inventory balances, and if the item was at the Memphis Defense Depot or at the Red River Army Depot, the requester was notified that the item was available and would arrive in 1 to 3 days. If the item was not available at either location, the requisition was passed to the source of supply with notification to the requester that the action had been taken and that requisition status would be reported through the normal supply system.

The average elapsed time for transmitting the requisition from the requester to the mainframe and receiving item status was 17 seconds.

According to the Task Force's report, the proof-of-principle demonstration clearly showed the following:

- The use of automation and communications can significantly reduce the time required to fill a request for supplies. As a general rule, the test showed that order-ship-time was reduced by 50 percent—from 25 days to 12 days. The Task Force estimated that the reduced order-ship-time would result in a one-time savings of $43 million in the Army stock fund.

[2]Since November 1988, the results of the demonstration have been evaluated. It is expected that the best parts of the demonstration will be incorporated into the SARSS.

- Providing instant status information to the customer created a seamless supply system that allowed the customer to enter requirements on a computer terminal and, within seconds, know whether and from where the needed materiel would be shipped.
- Although empirical data was not available to prove that the reduced order-ship-time improved readiness, it was the Task Force's opinion that if supply parts are received more quickly, more equipment will be mission ready.

Efforts to Gain Visibility and Control of Excess Items in the European Theater

Various Commanders-in-Chief of U.S. Army, Europe (USAREUR), have explored alternatives to gain visibility and control over excess inventories within the theater. These efforts have focused on identifying the causes of excess, emphasizing the need for units to identify and turn in excess inventory, and establishing a redistribution process that links the Army's wholesale and retail logistics systems. While these efforts have resulted in improvements, excess inventories remain a problem within the theater. Some of the more significant efforts are discussed below.

General Officer Steering Committee

In November 1983, USAREUR established a committee composed of general grade officers to determine the extent of the excess inventory problems and to provide recommendations on how to reduce and redistribute these inventories.

In March 1984, the committee reported that the theater did not have the ability to identify or redistribute excess items within the theater and that excesses were caused by (1) units' not following Army policies for managing inventories and excess, (2) systemic weaknesses in the Army's wholesale and retail logistics systems, and (3) a complicated process that inhibited the turning in of excess items.

One of the initial efforts taken to address the committee's findings was to simplify procedures for turning in excess items to the theater's central receiving activity—the Retrograde Processing Point (RPP). The revised procedures provided for units to turn in items (1) without appointments, (2) with a reduction of accompanying paperwork, and (3) with no explanation of where the items had come from or why they were excess.

As a result of the revised procedures, which eased the turn-in process, the RPP's work load soon exceeded its ability to process the materiel. Also, since the RPP did not have the capability to determine whether the

excess items were needed in theater, a significant number of the items were automatically returned to CONUS wholesale system storage depots.

As a result of the theater's inability to redistribute the excess items to other USAREUR units, the items that were being returned to CONUS were often being requisitioned by other USAREUR units. For example, between July 1984 and January 1986, USAREUR returned 674 vans of excess materiel to a CONUS storage depot. As of January 1986, items valued at $88 million had been processed back into the wholesale supply system. Of this amount, $13.8 million of the items were immediately shipped back to Europe to fill shortages in USAREUR units.

The excessive work load at the RPP, coupled with the theater's inability to redistribute excesses within the theater, provided the catalyst for USAREUR to explore other alternatives for receiving and redistributing excess items.

European Redistribution Facility

In 1986, USAREUR and the U.S. Army Material Command jointly established the European Redistribution Facility (ERF) as the central turn-in point for excess repair parts in Europe.

When excess items are turned in to the ERF, the items are screened to determine whether they are on the theater's list of 2,800 intensively managed items. If they are, unserviceable items are sent to the theater repair facility, and serviceable items are returned to the USAREUR inventory.

After the screening process, the remaining excess items are again screened to determine whether they should be (1) returned to a CONUS depot repair activity, (2) sent to the Defense Reutilization and Marketing Office, or (3) retained at the ERF to fill requisitions from USAREUR units. Assets retained at the ERF are reported to the wholesale logistics system's inventory record and become part of the overall wholesale inventory. As a general rule, the wholesale system item manager uses the items in the ERF inventory to fill requisitions from USAREUR units. However, the items can also be used to fill shortages elsewhere.

From October 1988 through April 1989, the ERF received and processed 195,209 line items of excess parts, valued at $277 million. Table 3.1 shows the disposition of these items.

Table 3.1: Disposition of Excess Items Received by the ERF From October 1988 Through April 1989

Dollars in millions

Disposition	Number of items	Dollar value
CONUS storage	61,582	$37.5
Theater repair	17,452	119.9
USAREUR inventory	13,979	98.9
Retained by ERF	86,303	16.4
Sent to disposal	15,893	4.2
Total	**196,209**	**$276.9**

While the ERF demonstrates the potential for redistributing excess items, the newly integrated wholesale and retail logistics systems will be totally dependent on the units to identify and turn in excess items. As discussed in chapter 2, Army divisions are still retaining significant amounts of excess inventories. As a case in point, the four European-based divisions in our review had over $70 million of inventory over and above their authorized levels.

Conclusions and Recommendations

Conclusions

Many retail-level activities are accumulating and retaining inventories of spare and repair parts that are excess to their needs, while other retail-level units are experiencing shortages of these same parts. At the same time, wholesale system managers are trying to carry out their responsibility of ensuring that sufficient stock is available to meet the needs of all supply activities by procuring many of the same items that are excess to the needs of retail-level activities.

Commanders at the retail level are not generally following Army regulations, which require that excess inventory be identified and reported to the wholesale system. Their reluctance to identify and turn in the excess items stems from a mind-set that has developed over the years. The thinking seems to be that it is better to have too much than too little, even if it means that others have inoperable equipment because they do not have the needed parts. As a result, excesses continue to accumulate. At the same time, wholesale managers are buying the same items to satisfy shortages at other units.

Both Army-wide and major command efforts to address the excess inventory problem have only been marginally successful because the initiatives have been designed on the premise that the wholesale and retail systems must operate independently of each other.

The systems and the concepts currently being developed, including SARSS and the Objective Supply System, will not fully address the problems identified in our review. Even when SARSS is fully implemented, the system will still lack the capability to redistribute excess spare parts from one corps to fill shortages that exist in other corps or theaters of operation. Further, SARSS will not provide wholesale managers with the visibility or control of items necessary to prevent the procurement of items that are excess at the retail-level activities.

The Objective Supply System Task Force captured the essence of the remedy for the Army's inventory management problems by acknowledging that the Army must create a single, integrated supply system. However, in its demonstration tests, the Task Force excluded the wholesale system by allowing the retail level to direct the release of material from the wholesale level depot. This is contrary to the normal practice, in which the depot performs the supply function of issuing material release orders to fill requisitions.

We believe that the Department of Defense's inventory management philosophy of creating one integrated supply system deserves full consideration if the problems identified in our review are to be fully addressed. To be effective, the single, integrated system must centralize visibility and redistribution authority at the integrated inventory management level. Otherwise, each individual installation, command, and activity will continue to determine how much stock should be retained, and managers of no one organization will have a complete overview of what the supply system contains.

We also believe that the magnitude of the excess problems and the resultant inefficiencies warrant the reporting of these matters as a material weakness in the Secretary of the Army's annual assessment of internal controls under the Federal Managers' Financial Integrity Act.

Recommendations

We recommend that the Secretary of the Army report the accumulation and retention of retail-level excesses as material weaknesses in the Army's next annual assessment of internal controls, as required by the Federal Managers' Financial Integrity Act.

Because the retail-level activities are not complying with Army regulations that require that excess items be reported and returned to the wholesale-level supply system, we recommend that the Secretary of the Army establish a single supply system that provides the inventory supply system manager with systemwide asset visibility and the authority to redistribute excesses from locations where they are not needed to locations where they are.

Agency Comments

DOD agreed with our recommendation that the Army report the accumulation and retention of retail-level excesses as a material weakness in its next annual assessment of internal controls under the Federal Managers' Financial Integrity Act. The Army has reported the matter in its most recent statement.

DOD also agreed with our recommendation to establish a single supply system and ensure that the system manager has systemwide asset visibility and redistribution authority.

DOD commented that the Army has three initiatives underway to achieve these objectives. The first initiative focuses on providing war-fighting

commanders with the ability to redistribute assets to enhance their combat power. The second initiative involves prototype tests to link asset databases on a real-time basis from the retail to the wholesale level. The third initiative, to be completed by fiscal year 1995, envisions a "seamless" supply system that will provide vertical integration of the wholesale and retail systems with the end result being one Army supply system, from top to bottom. This one system will provide total asset visibility and redistribution capability.

DOD also commented that a single supply system will improve the efficiency and effectiveness of item management and will provide superior responsiveness to the supply system's customers at reduced costs. Vertical inventory management—ensuring that the item manager has visibility of retail assets and the authority to direct the redistribution of assets among retail activities—is a fundamental goal of DOD as it moves from item/commodity management to weapon systems management.

Divisions GAO Visited

1st Cavalry Division, Fort Hood, Texas
2nd Armored Division, Fort Hood, Texas
1st Infantry Division, Fort Riley, Kansas
4th Infantry Division, Fort Carson, Colorado
5th Infantry Division, Fort Polk, Louisiana
6th Infantry Division, Fort Richardson, Alaska
7th Infantry Division, Fort Ord, California
10th Mountain Division, Fort Drum, New York
24th Infantry Division, Fort Stewart, Georgia
1st Armored Division, Fuerth, Germany
3rd Armored Division, Frankfurt, Germany
3rd Infantry Division, Kitzingen, Germany
8th Infantry Division, Bad Kreuznach, Germany

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