United States General Accounting Office 130221

GAO

Briefing Report to the Honorable Pete Wilson, U.S. Senate

May 1986

INVENTORY MANAGEMENT

Problems in Accountability and Security of DOD Supply Inventories

130221

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NSIAD-86-106BR

535538/130221

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

NATIONAL SECURITY AND
INTERNATIONAL AFFAIRS DIVISION

May 23, 1986

B-222859

The Honorable Pete Wilson
Chairman, Task Force on DOD Inventory Management
Committee on Armed Services
United States Senate

Dear Mr. Chairman:

In response to your September 5, 1985, request, we have reviewed inventory-management practices within the Army, Air Force, Navy, Marine Corps, and Defense Logistics Agency (DLA) supply systems. On March 4, 1986, we briefed you on our findings, and this report summarizes the results of our review.

Each year, the military services and DLA buy billions of dollars of supplies which are stored as wholesale inventories and subsequently distributed to military units throughout the world. To gain a perspective on each level of the supply chain, we conducted analyses at 9 wholesale management activities and 6 storage depots in the United States and 15 activities at military bases in the United States and Germany. By tracing receipt and issue transactions for a sample of supply items, we were able to evaluate each supply system's internal controls. (See app. I for an overview of DOD's supply system and a detailed description of our objectives, scope, and methodology.)

We identified potentially significant supply-management problems at all levels in the areas of receipt confirmation, records accuracy, inventory taking, reconciliation and research of inventory discrepancies, retail-activity controls over inventory, and physical security. Also, our concurrent review of over 300 prior DOD and GAO reports showed that most of these systemic problems have existed for years.

Although the DOD components have taken some corrective actions in response to these past reports, their actions have not corrected the root causes of these repetitive problems. The services and DLA continue to experience significant inaccuracies in inventory records and physical-inventory adjustments. In many cases, causative research cannot determine the underlying

reasons for the inventory discrepancies. Until these deficiencies are corrected, adequate accountability over supply system inventories will not be achieved. In addition, the lack of adequate physical security over some inventories results in a great potential for theft, waste, and misplacement. In appendixes II through VI, we comment on the supply systems of the Army, Air Force, Navy, Marine Corps, and DLA, respectively.

Because we did not statistically sample items, our findings cannot be projected to the universe of military supplies or users. Therefore, this report contains no recommendations. However, we have identified a body of detailed audit work that you have subsequently requested us to do to identify causes of some of the problems and to recommend corrective actions. This will be a long-term effort. We will design these audits to more fully address specific issues that have an impact on the security and effectiveness of DOD's inventory management.

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As arranged with your office, we did not obtain official agency comments on a draft of this report; however, we did discuss our findings with officials in the Office of the Secretary of Defense and each service. Also, as agreed, we plan no further distribution of this report until 30 days from the date of its issuance unless you publicly announce its contents earlier. At that time, we will send copies to the Chairmen, House Committee on Government Operations, Senate Committee on Governmental Affairs, House and Senate Committees on Appropriations and on Armed Services; the Secretaries of Defense, the Army, the Navy, and the Air Force; and the Director, Office of Management and Budget. Copies will be made available to other interested parties upon request.

We look forward to a close working relationship with the task force on inventory management. If you have any questions, please call Martin M Ferber, Associate Director for Manpower, Reserve Affairs, and Logistics on 275-5140.

Sincerely yours,

Frank C. Conahan

Frank C. Conahan
Director

C O N T E N T S

Appendix		Page
I	INTRODUCTION	6
	Management of Supply System	6
	Inventory Control and Accountability	7
	Physical Security	8
	Objective, Scope, and Methodology	8
II	ARMY INVENTORY-MANAGEMENT PRACTICES	14
	Pilferable and Sensitive Items Not Properly Identified or Safeguarded	14
	Ammunition and Explosives Losses	16
	Excess Repair Parts in Europe	18
	Inaccurate Inventory Records at All Supply Levels	20
	Significant Number of Discrepant Shipments	24
	Requisitions Not Accurate	26
	Material-Receipt Processing Requires Additional Attention	27
	Inadequate Physical Security	28
III	AIR FORCE INVENTORY-MANAGEMENT PRACTICES	30
	Inventory Adjustments Growing	31
	Causative Research Not Identifying Causes	32
	Reports of Survey Not Used As Intended	34
	Equipment-Management System Loses Visibility and Accountability Over Some Assets	34
	Unserviceable Items Improperly Returned	36
	Inaccurate Supply Transactions	37
	Inventories of Serviceable Excess Items Growing but Not Reported	38
	Weak Controls Over Pilferable Items	40
	Inadequate Physical Security	41
IV	NAVY INVENTORY-MANAGEMENT PRACTICES	43
	No Assurance of Material Receipt	44
	Unnecessary Stock-Fund Losses	45
	Inventory Accuracy Still a Problem	46
	Controlled Items Not Correctly Received and Accounted For	47
	Physical Inventories Not Always Performed	48
	Precious Metal Items Not Properly Identified, Received, or Stored	49
	Loss of Accountability at Shipyards	50
	Improper Disposal and Unreported Excess	51
	Security Breached	52

		Page
V	MARINE CORPS INVENTORY-MANAGEMENT PRACTICES	53
	Inaccurate Inventory Records	53
	Causative Research Not Identifying Causes	54
	Controlled Items Improperly Handled	55
VI	DEFENSE LOGISTICS AGENCY INVENTORY-MANAGEMENT PRACTICES	57
	Inventory-Records Accuracy Problems	57
	Weaknesses in Material-Receipt Confirmation	60
	Inventory-Discrepancy Research Not Effective	61
	Requisitioning Process Can Be Compromised	62
	Potential Physical-Security Problems	63
	Federal Catalog System Has Trouble Meeting Its Objectives	64

TABLES

II.1	Ammunition Authorizations and Expenditures	17
II.2	Incidences of Finding Ammunition in Unauthorized Locations	17
II.3	TACOM Records-Accuracy Percentages	21
II.4	TACOM Physical-Inventory Adjustments	21
II.5	CECOM Inventory-Adjustment Data	21
II.6	CECOM Physical-Inventory Adjustments	22
II.7	New Cumberland Army Depot Reversals of Gains and Losses	22
II.8	Depot Physical-Inventory Discrepancies	23
II.9	Inventory Adjustments at Class II (Clothing and Individual Equipment) and Class IX (Repair Parts) Warehouses	23
II.10	Using-Units' Physical-Inventory Discrepancies	24
II.11	Discrepancy Reporting on Non-Receipts	25
III.1	San Antonio Inventories and Adjustments	32
III.2	Comparison of Serviceable Issues and Unserviceable Returns for Seal Assemblies	37
III.3	Dollar Value of Serviceable Excess in Air Force Base-Supply Inventories	39
IV.1	Naval Supply Center Inventory Discrepancies	47
IV.2	Naval Supply Center "Controlled" (Medical) Inventory Discrepancies	48
IV.3	Norfolk Naval Shipyard Shop-Stores Inventory Discrepancies	49
VI.1	Inventory Adjustments Fiscal Year 1985	59
VI.2	Inventory Variances at Mechanicsburg Depot	60

ABBREVIATIONS

AFEMS	Air Force Equipment Management System
AFLC	Air Force Logistics Command
AMC	Army Materiel Command
CECOM	(Army) Communications - Electronics Command
DIMIS	Defense Investigations Management Information System
DLA	Defense Logistics Agency
DOD	Department of Defense
DODAAC	DOD Activity Address Code
FBI	Federal Bureau of Investigation
GAO	General Accounting Office
ICP	Inventory Control Point
MICOM	(Army) Missile Command
NARF	Naval Air Rework Facility
NIS	Naval Investigative Service
NSN	National Stock Number
OSI	(Air Force) Office of Special Investigations
ROD	Report of Discrepancy
SAALC	San Antonio Air Logistics Center
SASSY	Supported Activities Supply System
TACOM	(Army) Tank-Automotive Command

INTRODUCTION

Each of the services and the Defense Logistics Agency (DLA) maintains wholesale inventories to meet the needs of the nation's military forces throughout the world. These inventories include principal items (such as trucks, tanks, and major weapons) and secondary items (such as repair parts, supplies, and clothing).

DOD's wholesale and retail inventories of principal and secondary items are estimated at about $130 billion. There are about 5.5 million different items in the supply system. As of September 30, 1985, DOD components reported managing wholesale inventories valued at about $71 billion, of which about $41 billion was physically inventoried. These inventories consist mainly of secondary items. The dollar value of retail inventories, though not readily available, has been estimated in the tens of billions of dollars and is located at over 500 major installations in the continental United States and 250 installations overseas.

MANAGEMENT OF SUPPLY SYSTEM

Each of the DOD components has a wholesale supply system that is managed by one or more inventory control points (ICPs). At the wholesale level, inventory management is under the direct control of the ICP, which maintains quantities of wholesale stocks to satisfy requisitions from the retail level. All other echelons of supply are retail levels. The Army and DLA each have six ICPs; the Air Force has five; the Navy has two; and the Marine Corps has one. Each ICP oversees the supplies kept in several wholesale storage depots. The services' wholesale depots, in turn, provide supplies to retail inventory activities, such as Army and Air Force bases.

Items within the supply system are categorized as either controlled or noncontrolled. Controlled items are those that must be identified, accounted for, secured, segregated, and handled in a special manner. They are further identified as

--classified--items that require the highest degree of protection in the interest of national security (such as certain radar circuit cards),

--sensitive--items that require a high degree of protection due to statutory requirements (such as narcotics, precious metals, small arms, ammunition, explosives, and demolition material), or

--pilferable--items that have high resale value or desirability for personal use or possession (such as alcoholic beverages, watches, and tools).

INVENTORY CONTROL AND ACCOUNTABILITY

Inventory-control programs are designed to assist management in maintaining the accuracy and compatibility of physical assets and their related custodial records at storage locations and the accountable records at ICPs. This accountability is essential to effective inventory management. Because of the continuous daily flow of equipment and supplies into and out of the DOD supply system through receipt and issue transactions, custodial and accountable records are continuously updated. These adjustments to the records provide numerous opportunities for errors to occur and, therefore, imbalances between actual assets and accountable records. Consequently, DOD has established inventory-control policies and procedures for the military services and DLA to follow in

--taking physical inventories,

--conducting audits to verify stock location,

--doing quality-control studies, and

--researching inventory adjustments.

DOD views inventory adjustments as a measure of the accuracy of inventory records. Physical-inventory adjustments are accounting transactions intended to make book balances agree with the quantities of items in storage. They are categorized as gains (quantities in the warehouse in excess of record balances) or losses (quantities in the warehouse less than record balances). DOD sometimes offsets the dollar value of gains and losses against each other to measure the net financial impact on inventory. However, DOD recognizes that gross adjustments--gains plus losses--combined with reversals of prior adjustments give the best measure of the total turbulence in the inventory records.

In fiscal year 1985, reported gross inventory adjustments for wholesale assets were $2.0 billion. Gross adjustments compared to DOD's average inventory value of $71 billion were 2.7 percent; when compared to the value of items inventoried--$40.8 billion--the rate rises to 4.8 percent. When reversals of prior adjustments are added to the gross adjustments, the dollar value of total reported variances is $3.7 billion. Total reported variances are 9.0 percent when gross adjustments and reversals are compared to the value of items inventoried. (See table VI.1.)

After taking physical inventories and making necessary adjustments to the accountable stock records, inventory managers are required to perform causative research on a complete or sample basis on inventory discrepancies for controlled items and those over $800 per item. Causative research is the analysis that managers should perform to determine the causes of

physical-inventory discrepancies--the difference between actual and recorded inventories. It consists of a complete review of all transactions, catalog-data changes, shipment discrepancies, and unposted or rejected documentation occurring since the last physical inventory. The purpose of this research is to provide managers with indications of failures in control systems and of potential areas for improvement; reduce similar inventory discrepancies in the future; ensure that proper adjustments were made to the inventory records; and evaluate trends or systemic problems so that corrective actions can be taken. Causative research ends when the cause of the discrepancy has been discovered or when, after reviews of the transactions, no conclusive findings are possible.

PHYSICAL SECURITY

The Joint Chiefs of Staff have defined physical security as those measures designed to safeguard personnel; prevent unauthorized access to equipment, facilities, material, and documents; and protect against espionage, sabotage, damage, and theft. Sound physical-security procedures can reduce loss due to theft and misappropriation of supply items. Without the necessary physical-security measures, opportunities exist for the unauthorized removal of supplies.

When dealing with inventory losses, one of the obvious questions is whether they are caused by theft. Recognizing that theft may have occurred, the next question becomes how to minimize it. According to a Navy report on physical-inventory adjustments, "Security experts state the greatest motivation for theft is opportunity. Further, if opportunity is present without fear of being detected, then theft will be that much more prevalent."[1] If controls to detect theft are improved, the opportunity to steal is reduced. Controls which are fundamental to traditional security programs include guards, storage cages for pilferable items, locks, and personnel-identification badges. Another aspect to control is accurate and prompt identification and reporting of inventory discrepancies. It is important to reduce the error in paperwork processing through good inventory accountability, thereby avoiding an environment which may become conducive to theft.

OBJECTIVE, SCOPE, AND METHODOLOGY

On September 5, 1985, Senator Pete Wilson asked us to review inventory-management practices within the Army, Air Force, Navy, Marine Corps, and DLA supply systems. Senator Wilson requested this review because of his concerns about the security and effectiveness of the DOD supply system after F-14 aircraft parts were stolen and diverted to Iran.

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[1] Report and Management Action Plan--Physical Inventory Adjustments, Naval Supply Systems Command, Jan. 12, 1982.

Our overall objective was to determine how well the services and DLA were managing the secondary supplies that they keep to meet the needs of the nation's military forces throughout the world. Specifically, we looked at how internal controls at all levels worked to ensure the accountability and security of secondary supply inventories.

Concurrent with our audit work, we reviewed 347 reports issued by GAO and DOD audit agencies from 1981 to 1985 to identify past reported supply-management problems in the five defense supply systems. We categorized the problems these reports identified and the recommendations they made for corrective actions. Because Army management of conventional ammunition and explosives has been frequently criticized as a separate and distinct inventory-management problem, we included selective reports on this issue in our review.

To review the internal controls of the components of the DOD supply system, we reviewed management practices and traced supply transactions from ICPs, depots, and users. We conducted audit work at 9 ICPs:

U.S. Army

--Communications-Electronics Command
Fort Monmouth, New Jersey

--Tank-Automotive Command
Warren, Michigan

--Armament, Munitions and Chemicals Command
Rock Island, Illinois

U.S. Air Force

--San Antonio Air Logistics Center
San Antonio, Texas

U.S. Navy

--Ships Parts Control Center
Mechanicsburg, Pennsylvania

U.S. Marine Corps

--Marine Corps Logistics Base
Albany, Georgia

Defense Logistics Agency

--Defense Electronics Supply Center
Dayton, Ohio

--Defense Industrial Supply Center
Philadelphia, Pennsylvania

--Defense Personnel Support Center
Philadelphia, Pennsylvania

We also reviewed internal controls and management practices at 6 wholesale storage depots--each storing supplies directly controlled by one of our selected ICPs:

U.S. Army

--New Cumberland Army Depot
New Cumberland, Pennsylvania

--Letterkenny Army Depot
Chambersburg, Pennsylvania

U.S. Air Force

--San Antonio Air Logistics Center
San Antonio, Texas

U.S. Navy

--Naval Supply Center
Norfolk, Virginia

U.S. Marine Corps

--Marine Corps Logistics Base
Albany, Georgia

Defense Logistics Agency

--Defense Depot Mechanicsburg
Mechanicsburg, Pennsylvania

We also visited 15 retail inventory activities--11 in the United States and 4 in Europe. Each activity sends requisitions through one of our selected ICPs and receives supplies from one of our selected wholesale storage depots:

U.S. Army

--1st Cavalry Division
Fort Hood, Texas

--6th Cavalry Brigade
Fort Hood, Texas

--13th Corps Support Command
Fort Hood, Texas

--82nd Air Borne Division
Fort Bragg, North Carolina

--1st Armored Division
Fuerth, West Germany

--11th Armored Cavalry Regiment
Fulda, West Germany

U.S. Air Force

--Maintenance Activity
San Antonio Air Logistics Center
San Antonio, Texas

--Wright-Paterson Air Force Base
Dayton, Ohio

--Bitburg Air Base
Bitburg, West Germany

--Hahn Air Base
Hahn, West Germany

U.S. Navy

--Naval Shipyard
Portsmouth, Virginia

U.S. Marine Corps

--Marine Corps Base
Camp Lejeune, North Carolina

--2nd Marine Division
Camp Lejeune, North Carolina

--Maintenance Activity
Marine Corps Logistics Base
Albany, Georgia

At each ICP, we selected a sample of items that were stored at the respective wholesale storage depots and requisitioned by the retail activities. By tracing transactions for these items through each supply level, we were able to evaluate each system's accountability for and physical security of controlled items (classified, sensitive, and pilferable) and noncontrolled items. Because of the large number of items managed by each service, the diversity of potential supply locations and time limitations, we were unable to select a statistically valid sample. Consequently, our findings cannot be projected to the universe of military supplies or customers. Instead, we randomly chose those items we believed most susceptible to being lost, stolen, or diverted from the warehouse depots and retail activities. We generally assumed that, because of the more stringent inventory requirements over controlled items, accountability for these items would be better than for noncontrolled items.

We also discussed our audit with officials of the following civilian and defense investigative agencies to obtain any information they might have related to our work:

--Federal Bureau of Investigations,

--Bureau of Alcohol, Tobacco and Firearms,

--U.S. Customs Service,

--Defense Criminal Investigative Service,

--DLA Office of Command Security,

--Army Criminal Investigations Command,

--Army Military Police Operations Agency,

--Naval Investigative Service, and

--Air Force Office of Special Investigations.

During these discussions, we attempted to find out whether these agencies

(1) compiled data on criminal investigations of loss, theft, and diversion of military supplies so that we could get a better perspective on the magnitude of the problem; and

(2) generally shared the results of their criminal investigations with defense supply-management officials so that potential systemic problems in the supply system can be identified and corrected.

All the agencies have management-information systems to capture data on ongoing investigations. The FBI has an extensive data-collection system with its National Crime Information Center. However, none of the systems is set up to identify and retrieve information to provide perspective on the magnitude of theft of military property. For example, we were unable to obtain any total or summary information on (1) what type of items were being lost, (2) the quantity and dollar value of the items lost, and (3) the amount of property being lost at specific bases or installations.

The DOD Inspector General's Office for Criminal Investigations is establishing a management-information system to pull together DOD-wide statistics on all closed criminal investigations involving loss, theft, and diversion of government property. The Defense Investigations Management Information System (DIMIS) has data on about 6,000 cases. Since DIMIS reflects data on closed cases, it does not reflect the most recent investigative activity. However, it is the only system in DOD that provides some perspective on defense-wide criminal investigations.

Concurrent with our work, the Naval Audit Service was conducting a review of the Navy's supply system. Since the emphasis of its work was on Navy aviation parts, we limited our work to nonaviation items. In addition, the Navy's Judge Advocate General was reviewing certain allegations of improper supply management aboard the USS Kitty Hawk.[2] Because of this, we limited our review work in the Navy to the Navy's Ships Parts Control Center and the Naval Supply Center and Naval Shipyard at Norfolk, Virginia. We did not review supply procedures for the Navy afloat (on board ships).

Our review was conducted in accordance with generally accepted government auditing standards.

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[2]Navy Judge Advocate General, Investigations to Inquire Into Allegations of Fraud, Mismanagement, and Improper Supply Procedures Aboard the USS Kitty Hawk (CV 63), Submitted by AW2 Robert W. Jackson, USN, on June 11, 1985.

ARMY INVENTORY-MANAGEMENT PRACTICES

As of September 30, 1985, the Army managed wholesale inventories of general supplies and ammunition valued at about $29.4 billion. As with the other services, Army inventory is managed at two supply levels: (1) the wholesale supply level, composed primarily of ICPs and depots, and (2) the retail supply level, made up of units, posts, camps, and stations. Managing inventories requires detailed record-keeping; periodic physical inventories; good physical security; and effective procedures for requesting, receiving, issuing, and disposing of material and supplies.

Prior reviews of the Army's management of its inventories revealed many weaknesses at both the wholesale and the retail supply levels--particularly, inaccurate inventory records and inadequate physical inventories. Physical-security deficiencies were found primarily at retail storage facilities. According to the Army, it implemented corrective actions for many of the shortcomings found during prior reviews; however, our examination of Army inventory-management practices at the activities we visited identified continuing accountability and physical security weaknesses in such areas as

--identifying and safeguarding pilferable and sensitive items,

--ammunition and explosives losses,

--excess repair parts,

--inaccurate inventory records,

--discrepant shipments,

--inaccurate requisition records,

--receipt-processing procedures, and

--physical security.

PILFERABLE AND SENSITIVE ITEMS NOT PROPERLY IDENTIFIED OR SAFEGUARDED

Generally, pilferable items are those items which have a ready resale value or civilian utility and thus are susceptible to theft. Other than this general definition, we found that the Army Tank-Automotive Command (TACOM)--an ICP--had no guidelines for use by their personnel and contractor personnel for identifying, classifying, and coding the pilferable items it managed. As a result, Army elements may be safeguarding some items incorrectly classified as pilferable, while other items that should be safeguarded are not being controlled.

For example, as of October 1985, 1,522 of the items TACOM managed were classified as pilferable. A review of the listing of these items disclosed that almost all were special-purpose hand tools which, because of their unique characteristics, may not be as subject to theft as other items. Conversely, we found that the TACOM listing of noncontrolled items contained many items which, by their nature, would appear to be more susceptible to theft--such as automobile tires, headlights, spark plugs, batteries, and other automotive items having a civilian utility.

In January 1986, TACOM officials informed us that none of the Army ICPs had any guidelines for identifying and classifying pilferable items. Because of the lack of specific criteria, other Army ICPs may be experiencing similar problems.

At the retail supply activities we visited, pilferable and sensitive items were not being properly segregated and safeguarded. Warehouse personnel were using their judgment rather than the Army Master Data File--which contains the Army's official item-management data--to determine which items should be classified as pilferable and sensitive. As a result, pilferable and sensitive items were being stored with noncontrolled items. Since units we visited did not always properly identify and intensively manage these items, they may not realize whether the items are being stolen. Failure to adequately identify controlled items could result in loss of the items to theft or over control of improperly coded items.

At one installation, we inventoried, at four different using organizations, a total of 92 repair parts which were considered pilferable. We found discrepancies--a gain or a loss--on 33 percent of the items. Examples of items inventoried included such things as headlights, windshield wiper blades, and spark plugs.

Diversion of individual equipment items

Individual equipment items, such as helmets, canteens, and tents (referred to in the Army as TA-50 gear), are being lost, stolen, and pawned by soldiers. We were not able to identify the magnitude of the problem DOD-wide; however, these situations exist primarily because there are ready buyers for TA-50 items.

Items issued to soldiers are the responsibility of soldiers. Items in inventory are the responsibility of the post and unit commander through the installation's central issue facility. At Fort Hood, it appeared that TA-50 items were being properly managed at the central issue facility. (The last inventories performed resulted in less than 1-percent adjustment rates.) However, at Fort Bragg and in Europe, we found examples of TA-50 items being diverted from the government by individual soldiers and civilian employees.

--At Fort Bragg, a local military surplus dealer paid an undercover FBI agent for exchanging old TA-50 equipment for new at the base central issue facility.

--In Chicago, a surplus dealer purchased TA-50 and other equipment valued at $50,000 from a local surplus dealer in North Carolina, who had paid three soldiers and five civilians to steal the material from Fort Bragg warehouses.

--At one Army installation in Europe, civilian contractor employees from the central issue facility reportedly stole over $32,000 worth of equipment, mostly TA-50 equipment. Moreover, a physical inventory conducted by Army investigators after the theft found an additional $161,000 worth of TA-50 equipment that was not on the facility's accountable records.

AMMUNITION AND EXPLOSIVES LOSSES

Army installations are losing accountability over large quantities of ammunition and explosives, some of which is lost or stolen. According to the Bureau of Alcohol, Tobacco and Firearms, military explosives were used in 445 bombings within the United States during the 10-year period from 1976 through 1985. Moreover, the number of such bombings has been on the increase, rising from 31 in 1983 to 43 in 1984 to 54 in 1985.

According to the Army Inspector General, the amount of ammunition and explosives lost by the Army each year cannot be determined.[1] Controls are inadequate to detect diversion. The loss or theft of ammunition and explosives is due to many factors, including

--the lack of command emphasis,

--poor accountability procedures,

--time-consuming and burdensome turn-in procedures for excess training ammunition,

--inaccurate forecasting of ammunition requirements for training, and

--the lack of policies and procedures for coordinating accountability.

The potential exists for loss of ammunition at supply points where losses can occur because all supply transactions are not posted, resulting in inaccurate inventories.

During our review, we identified documented examples of thefts at Fort Bragg involving training ammunition, including

[1] Ammunition and Explosive Accountability, United States Army Inspector General Agency, Sept. 5, 1985.

rockets and bulk explosives, which occurred in 1985. During the period October 1984 through October 1985, the Army Audit Agency conducted a detailed review of training ammunition management in Europe and the United States, including Fort Bragg. Their final report also confirmed inadequate accountability over ammunition.[2]

The report points out that training-ammunition authorizations were higher than the amounts of ammunition expended. Table II.1 shows authorizations and expenditures for fiscal years 1982 to 1984.

Table II.1: Ammunition Authorizations and Expenditures

Fiscal year	Authorizations	Expenditures	Difference	Percent of Authorization
	millions			
1982	$ 973	$ 707	$ 266	27
1983	940	710	230	24
1984	993	734	259	26
Total	$2,906	$2,151	$ 755	26

As the Army Audit Agency noted, the $755 million in overstated requirements reduces the incentive to conserve, and could actually encourage waste. Moreover, the 1985 authorization was more than $300 million higher than the amount expended in 1984.

In addition, the Agency reported that significant quantities of ammunition and explosives were found at unauthorized locations, turned in under the Army's amnesty program, or diverted to criminal use. Table II.2 shows the fiscal year 1984 breakdown for 1,200 occurrences at those Army activities where ammunition was found at unauthorized locations.

Table II.2: Incidences of Finding Ammunition in Unauthorized Locations

Location	No. of occurrences	Small arms (rounds)	Grenades	Bulk explosives (pounds)
Fort Bragg	600	32,000	1,500	3,600
Fort Benning	500	15,000	1,200	750
Fort Lewis/ Yakima Firing Center	100	83,400	247	0
Total	1,200	130,400	2,947	4,350

[2]Training Ammunition Management, Army Audit Agency, Jan. 16, 1986.

During fiscal year 1984, about 200 tons of ammunition were turned in under the amnesty program on a no-questions-asked basis at two primary ammunition supply points in U.S. Army, Europe. Further, the Army Audit Agency reported that, on four occasions, federal officials in undercover operations purchased quantities of ammunition from soldiers at Fort Bragg, including mines, rockets, grenades, bulk explosives, and small arms.

Although many thefts, losses, and recoveries of ammunition and explosives are routinely reported to Army Headquarters, some are not. For example, at Fort Bragg we found that, in November 1984, it reported that almost 3 million rounds of ammunition and hundreds of explosive items were adjusted in its inventory records for shortages (17,933 items) or overages (2,945,342 items). However, we also found that in 1984 and 1985, there were numerous instances of ammunition or explosive items found on post and off post that were not reported.

The Army is unaware of some ammunition and explosive item losses until the items are recovered, as evidenced by the fact that items are reported as lost or stolen the same day they are recovered. For example, on March 14, 1985, the Army reported that the Bureau of Alcohol, Tobacco and Firearms recovered 12 40MM fragmentation hand grenades along with other assorted items of ammunition and explosives. These same items were reported by the Army as lost or stolen on the same day.

The Army has known about many of its ammunition-accountability deficiencies for years, but it has made no significant policy changes or efforts to eliminate systemic causes, according to the Army Inspector General's September 1985 report on ammunition and explosives accountability. The Army is currently revising Army Regulation 710-2, which sets out supply policies for retail activities, to include revised policies on ammunition accountability. According to Army officials, new procedures should be in effect by May 1986.

EXCESS REPAIR PARTS IN EUROPE

The Army has accumulated a significant quantity of excess repair parts in Europe. According to Army officials, the accumulation of repair parts can be attributed primarily to two factors: (1) the moratorium that halted the turn-in of excesses to disposal activities and (2) the large quantities of repair parts requisitioned to support new weapon systems. The moratorium on turn-ins to disposal activities, which started on

July 2, 1984, was lifted on September 28, 1984. During this review, we did not evaluate its impact on Army supply activities. However, we did collect data on the requisitioning of excess repair parts to support new weapons systems.

Historically, the Army has not been able to accurately determine its repair-parts requirements for provisioning parts for new weapon systems issued to field units. The initial stockage quantity of repair parts is requested by using units, based on support list allowance cards provided by the wholesale supply level. The wholesale level develops the repair-parts requirements primarily from engineering data provided by the equipment manufacturers.

Based on the allowance cards, large quantities of repair parts were requisitioned and received by using units in Europe. Repair parts stockage levels became too large for the units to manage effectively. In addition, a significant quantity of the items were not needed during the first 2 years after the new weapon systems were fielded. Consequently, the repair parts were declared excess to the needs of the units. While 20 to 30 percent of initial stockage repair parts were retained by the units, the remaining 70 percent to 80 percent were returned to Army depots in the United States as excess.

The Army in Europe returned at least 674 MILVANS (8' X 8' X 20' trailers) of excess parts to the depots during an 18-month period beginning July 1984. As of January 1986, 585 MILVANS had been received at Letterkenny Army Depot, 477 of which had been processed by the depot. We made the following observations regarding the items processed:

--Although $88 million of material was put back into the Army's supply system, $13.8 million of this amount was shipped back to other Army units in Europe.

--Of 183,000 line items, 36 percent had a value of less than $20. The Army's estimated cost of shipping items back to the depot and subsequently redistributing them is more than $70 per line item.

--There is no accountability over the excess material until it is identified and returned to the supply system. We sampled 20 items and found that they were off the accountable records for an average of 261 days. On 6 of these items, the Army made purchases during this time, not knowing that these items were in its inventory.

--Of 24,600 items processed during the 6-month period ending January 15, 1986, 15,700 could not be identified by a national stock number. Without knowing the stock number of these items, the Army was not able to adequately screen them against requirements.

--The remaining 107 MILVANS have awaited processing for as long as from 4 to 13 months.

--There were 16 MILVANS that contained material that will probably be sent to disposal because the items either could not be identified or were junk.

The main problem is not that the excess was returned but how it was generated. According to senior Army officials, the Army does not have the maintenance engineers it needs to adequately review contractor estimates and determine what parts it needs and should buy. Only after units acquire the weapon systems and repair parts do they find that a large percentage of the parts are not needed.

To prevent one unit in Europe from excessing material that another unit needs, the Army is planning to establish a European redistribution facility in West Germany, which is expected to become operational about June 1986. This facility will be under the administrative management of New Cumberland Army Depot and will use satellite communications between Europe and the United States to facilitate the redistribution of excess stock. Cost estimates are being prepared for the new facility and communications link.

INACCURATE INVENTORY RECORDS AT ALL SUPPLY LEVELS

Record inaccuracies continue to exist at ICPs, depots, and using units.

At TACOM, statistical data indicated that no significant improvements have been made in the accuracy of inventory records for the past 5 fiscal years. Inventory-records accuracy is the ratio of unadjusted records to the number of inventories taken. Although reported inventory accuracy during the period ranged from 84.5 percent to 90.7 percent against the Army's goal of 85 percent, as shown in table II.3, actual record accuracy was far less.

Table II.3: TACOM Records-Accuracy Percentages

Fiscal year	1981	1982	1983	1984	1985
Actual, based on all records adjusted	31.38	39.07	38.03	31.93	36.73
Reported, based on major records adjusted	84.46	90.48	90.38	90.71	86.86

This difference between actual and reported percentages exists because the reported rates were derived by excluding all record adjustments that were less than $500 per item in fiscal years 1981 and 1982 and less than $800 per item in later years. Table II.4 shows the dollar value of total adjustments as a result of physical inventories for TACOM for fiscal years 1981 through 1985.

Table II.4: TACOM Physical-Inventory Adjustments

Fiscal year	1981	1982	1983	1984	1985
	----------millions----------				
Gains	$520.3	$363.0	$146.5	$267.9	$289.9
Losses	365.7	393.2	58.9	341.2	262.6
Total	$886.0	$756.2	$205.4	$609.1	$552.5

As shown in table II.5, at the Army Communications-Electronics Command (CECOM), over 50 percent of the CECOM-managed items inventoried in fiscal years 1984 and 1985 required adjustments.

Table II.5: CECOM Inventory-Adjustment Data

	Fiscal year 1984			Fiscal year 1985		
	Number	Percent	Value (millions)	Number	Percent	Value (millions)
Items inventoried	58,538		$2,831.8	37,574		$2,859.0
Major Adjustments (over $800)	9,290	15.9	144.6	6,085	16.2	86.5
Minor Adjustments (under $800)	24,316	41.5	28.5	13,468	35.8	13.1
Total	33,606	57.4	$173.1	19,553	52.0	$99.6

Table II.6 shows the dollar amount of adjustments--gains and losses--for CECOM.

Table II.6: CECOM Physical-Inventory Adjustments

Fiscal year	1981	1982	1983	1984	1985
	----------millions----------				
Gains	$ 53.5	$ 76.7	$38.4	$ 62.2	$43.7
Losses	57.2	79.6	34.7	110.9	55.9
	$110.7	$156.3	$73.1	$173.1	$99.6

At the depot level, records inaccuracies were evidenced by the significant number of adjustments to inventory records we found. These adjustments were reversals of prior entries or accounting adjustments to correct clerical errors. The impact of reversals on inventory record gains and losses is demonstrated by the data in table II.7. This data was gathered from New Cumberland Army Depot for fiscal years 1984 and 1985.

Table II.7: New Cumberland Army Depot Reversals of Gains and Losses

Fiscal year	1984[a]	1985
	------millions------	
Total gains	$101.2	$111.1
Reversals	20.7	31.3
Net Gain	$ 80.5	$ 79.8
Total Losses	$ 86.6	$ 70.0
Reversals	32.3	43.4
Net Losses	$ 54.3	$ 26.6

[a]Last three quarters.

Our review of causative research findings for physical-inventory adjustments for the fourth quarter of fiscal year 1985 revealed that the New Cumberland Army Depot failed to identify the cause for 42 percent of the discrepancies which led to the adjustments. At Letterkenny Army Depot, the failure rate was 86 percent for the same period. Without adequate causative research, inaccurate inventory records are likely to continue as the problems that caused the inventory inaccuracies in the first place were not identified and corrected.

Our independent check of physical-inventory balances revealed discrepancies in depot custodial records. We inventoried 30 items at two depots and found discrepancies in the recorded balances for 13 of the items. Table II.8 shows examples of the discrepancies.

Table II.8: Depot Physical-Inventory Discrepancies

Item	Custodial record balance	Official depot count	Inventory quantity gain/loss	Value of discrepancy
Remover	311	533	222	$ 2,069
Heater	192	433	241	188,703
Parts kit	1,067	6,800	5,733	68,395
Accessory kit	15	12	(3)	(43,260)
Wrench	519	463	(56)	(575)
Scissor jack	272	107	(165)	(7,908)

At the using unit level, the inventory records did not accurately reflect the quantity of items on hand. As table II.9 shows, several 100-percent inventories of two warehouses in West Germany, conducted between October 1984 and December 1985, showed adjustments ranging from 4 percent to 83 percent.

Table II.9: Inventory Adjustments at Class II (Clothing and Individual Equipment) and Class IX (Repair Parts) Warehouses

Inventory date	Class II warehouse (Adjustment rate)	Inventory date	Class IX warehouse (Adjustment rate)
Dec. 1984	4	Oct. 1984	61
June 1985	72	July 1985	19
Oct. 1985	53	July 1985	32
		Dec. 1985	83

The following is an example of the potential impact of inaccurate inventory records at the using-unit level. In January 1985, over $32,000 worth of material, mostly TA-50 items, was reportedly stolen by a government contractor from an installation warehouse in West Germany. The items were recovered by local authorities and the Army Criminal Investigation Division. However, a 100-percent physical inventory failed to confirm that the material came from that warehouse. The recovered items were not on the accountable records of the storage-and-issue facility. Moreover, a significant quantity of similar items, about $161,000, were found that also were not on the facility's accountable records. As a result, the contractor could not be held accountable.

Our physical inventories of items stored in secured and unsecured areas of a using unit's warehouse in Europe showed that the on-hand quantities of the items differed significantly from the quantities of items shown on the warehouse's records and the accountable records. Table II.10 shows examples of these discrepancies.

Table II.10: Using-Units' Physical-Inventory Discrepancies

M-16 or M-60 weapons parts	Custodial record quantity	Accountable record quantity	On-hand quantity
Screw, Butt	139	426	58
Pin, Firing	5	249	165
Barrel	5	13	4
Magazines	3,251	2,040	0
Guard	209	39	534
Key, Bolt	36	57	60

Army officials believe that most of these discrepancies represent interface problems between computers, not real losses. They contend that the DS4 computer (accountable record) was feeding outdated, erroneous data to the automated warehouse computer (custodial record). In January 1986, 1st Armored Division warehouse officials began working with U.S. Army Europe computer software specialists to verify the specific problems and report them to the Army Logistics Center in the United States. Until problems are corrected, physical counts will be relied on as the basis for causative research and inventory adjustments.

SIGNIFICANT NUMBER OF DISCREPANT SHIPMENTS

Army Regulation 735-11-2 requires activities to submit a Report of Discrepancy (ROD) for the receipt of discrepant shipments. Examples of the type of discrepancies usually covered are as follows: shortages, overages, wrong item, material condition, documentation, marking, misdirected, and packaging.

During fiscal year 1985, the Army Materiel Command (AMC) Central Repository for ROD data reported that 22,208 RODs were processed. While the total dollar value of discrepancies was over $75 million, the largest single discrepancy for the year was shortage of material in shipments. For the first half of fiscal year 1985, shortages accounted for 51 percent of discrepancies for wholesale shipments and 38 percent for the second half of the fiscal year. An AMC analysis of shipment

discrepancies for fiscal year 1985 revealed that, while actual loss to the supply system amounted to only $228,225, potential loss to the supply system totaled $7.9 million. "Potential loss" is defined as discrepant shipments where a loss is possible but cannot be positively established. An AMC official stated that no system exists within the Army for determining the final disposition of potential losses.

We have reported in the past that untimely and improper processing of discrepancy reports can result in a loss of control over material, lost recovery rights, and material remaining in a questionable status for long periods of time.[3] In its 1984 report on material shipments from defense depots, the DOD Inspector General, as shown in table II.11, noted the following discrepancy-reporting statistics when material was not received by the customer.[4]

Table II.11: Discrepancy Reporting on Non-Receipts

	Number of shipments	Total value
Discrepancies that should have been reported	394	$551,583
Discrepancies reported	52	38,621
Discrepancies not reported	342	$512,962

At the three Army retail activities we visited, we obtained indications that not all RODs are being processed. During our review, we found that 61 RODs were filed by Fort Hood during October and November of 1985; yet the number of receipts processed in that same period was 68,516. These statistics indicate that either the wholesale shipments to Fort Hood retail activities are almost perfect, or the units at Fort Hood are not adequately filing discrepancy reports. Also, the 1st Armored Division, in West Germany, had no record of RODs for repair parts and, in November 1985, had only begun to file RODs routinely for other types of items.

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[3] Improvements Needed in Defense's System for Controlling Material Shipments to Defense Logistics Agency Depots and Customers, PLRD-82-81, June 10, 1982.

[4] Control Over Shipments of Material From Department of Defense Depots, Office of Inspector General, Department of Defense, Nov. 14, 1984.

REQUISITIONS NOT ACCURATE

Inaccurate requisitioning practices hamper effective inventory management. Requisitions for unneeded items or inaccurate quantities increase the government's costs of managing its supplies.

Army Missile Command (MICOM) data shows that, when it challenged requisitions for items it does not stock, many requestors cancelled their orders. During the period October 1981 through December 1985, MICOM challenged 2,466 requisitions received for non-stocked items. Of the requisitions rejected, 97 percent were rejected after the requisitioners failed to justify a need for the requested items. As a result of the rejections, MICOM estimated a cost avoidance at $2.3 million. If requisitions for non-stocked items were challenged at all Army ICPs, MICOM estimated potential cost avoidance for the Army at $23.1 million.

At the using-unit level, we found that one installation purchased items outside of the established supply system. Since October 1984, Fort Bragg has purchased more than 21,700 small-arms cleaning kits outside of the established supply system. Further, it had entered into a contract to purchase up to 66,000 more. Two separate local procurement contracts were issued for the kits. Under the first contract, 12,582 kits were purchased from a military surplus store in Georgia, for $6.75 to $7.86 each. The latest contract, issued in September 1985, provides for the purchase of 75,000 kits at $7.12 each from a hardware store in Fayetteville, North Carolina. All the items in the kits are available through the Army's supply system for $2.29 except for one item, a silicone-treated gun cloth. (This cloth is not available through the Army's supply system because the technical manual which prescribes maintenance procedures for the Army's M-16 rifle specifically states that a "treated cloth" should not be used to clean the outer surfaces of the weapon.)

The Army's actions in this case could cost the government more than $362,000 in additional costs. Fort Bragg's Chief of Staff agreed to review the latest contract to determine whether part of the planned procurement can be cancelled.

In West Germany, we found a situation where the process failed to detect and correct a requisition for an unusually large quantity of supplies. An element of the 1st Armored Division mistakenly requisitioned 9,000 U-joint kits. After receiving the items, it distributed 600 kits, swapped 1,400 kits with another organization, and excessed 7,000 kits worth about $69,000. However, we could not find any accountability for the excessed kits at either the 1st Armored Division or the facility to which they were reportedly sent. The 7,000 kits remained unaccounted for, as of February 26, 1986.

MATERIAL-RECEIPT PROCESSING REQUIRES ADDITIONAL ATTENTION

Material-receipt confirmation procedures and practices at ICPs, depots, and using units require management attention.

The current Army receipt and issue system does not provide adequate confirmation of material receipts when material is shipped directly from vendors' plants to requisitioners. Although the vendors notify the ICPs of the direct shipments, the system does not provide for the positive confirmation of receipts of material. A recently completed study of Army physical-inventory control procedures points out that the receiving process is the greatest contributor to inventory record discrepancies.[5] The study noted that prepositioned material receipt and due-in documents, which alert depot personnel to expect material receipts, are frequently not on file at the depot when stock arrives at the loading docks.

During fiscal year 1985, the six Army ICPs placed 146,688 orders involving direct vendor deliveries. Under the current system, the ICPs assume that the material is received by the requisitioners. After 90 days, whether or not they have confirmation that the material was received, ICPs no longer carry the order as a due-in on their records.

According to officials at one Army ICP, the Army has recognized this weakness in receipt confirmation involving vendor direct deliveries and has been planning a procedural change since 1982. The change would have required requisitioners to advise ICPs upon receipt of direct shipments; however, it has never been made.

At depots, controls do not ensure that all receipts are properly posted. Also, some unposted receipts identified during physical inventories are corrected by accounting adjustments or by processing as new receipts for material "found on post." Improperly posted receipts result from human error and usually can be corrected with accounting adjustments. Unposted receipts identified during physical inventories should be corrected by inventory-adjustment reports, and the failure to post the original receipt should be reported as the cause of the adjustment.

Examples of how weaknesses in receipt processing affect inventory-record accuracy and inventory adjustments follow.

--A May 9, 1983, receipt of 26,400 screw caps (NSN 5305-00-042-6417), valued at about $2,000 was incorrectly entered on depot stock records as 26,400 valves (NSN 5305-00-042-8417), valued at about $37 million. This error was not detected until we attempted to inventory the

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[5] Army Physical Inventory Control Procedures, Howard Finley Corporation, Feb. 18, 1985, and Mar. 25, 1985.

valves on December 19, 1985. Subsequently, the valves were deleted from the depot stock records via an accounting adjustment.

--A physical inventory disclosed a stock overage of 25,672 shoes for "tracked vehicles" valued at more than $3.0 million. The depot added the items to the stock records as a new receipt "found on post."

--Our physical inventory of oil-filter-parts kits disclosed a stock overage of 5,733 kits, valued at more than $68,000. The depot added the 5,733 kits to the stock records, using an accounting adjustment.

Receipt processing at the using-unit level was affected by lost documentation, improperly recorded data, and supply transactions that were closed without receipt confirmation. Examples of situations we found at the using units are as follows:

--Records at the main supply warehouse at one base in Germany showed that a unit placed six requisitions for 10 M-1 tank lubricating guns and that the guns had been received and sent to the unit. However, the unit had no record of either ordering or receiving the lubricating guns.

--In September 1985, the Army's automated logistics system closed 29,769 shipments from depots to local units at Fort Hood. However, over 17 percent, or 5,143 of the shipments, were closed administratively. This means that the records were dropped from the system because the customer had not acknowledged receipt of the material within 45 days of the shipment date. The system does not follow up to verify actual receipt.

INADEQUATE PHYSICAL SECURITY

Physical security at some unit warehouses and central issue facilities was inadequate to prevent unauthorized entry to the facilities and the possible diversion of material. The storage facilities lacked adequate barriers to prohibit unauthorized entry, weak control over customer access and keys, and improperly secured doors and gates. For example:

--Accompanied by the local Provost Marshal, we made an unannounced night visit to one warehouse at the 11th Armored Cavalry Regiment in Fulda, West Germany, and found two of the facility's seven gates unlocked. We entered the storage facility and, once inside, gained access to an unlocked and unmanned van containing a variety of computer equipment, such as keyboards, power supply and modems, as well as various vehicles and computer repair parts.

--During an unannounced visit to a warehouse at the 1st Armored Division in Fuerth, West Germany, we found an unlocked gate that allowed us to enter an outdoor storage tent, containing pilferable items such as automotive batteries, electrical wire, and copper tubing. In addition, the unlocked gate provided access to the warehouse itself through three unlocked doors. These doors were out of sight of the single computer clerk on duty. We also noticed that both computer cages in the warehouse were unlocked and unattended.

Our review of local Army Criminal Investigation Division files revealed two incidents during 1985 that further illustrate the inadequacy of physical security measures at two of the warehouses we visited in West Germany. Abandoned tunnels dating from World War II exist under both warehouses. A tunnel was allegedly used in April 1985 to enter one warehouse and remove four night vision devices and other items. At the other warehouse, alleged access was gained via a tunnel or a loosely mounted floor-level window and a personal computer was removed. At the time of our visit, most of the tunnels had not been sealed; however, an approved work order existed for surveying and sealing the tunnels.

AIR FORCE INVENTORY-MANAGEMENT PRACTICES

The Air Force procures, stores, repairs, and distributes supplies essential to conduct its mission. The Air Force Logistics Command (AFLC) through its five Air Logistics Centers manages the Air Force supply system--about 900,000 line items with a worldwide inventory valued in excess of $19 billion.

The Air Force recognizes that it has problems with the management and control of its inventory. Since 1982, its methods of inventory taking and inventory control have been, according to the Air Force, comprehensively scrutinized. The Arthur Young Company has studied the process and assisted in defining improvements. Recent initiatives in the area include updating automatic data processing equipment, implementing the new stock control and distribution system, bar coding assets, and automating the existing warehousing system.

Even with these improvements, at the activities we visited, we found that many long-standing problems in the Air Force supply system continue. For example:

--Inventory adjustments are growing.

--Causative research is not identifying causes.

--Reports of survey are not used as intended.

--The equipment-management system loses visibility and accountability over some assets.

--Unserviceable items are improperly returned.

--Supply transactions are inaccurate.

--Inventories of serviceable excess items are growing but not reported.

--Controls over pilferable items are weak.

--Physical security is inadequate.

Concurrent with our review, the Air Force Inspector General conducted a special inspection of supply-system vulnerability from October 5, 1985, to February 26, 1986.[1] The inspection report addresses deficiencies similar to those we identified in the areas of accountability and physical security. For example:

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[1]Special Inspection of Supply System Vulnerability, Office of Air Force Inspector General, Feb. 26, 1986. (Details of this report are not releasable without permission of the Secretary of the Air Force.)

--Weaknesses in inventory procedures and adjustment practices could have resulted in inaccurate records at wholesale and retail supply activities and, therefore, could have resulted in theft or diversion of property.

--Accountability for aircraft component parts undergoing repair was poor, resulting in increased vulnerability to theft.

--Contractors could easily acquire government-furnished material by manipulating requisitioning data because contract administration procedures were inadequate.

--Physical-security practices at both wholesale and retail maintenance and supply activities provided numerous opportunities for theft.

INVENTORY ADJUSTMENTS GROWING

Accurate inventory records are essential to the economic and effective supply support of Air Force activities. Inaccurate records can result in critical supply shortages and prolonged delays in filling requisitions for material affecting mission readiness, inflated requests for funds, unnecessary expenditure of funds for procurement and repair of stocks, maldistribution of stocks, and accumulation and disposal of excess stocks.

To maintain accurate records, Air Force supply activities are required to take annually scheduled physical inventories on a complete, sample, or selective basis. Activities also are required to take unscheduled physical inventories when requested by management activities, such as ICPs, or whenever needed to confirm and correct suspected discrepancies. After taking physical inventories, activities are to promptly make necessary adjustments to their records and to report physical counts to the appropriate inventory-management activities.

In recent years, the San Antonio Air Logistics Center (SAALC) has begun an effort to consolidate its inventory from multiple storage locations to single locations. This effort has resulted in identifying and correcting past imbalances in the inventory. Table III.1 shows San Antonio's inventory and adjustments for fiscal years 1981 to 1985 and compares these adjustments to the total for AFLC, which includes all five air logistics centers.

Table III.1: San Antonio Inventories and Adjustments

Fiscal year	Inventory value (billions)	Inventoried Value (billions)	Inventoried Percent	Value adjusted (millions)	Adjustments as percent of Total value SAALC	Total value AFLC	Value inventoried SAALC	Value inventoried AFLC
1981	**$2.650**	**$2.282**	**86**	**$ 45.9**	**1.7**	**1.8**	**2.0**	**2.5**
1982	$3.065	$1.759	57	$ 65.2	2.1	2.0	3.7	2.6
1983	$3.576	$1.686	47	$ 70.2	2.0	1.6	4.2	2.5
1984	$4.222	$1.321	31	$124.8	3.0	2.3	9.4	4.0
1985	**$5.226**	**$1.271**	**24**	**$186.7**	**3.6**	**3.0**	**14.7**	**5.2**

As the table shows, San Antonio inventory adjustments have quadrupled since fiscal year 1981--from $46 million to $187 million. At the same time, the dollar value of items inventoried significantly decreased--from 86 percent to 24 percent. The resultant statistics provide a picture of inventory effectiveness subject to interpretation, depending on how adjustment percentages are portrayed. For example, when percentages are based on inventory value, San Antonio's fiscal year 1985 adjustments of 3.6 percent compared to AFLC's of 3.0 percent is not extraordinary. However, when adjustment percentages are based on value inventoried, San Antonio's 14.7 percent far exceeds what was being experienced Air Force-wide.

According to Air Force officials, the increase in adjustments were expected as AFLC has changed the focus of its inventory policy to concentrate its efforts on those items that are most active or are considered critical items. The Air Force contends that its strong effort to reconcile inventory records resulted in a higher rate of inventory adjustments and that these are an expected result of corrective actions and not a symptom of management laxity. Further, it contends that a shortage of over 700 personnel within AFLC distribution functions also contributed to the increasing number of inventory adjustments because, as fewer people try to move more material, sloppy warehousing practices occur. Previous attempts to fund the additional manpower could not be supported within the Air Force budget request.

CAUSATIVE RESEARCH NOT IDENTIFYING CAUSES

Causative research is the analysis that DOD components should perform to determine the causes of physical-inventory discrepancies. The objectives of this research are to provide managers with indications of failures in control systems and of

potential areas for improvement; reduce similar inventory discrepancies in the future; ensure that proper adjustments were made to the inventory records; and evaluate trends or systemic problems so that corrective action can be taken. Within the Air Force, causative research is required when inventory variances are found that exceed prescribed dollar limits--$800 per item for Air Logistics Centers and $100 per item for Air Force base inventories.

GAO and Air Force Audit Agency reports, issued in 1983 and 1984, respectively, found several problems with Air Force causative research:

--Causative research did not always identify the primary causes for inventory discrepancies.

--Little or no follow-up was taken on any of 77,228 variances identified at the five air logistics centers.

--Required causative research for some inventory adjustments was not always done.

--In fiscal years 1981 and 1982, air logistics centers could not determine reasons for 43 percent and 39 percent, respectively, of the major inventory variances.

For fiscal year 1985, the San Antonio Air Logistics Center could not determine reasons for 7,224 (52 percent) of the 13,844 major inventory variances researched.

Our work at Wright-Patterson Air Force Base revealed that research efforts at the base supply level are also ineffective. Although the inventory-analysis unit of base supply spent 70 percent of its staff resources doing causative research, the process usually just identifies and verifies inventory discrepancies. It rarely determines causes, recommends corrective actions, or evaluates trends. Inventory-analysis reports routinely contain a standard phrase: "There is no reason to believe theft, fraud, or misdemeanor are involved in items requiring adjustments." This phrase permits base supply to adjust the records.

According to Air Force officials, since DOD policy limits causative research of inventory variances to a 1-year history of transactions and documentation, a majority of causes may not be identified. Because the Air Force is not able to research transactions more than a year old, it contends that the inventory-variance resolution rate does not indicate how adequate or effective research efforts are. Further, Air Force officials believe that San Antonio's finding causes for 48 percent of the variances researched reflected a higher resolution rate than expected.

REPORTS OF SURVEY NOT USED AS INTENDED

When causative research of inventory variances indicates that fraud, theft, or negligence may be involved in losses, further investigation is conducted through reports of survey. Reports of survey are performed to determine whether individuals are responsible and liable for lost or damaged property. However, we found that

--reports of survey are not being used as intended, and

--individuals are rarely assessed for lost or damaged property.

AFLC reported that, in the last 3 fiscal years, air logistics centers reported about $1.2 billion in inventory adjustments. Reports of survey are generally required when causative research of inventory variances indicates that losses are due to other than normal circumstances, such as paperwork and posting errors. For these 3 years, the 5 air logistics centers completed 3,600 reports of survey on about $37 million of lost or damaged government property--about 3.1 percent of total adjustments. Financial liability was assessed to individuals for about $165,600, or .4 percent, of the reported lost and damaged property. A 1985 independent consultant's study of inventory management procedures at air logistics centers reported that its review of 137 reports of survey done during fiscal year 1984 at 2 air logistics centers found no individual liable.[2] The study concluded that the report of survey is not performing its intended role and the resources required to perform them could be used more appropriately elsewhere.

The Air Force is aware of the problem with reports of survey. It believes that, with implementation of proposed revisions to DOD Instruction 7200.10, "Guidance for Accounting and Reporting of Government Property Lost, Damaged, or Destroyed," the number of meaningless reports of survey investigation will decrease substantially. At the same time, it believes that focusing attention on cases of apparent fraud, theft, or negligence will enhance the purpose of report of survey investigations.

EQUIPMENT-MANAGEMENT SYSTEM LOSES VISIBILITY AND ACCOUNTABILITY OVER SOME ASSETS

The Air Force Equipment Management System (AFEMS) is supposed to provide an accounting trail from the time equipment items are procured and enter into the supply system until the items are removed from the system or sent to disposal. We

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[2]Study of Air Logistics Center Inventory Procedures, Arthur Young and Company, Jan. 25, 1985.

found that problems in Air Force management of equipment results in the loss of visibility and accountability over some assets.

To requisition equipment items, an Air Force activity must have an authorized requirement for the item. Once obtained, the activity is required to report monthly on the status of the assets under its control.

There is an exception to this requirement. An activity can obtain an item of equipment without demonstrating an authorized requirement when the 6F advise code is used in the requisitioning document. A 6F advise code is used when an equipment item is to be issued to an agency that is not required to report data on equipment inventories, such as other services or contractors. Once shipped, AFEMS accounts for the item as a loss to the system because bases do not report on the status of the item. The system erases visibility, control, and accountability for the equipment item.

In 1983, the San Antonio Air Logistics Center found that Air Force bases had submitted requisitions for $5.5 million using the special code to obtain equipment for contractors. During our review, we found that

--the use of the special code to requisition equipment items has grown at the San Antonio Center which had unfilled orders for equipment valued at $8.5 million with the special code, as of January 17, 1986;

--the San Antonio Center did not know how much equipment had been issued to Air Force activities that used the special code;

--Air Force activities terminate their accountability when equipment obtained with the special code is issued to contractors, the contractors assuming accountability; and

--contractors may be able not only to obtain equipment items from the AFEMS but also may ultimately have the only record of the equipment.

According to the Air Force, 6F-coded requisitions tell the item manager that the equipment requisitioned is exempt from reporting to AFEMS. Further, when the item is delivered to the customer, the manager loses visibility of the asset; however, the Air Force states that this does not mean that accountability of the equipment is compromised; accountability is maintained at the base level. Although bases are supposed to keep track of what contractors get, this is not always being done.

In a June 4, 1985, letter to Vandenburg Air Force Base, California, San Antonio noted that the base had submitted a large number of 6F-coded requisitions. The Center requested

that Vandenburg provide a semiannual list showing the stock numbers and quantities of equipment obtained. Vandenburg responded on June 11, 1985, that the equipment had been provided as contractor support, and accountability for equipment items issued to contractor was maintained by the contractor. Since accountability was terminated at Vandenburg and assumed by the contractor at time of issue, Vandenburg could not provide the requested data as the Air Force contends it should have been able to provide. In 1981 and 1985, and as recently as March 1986, we testified on problems with controls over equipment provided to contractors and noted that defense contractors were not held accountable for all government-furnished property under their control.[3]

UNSERVICEABLE ITEMS IMPROPERLY RETURNED

Some Air Force items, when they become unserviceable, can be repaired and returned to serviceable condition at less cost than procuring new ones. These reparable items are managed in the Air Force's Recoverable Assembly Management System and are provided as free-issue items to Air Force activities. This means that Air Force activities can requisition reparable items from air logistics centers, and the items will be provided without requiring reimbursement.

Generally, Air Force activities should return an unserviceable item for repair for each like serviceable item requisitioned, except in those cases where the items are required to fill war readiness stocks or increases in base stock levels. Failure to return unserviceable items can aggravate shortages, thereby contributing to items becoming designated as critical items of supply. In a review we are completing on critical-item management in the Air Force, we found that for 4 of the 18 items we examined, bases were not promptly returning unserviceable items for repair.[4] Such delays aggravated the shortages that existed.

During our review, we also found that unserviceable items were not being returned at the same rate serviceable, like items were being issued. For example, as shown in table III.2, we analyzed all serviceable shipments to and unserviceable returns from three Air Force bases for seal assemblies (including substitute items) which are used on the F-100 engine.

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[3]Statement of Frank C. Conahan before the House Subcommittee on Legislation and National Security, "The Department of Defense Has Not Minimized the Amount of Equipment It Provides to Contractors", Mar. 20, 1986.

[4]Evaluation of the Critical Item Program, Code 392068.

Table III.2: Comparison of Serviceable Issues and Unserviceable Returns for Seal Assemblies

Air Force Base	12-month serviceable issues[a]	12-month unserviceable returns	Net differences	Percent
Hahn, Germany	561	552	9	1.6
Bitburg, Germany	606	486	120	19.8
Luke, Arizona	1,168	1,002	166	14.2
Total	2,335	2,040	295	

[a]Excludes shipments to fill war readiness and mobility stocks.

In the past year, F-100 engine capabilities have been affected by seal-assembly shortages.

INACCURATE SUPPLY TRANSACTIONS

Because of the continuous daily flow of material into and out of the supply system through receipt and issue transactions, custodial and accountable records are continuously updated. The adjustments to the records provide numerous opportunities for errors to occur and, therefore, differences between actual assets and record balances.

We traced 2,611 receipt and issue transactions between the San Antonio Air Logistics Center and the three air bases we visited and found that 278, or 10.6 percent, could not be verified. Many of these transaction errors were not known either to base supply or San Antonio officials, and the discrepancies remain unreconciled.

The following are examples of the inaccuracies we found:

--41 shipments from San Antonio to the bases where the bases had no records of receiving the shipments,

--19 shipments from the bases to San Antonio where the base had no records of shipment but for which San Antonio had receipt records,

--53 shipments between San Antonio and the bases where quantity differences existed,

--63 shipments from the bases to San Antonio where the bases had shipping records but San Antonio had no record of receipt,

--46 shipments to the bases where the bases had receipt records but San Antonio had no records of shipments, and

--56 shipments between Bitburg and San Antonio which could not be fully verified with available documentation.

The following case provides a specific example of the problems we found:

Engine nozzle, NSN 2840-01-118-1064 PT, is used on the F-100 engine and costs $1,414. Hahn Air Base records show that 21 different shipments of this nozzle were made to San Antonio, returning 102 unserviceable nozzles. San Antonio had no record of their receipt. Further review by the Center found that Hahn returned 86 nozzles whose NSNs were different than those on the shipping document. Some of these nozzles are interchangeable with and substitutable for NSN 2840-01-118-1064 PT. We did not have time to determine the impact of the misidentified nozzles on the Center's supply operations. However, we did determine the impact of the shipping discrepancy. The Center has no record of 2 shipments of 16 nozzles costing about $30,000. At the time of our audit, neither Hahn nor Center officials knew that these nozzles were missing.

According to an AFLC official, the Air Force is currently conducting an investigation into the loss of a controlled item--hand-held portable-crypto radios. This case illustrates the potential consequences of inadequate controls over requisition, receipts, and issues:

Sacramento Air Logistics Center purchased radios from Motorola at a unit price of $4,000. The contractor sent the radios to Tinker Air Force Base, which in turn shipped 280 radios to a base in the United Kingdom in response to a requisition. The base received only 144. The Air Force cannot document the shipment or account for the shortage of 136 radios. Recently, a commercial radio repair shop contacted the Air Force through the FBI, advising it that an individual had brought in one of the radios for repair. Investigation revealed that a purported drug smuggler had 10 to 12 of the same radios in his possession. Further, these radios had been shipped nearly a year before but had never been received by the base. The system did not detect that the radios were missing.

INVENTORIES OF SERVICEABLE EXCESS ITEMS GROWING BUT NOT REPORTED

The military services have had long-standing problems in disposing of excess property. Because of congressional and Inspector General concerns over poor accountability and systems that allowed needed property to be sent to the DOD disposal systems, the Secretary of Defense, in July 1984, ordered a moratorium on disposing of excess property. In its implementation, the Air Force prohibited sending any serviceable or reparable

item to disposal that was used on active end items. The disposal moratorium was cancelled for the Air Force on January 1, 1986; however, the Air Force continues to prohibit the disposal of serviceable and reparable items used on current weapons systems.

During our review, we found indications that excess serviceable inventories were beginning to have a negative impact on base supply operations. Since the disposal moratorium, excess serviceable stocks have more than doubled in base supply inventories. Table III.3 shows the growth in these inventories for Hahn and Luke Air Force Bases from October 1983 to November 1985. Supply personnel are having to manage, control, protect, secure, and account for substantial amounts of excessive inventories.

Table III.3: Dollar Value of Serviceable Excess in Air Force Base-Supply Inventories

Date	Hahn	Luke
Oct. 1983	$ 599,000	$ 561,000
Nov. 1983	588,000	452,000
Dec. 1983	778,000	397,000
Jan. 1984	589,000	424,000
Feb. 1984	637,000	432,000
Mar. 1984	630,000	571,000
Apr. 1984	804,000	562,000
May 1984	704,000	754,000
June 1984	773,000	616,000
July 1984[a]	703,000	631,000
Aug. 1984	642,000	575,000
Sep. 1984	670,000	592,000
Oct. 1984	724,000	639,000
Nov. 1984	868,000	743,000
Dec. 1984	949,000	771,000
Jan. 1985	985,000	1,051,000
Feb. 1985	1,284,000	886,000
Mar. 1985	1,421,000	951,000
Apr. 1985	1,359,000	1,114,000
May 1985	1,288,000	1,083,000
June 1985	1,280,000	1,208,000
July 1985	1,345,000	1,304,000
Aug. 1985	1,427,000	1,215,000
Sep. 1985	1,568,000	1,313,000
Oct. 1985	1,471,000	1,346,000
Nov. 1985	1,451,000	1,359,000

[a]The Secretary of Defense ordered a moratorium on disposals in July 1984

We also found that items excess to base supply needs were not reported to defense item managers. When excess items are not reported, the possibility of procuring or repairing unneeded items exists.

Air Force procedures for redistributing excess items require Air Force base supply activities to report items excess to their needs to the responsible defense item manager. Items in the Air Force base supply become excess when (1) inventory exceeds requirements or (2) an item in the inventory does not have a demand within a certain period. In the latter case, the entire inventory quantity becomes excess. Air Force item managers, upon receiving a report that an item is excess to base requirements, must review Air Force-wide requirements to determine if the item is needed. Air Force bases are directed to return an excess item to the wholesale depot if it is needed to meet future Air Force requirements that are expected to occur over the next 6 years.

Hahn Air Force Base supply personnel were not reporting all excess items to defense item managers. A special program called the "Last Look" program caused confusion in the reporting of excess items. As a result, in September 1985, a Hahn official began coding excess items so that the items would remain in the active inventory without being reflected as excess in the Hahn base supply inventory and would not be reported to Air Force inventory managers. A print-out of these items by their national stock number disclosed that quantity, cost, or other data was not shown for the 800 items on the list. In December 1985, we gave the list to San Antonio Air Logistics Center officials and asked them to screen the items to determine if any of the items they manage that were on the Hahn list were being procured or repaired. In February 1986, officials informed us that they managed 20 of the items and their analysis showed that 8 were either currently being procured, on contract, or would be procured within the next 12 months.

According to the Air Force, suppression of excess reporting found at Hahn was not consistent with Air Force policy. Further, it was an inappropriate decision and has now been corrected.

WEAK CONTROLS OVER PILFERABLE ITEMS

Base supply activities are required to identify controlled items and account for, secure, segregate, and handle them in a special manner.

At Bitburg Air Force Base, we found instances of pilferable assets not being accounted for and handled in a special manner as required. During fiscal year 1985, Bitburg base supply

personnel made an average of nine inventory adjustments monthly to pilferable asset records. In addition, cyclic inventories for pilferable assets done in December 1984 and 1985 resulted in 132 and 28 adjustments, respectively. According to base supply records, these adjustments were caused by differences between actual and recorded inventories which, in turn, were caused by

--warehouse personnel not accurately counting pilferable assets, especially bench stock items;

--unauthorized warehouse personnel obtaining pilferable assets from the secure area; and

--receiving personnel not hand-carrying pilferable assets to the applicable warehouse in a timely manner to ensure that the assets are secured, as required by regulations.

Theft of pilferable assets was cited as another possible reason for many of the adjustments. The Chief of Base Supply has informed the Air Force Office of Special Investigations (OSI) and Security Police of numerous potential thefts from the pilferable area of base supply. According to OSI records, since January 1985, 534 pilferable items with a total value of about $6,900 have possibly been stolen. The largest potential thefts were for 26 batteries costing $1,021.

In commenting on the above, Air Force officials noted that

--the problems found were caused by noncompliance with existing procedures, coupled with the failure to use common sense;

--supervision was lacking on a daily basis, resulting in inaccurate counts, poor warehouse practices, and unauthorized entrance of personnel;

--management failed to use common reports, lists, and analyses to detect resource losses through inventory adjustments; and

--surveillance, analyses, inventory adjustment trends, and review of the Monthly Inventory Adjustment Document would have alerted the managers to these problems.

According to the Air Force, new procedures are not needed; rather, compliance is needed in accordance with recent guidance.

INADEQUATE PHYSICAL SECURITY

Sound physical-security procedures can reduce opportunities of loss due to theft and misappropriation of supply items. During our review, we found that the physical security of supply warehouses at two bases in Germany was inadequate.

On December 10, 1985, and January 16, 1986, we made unannounced night visits to supply warehouses at the Hahn and Bitburg Air Bases respectively. (We were accompanied by security police at each location.) The main supply warehouse at Hahn is located off the base and is easily accessible to the general public. This warehouse contains F-100 engine and F-16 aircraft repair parts. The driveway to the warehouse goes through a gate which is left open during the day and is unguarded.

During our unannounced night visit to the main supply warehouse at Hahn, we found the gate closed but unlocked. We were able to enter unobserved through a door in one of the delivery bays and had free access to over three-fourths of the building. We could have easily removed anything that could be carried by hand. In another instance at Hahn, we were able to enter the retail supply store and tool-issue area and found no supply personnel in sight. For a period of time, we had unobserved access to items which are highly susceptible to theft.

At Bitburg, our unannounced night visit to base supply facilities found security to be inadequate at three of five warehouses. We were able to enter the main warehouse from the transportation management office, using the conveyor system opening between the two areas of the building. The main warehouse contains F-100 engine and F-15 aircraft repair parts. At another warehouse, we were able to enter the building through an unlocked fire door. We could have removed supplies unobserved through this door. At a third warehouse, we were able to enter the building through a damaged door. Once inside the warehouse, we found that all interior padlocks, which were used to secure warehouse interior doors, contained keys which would allow unobstructed egress with stolen property. This warehouse does not have supply personnel on duty in the evenings.

At both Air Force installations, we found that the security police are not required to physically check the supply warehouses after duty hours. In contrast, security police at Hahn are required to check the bowling alley and chaplain's office. We were told the reason for this is that the chaplain's office contained cash, which would be more attractive to a thief than items which would have to be sold after they were stolen.

The Air Force recognizes that it has problems in this area. In a March 1986 message, the Air Force advised its major commands that, despite previous messages on security, the GAO outbrief identified "ridiculous and lackadaisical" practices in the Air Force supply system. The message went on to say that it

> "is obvious that we are not complying with current published directives, ... It appears that our supply accounts are paying lip service to the need for increased security."

NAVY INVENTORY-MANAGEMENT PRACTICES

The Navy maintains large inventories of supplies to sustain its forces. The average value of these inventories is more than $22 billion. As in the other services, the Navy manges its supplies in three tiers:

--Inventory control points procure supplies and determine where to stock and when to reorder.

--Wholesale storage depots receive and store supplies and fill customer requests.

--Retail activities, such as ships and shipyards, request some items from the depots and maintain others in their own stock inventories.

At the time of our review, the Navy's Judge Advocate General was conducting its own investigation into allegations of fraud, mismanagement, and improper supply procedures aboard the aircraft carrier USS Kitty Hawk. The investigation documented deficiencies in the Kitty Hawk's inventory-management capabilities and procurement procedures. The investigation concluded that these inventory-control and procurement-procedures deficiencies were systemic to the Navy's afloat supply system. In commenting on the report, the Chief of Naval Operations said that the Navy has made improved inventory accuracy a top fleet priority. However, he further noted that the deficiencies are long-standing and systemic. In large measure, he said, they stemmed from a system that was not responsive and from an attitude that short-term readiness was the key goal, and that, in order to achieve it, "violations of regulations and sound business practice were acceptable."

The Navy has made some improvements in its wholesale inventory management; however, its internal controls over supplies, especially at retail shore activities, remain weak. Efforts to ensure the security and efficiency of supply receipt, storage, accountability, and issue are hampered by problems at all levels of inventory management. These problems--many of which are long-standing--concern such things as

--no assurance that material is received,

--unnecessary stock fund losses,

--inventory inaccuracy,

--incorrectly receiving and accounting for controlled items,

--physical inventories not always performed,

--identifying, receiving, and storing precious metal items,

--loss of accountability at shipyards,

--improper disposal and unreported excess, and

--breached physical security.

NO ASSURANCE OF MATERIAL RECEIPT

When supplies are shipped from a vendor to a DOD storage depot or customer, or when supplies are transferred between depots, confirmation of the receipt should be communicated to the inventory manager as quickly as possible. Prompt receipt confirmation provides information with which the manager can clear contract data from procurement records and due-in data from supply records. By reconciling procurement and supply data, the manager can verify whether material that is paid for and shipped from vendors, or transferred between depots, is actually received.

The Navy's Ships Parts Control Center (SPCC) reported about $1.1 billion of material in transit as of September 30, 1985. Although the Navy has a control procedure for monitoring in-transit shipments, it has no assurance that all such shipments are received. For example:

--Items costing about $763 million were in transit between depots as of September 30, 1985. Of this amount, about $181 million was shown as in transit for more than 6 months. After 6 months, Navy officials consider it unlikely that confirmation of receipts will occur.

--Items costing about $304 million were in transit from vendors to Navy depots as of September 30, 1985. In July 1985, SPCC changed the waiting period for automatically deleting records of shipments from their in-transit status files. Instead of waiting 6 months to clear the file of these records when there is no documentation to confirm receipt, SPCC clears the file after 1 month. When the criteria changed, about $178 million of material with unconfirmed receipts were deleted from the in-transit file.

In reporting on its evaluation of its internal controls for fiscal year 1985, the Navy also noted deficiencies in its

receipt confirmation procedures.[1] The Navy concluded that accounting and operating procedures for ship stores were ineffective to preclude duplicate payment of vendor bills and excess inventories. They found that

--a substantial volume of vouchers and invoices were unmatched,

--inventory adjustments and write-offs were unsupported, and

--vendors were paid under fast-pay procedures for material not reported as received by ship stores.

UNNECESSARY STOCK-FUND LOSSES

The Navy manages items, such as generators, transmitters, and circuit card assemblies which, when they become unserviceable, can be repaired and returned to serviceable condition. These items are called reparable items. Future requirements for them can be met more economically through depot repair than procurement. Since April 1981, the Navy has financed the purchase and repair of nonaviation reparable items through the stock fund mechanism in lieu of financing them through procurement accounts. Under this mechanism, items are issued to customers who, in turn, reimburse the fund with appropriated operations and maintenance funds. To encourage return of reparable items, Navy customers are given up-front credit if, when they requisition a serviceable item, they indicate that the unserviceable item will be returned at a later date. The credit is the difference between the standard replacement price that the customer pays if the unserviceable item is not returned and the net repair price the customer is charged when the item is returned. If the item is not returned as promised, the customer is supposed to be billed for the difference between the higher standard price and the net price.

In our September 20, 1984, report on Navy management of nonaviation reparable spares, we noted that a significant number of spares were not being returned to SPCC for repair.[2] Customers had increased their return of reparable items under stock funding. However, at the end of fiscal year 1983, the value of reparable spares that had not been returned to the Navy supply system was still about $113 million. This occurred even though customers had indicated that the items would be returned. Nonreceipt of reparable items can result in shortages of critical items, which could in turn hinder mission accomplishment.

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[1]Internal Control Certification Statement, Secretary of the Navy, Nov. 21, 1985.

[2]Navy Can Improve Management of Nonaviation Depot-Level Repairable Spares, GAO/NSIAD-84-150, Sept. 20, 1984.

When SPCC does not know whether the item has been returned, the customer cannot be billed for the price difference, and the stock fund must absorb this difference. Financial losses are eventually recovered through increases in the surcharge on future stock fund prices. From October 1984 through May 1985, SPCC could not verify return of 10,970 items. The stock fund absorbed a loss of $61.8 million in fiscal year 1985. This was more than double the loss of $26.6 million in fiscal year 1984.

INVENTORY ACCURACY STILL A PROBLEM

The overall goal of the Navy's physical-inventory program is to improve the accuracy of inventory control and asset information in the supply system. Attainment of this goal will help to ensure stock availability; to promote accurate, timely procurement; and to improve supply effectiveness. Accurate inventory records are essential to the economical, effective supply support of U.S. military forces. Inaccurate records can result in critical supply shortages, prolonged delays in filling requisitions, unnecessary procurement of stock, maldistribution of supplies, and accumulation of excess stock.

Material not on accountable records of Navy ICPs

Navy-owned supplies stored at Army depots are not included on the Navy's accountable records. Two Army depots are currently storing Navy-owned stock worth about $2 million. Since these items are not included on the Navy's accountable records, its ICPs lack visibility over them. These assets, therefore, are not considered when making procurement decisions and processing requisitions. The Navy will not gain visibility and accountability until the Army inventories the items and reports the results to the Navy.

We found that the Navy has made some unnecessary procurements because it lacked visibility over these items. For example:

--In December 1983, an Army depot received 5 Navy-owned light diving outfits. In April 1985, the Navy awarded contracts for 2 outfits costing $24,000 each because its records did not show the outfits stored at the Army depot.

--In May 1984, an Army depot received 2 Navy-owned heat exchange units. In September 1984, the Navy awarded a contract for 14 of the same units costing $13,600 each; as of December 1985, the ICP had outstanding back orders for 29 of these units. Army inventory records show that 2 Navy heat-exchange units were still in storage at the Army depot as of December 1985.

Records accuracy and causative research

The Naval Supply Center in Norfolk has reported improved inventory accuracy in fiscal years 1981 to 1985. During this time, the reported gross monetary inventory-adjustment rate declined from 21.5 percent to 2.9 percent. However, we noted some problems in the areas of records accuracy and causative research.

As a limited test of inventory-records accuracy, we sampled 17 items consisting of controlled and general supply items. As table IV.1 shows, we found that records for 6 items (35 percent) were in error when compared to stock on hand.

Table IV.1: Naval Supply Center Inventory Discrepancies

	Quantity				Extended value	
Item name	Depot record	GAO count	Variance	Unit price	Gains	Losses
Bushing	5	4	(1)	$ 1,150.00	—	($1,150.00)
Nut	178	156	(22)	48.50	—	(1,067.00)
Bearing	0	1	1	221.00	$ 221.00	—
Dye Set	126	209	83	24.11	2,001.13	—
Valve	8	5	(3)	20.00	—	(60.00)
Bell horn	11	99	88	113.55	9,992.40	—

The depot's causative research branch was unable to find reasons for the six discrepancies uncovered by our sample. Moreover, of all the cases it researched during fiscal year 1985, the branch did not identify the causes for 1,526 (33.6 percent) of the adjustments. As of November 1985, the branch had a 4-month backlog (about 2,000 cases) awaiting research.

CONTROLLED ITEMS NOT CORRECTLY RECEIVED AND ACCOUNTED FOR

Within the Navy, controlled items include narcotics and other medical items, precious metals, and small arms. All Naval stock should be safeguarded in a manner consistent with the security assigned. The Navy requires tighter security over controlled items throughout the receipt, storage, transfer, and issue processes.

In a limited test of the inventory accuracy of the Navy's controlled supplies, we sampled records for 22 controlled medical items at the depot. As table IV.2 shows, the sampling revealed four errors (18 percent) when comparing stock on hand with inventory records.

Table IV.2: Naval Supply Center "Controlled" (Medical) Inventory Discrepancies

Item name	Quantity: Depot record	Quantity: GAO count	Variance	Unit price	Extended value: Gains	Extended value: Losses
Diazepam tablets (bottles)	139	28	(111)	$47.06	—	($5,223.66)
Terpin hydrate (bottles)	110	435	325	.96	$ 312.00	—
Needles (boxes)	777	1236	459	2.13	977.67	—
Needles (boxes)	3	6	3	4.12	12.36	—

The depot's causative-research branch identified reasons for two of the errors--the diazepam tablets and the 459 boxes of needles. The cause of the first error was the posting of a duplicate document; of the second, that a document was not processed. Navy officials stated that internal controls over medical items--i.e., a required quarterly physical inventory--would have corrected these two inventory imbalances. We agree that these errors would possibly have been detected and inventory records corrected during the depot's next quarterly inventory of medical time. However, it appears that one of the errors we found--the inventory gain of 325 bottles of terpin hydrate--resulted from an erroneous loss adjustment during the prior quarterly inventory.

Another case of inaccurate records for controlled items revealed that receipt procedures for such stock were not followed. Navy regulations require that specified controlled supplies should be transferred by hand-to-hand signature receipts and stored in highly secured locations. On one occasion, because procedures were not followed, two 38-caliber revolvers were lost between receipt and storage. This case was closed without recovery of the weapons.

PHYSICAL INVENTORIES NOT ALWAYS PERFORMED

Physical inventory is the process of counting stocked items to verify inventory-record balances. Accurate inventory records are essential for such day-to-day decisions as which items to order or dispose of.

The Norfolk Naval Shipyard manages several categories of supplies--shop stores and direct material inventories. The direct material inventory contains industrial type materials

that are generally ordered and held for a specific overhaul. These inventories also include unassigned material that is no longer designated for a specific overhaul but that may be needed in the future. Shop-stores inventories contain commonly used materials and supplies, such as nuts and bolts. Each category has its own requirement for annual inventories.

We found that the shipyard was not always performing physical inventories as required. When we measured the activity's performance against the requirement for annual inventories, we found that, for 14 of 25 shop-stores inventories more than a year had elapsed since the last inventory. In 2 of the shop stores, more than 5 years had passed since the last inventory. For the direct material inventories we looked at, we found that only 4 of 7 required random-sample inventories had been performed over the last 5 years. For the unassigned direct material inventory, no annual inventory had been performed since 1982.

We sampled 10 shop-stores items and found 7 inventory imbalances (70 percent) when comparing on-hand counts with inventory records. Table IV.3 shows these discrepancies.

Table IV.3: Norfolk Naval Shipyard Shop-Stores Inventory Discrepancies

	Quantity				Extended value	
Item name	Shipyard record	GAO count	Variance	Unit price	Gains	Losses
Rivets	52,125	58,920	6,795	$ .04	$ 271.80	—
Lock	129	134	5	22.81	114.05	—
Hose	576	659	83	4.91	407.53	—
Plugs	440	450	10	1.40	14.00	—
Fuse	38	20	(18)	160.21	—	($ 2,883.78)
Cable	3,028	5,145	2,117	5.15 ft.	10,902.55	—
Correction fluid	1,500	1,496	(4)	4.43	—	(17.72)

PRECIOUS-METAL ITEMS NOT PROPERLY IDENTIFIED, RECEIVED, OR STORED

Precious metals (gold, silver, platinum, etc.) and items containing them are among the more closely safeguarded materials within the naval supply system. They are considered "sensitive," highly pilferable, and must be provided a high degree of protection at all times to prevent loss or theft.

Navy regulations require that precious-metal items be assigned a physical-security code, identified upon receipt, transferred by hand-to-hand signature receipting, and stored in a vault. At the shipyard, we found that personnel were not always noting the physical-security codes upon receipt of an item. This resulted in hand-to-hand signatures not consistently being obtained and required vault storage not always being used.

Precious-metal items should be segregated from common stock and stored in a vault meeting stringent security requirements. At the shipyard, we observed precious-metal items stored under conditions which did not meet the requirements of vault storage. For example, six transformers, valued at $12,840, were stored in a warehouse with general purpose stock. One additional transformer, valued at $2,240, was stored in a pilferable cage. At the depot, $73,130 worth of dental gold was improperly identified upon receipt, mishandled, and lost. The Naval Investigative Service (NIS) was investigating this loss at the time of our review.

LOSS OF ACCOUNTABILITY AT SHIPYARDS

The Naval Supply Center established a program where an individual can pick up an item that is needed for immediate use. At the shipyard, we found that the accountable records had not been changed to show either receipt or issue of supplies picked up through this program. For example, for two items classified as "Secret," documentation showed that the shipyard picked up the items from the depot and issued them to a user who installed them on a ship. Even though the items had been received and issued, the shipyard's accountable records still showed the items as due-in but not received.

We sampled 15 requisitions for items that were picked up and found that 6 (40 percent) had been improperly processed; that is, documentation showed that the items had been picked up by the shipyard, but the accountable records had not been updated to show the receipt. For 5 of the 6 requisitions, the shipyard was unaware that it had received the material and sent Reports of Discrepancy citing non-receipt of items to the supply center.

NIS reported similar accountability problems in its August 1985 report on its fraud investigative survey of the Naval Air Rework Facility (NARF) Norfolk, Virginia.[3] The NARF's receiving and storage division processes millions of dollars of material annually. NIS found numerous instances where shipments that were signed as received could not be located in receiving.

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[3]Naval Air Rework Facility, NAS Norfolk, Virginia, Fraud Investigative Survey, U.S. Naval Investigative Service, Aug. 2, 1985.

Further, there was no internal receipt system within the NARF. Because the shops did not sign for material they picked up, accountability for the item was lost at the receiving docks.

IMPROPER DISPOSAL AND UNREPORTED EXCESS

Navy regulations require any activity having supplies in excess of its allowance to return them to the supply system. Such returns may be necessary to supply critical shortages of items at other activities.

We found evidence that improper disposal of usable stock is occurring at both the wholesale and retail levels. At the Naval Supply Center, from January through mid-November 1985, base police issued 276 reports regarding abandoned supplies found on base. We accompanied base police and observed

--brass valves, projection lamps, and fluorescent lights (still in original containers) found in a trash dumpster;

--eight freon cylinders found on a pier; and

--two safety relief valves costing $1,560 found in a scrap metal dumpster.

At the retail level, our review of incident/complaint reports showed that the following items had been found at both the refuse/incinerator plant and in trash dumpsters:

--power-rotor triple screw worth $4,000;

--45 aluminum sheets, still crated, worth $2,025;

--electrical wire worth $1,330; and

--250 rolls of 50-foot electrical insulation sleeving worth $7,145.

In addition to being improperly disposed of, new material is not reported back to the supply system for redistribution. In its January 1985 fraud investigative report on Portsmouth Naval Shipyard, NIS reported that the shipyard had stockpiled unrecorded material with an estimated value of $10 million.[4] This material was charged to customers in prior years but remained unused and was not returned to the supply system in accordance with Navy instructions. One of the effects of this condition is that material is susceptible to pilferage because accountability is not maintained.

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[4]Portsmouth Naval Shipyard, Portsmouth, New Hampshire, Fraud Investigative Survey, U.S. Naval Investigative Service, Jan. 13, 1985.

SECURITY BREACHED

The Joint Chiefs of Staff have defined physical security as those measures designed to safeguard personnel; prevent unauthorized access to equipment, facilities, material, and documents; and protect against espionage, sabotage, damage, and theft.

Though the Navy depot we visited has improved the security over its supplies, its efforts have not eliminated security breaches. The depot has added fences and refocused training efforts to heighten security awareness of its employees. However, the activity's security-penetration test reports showed that there were successful security breaches in 1984 and 1985. These included

--entry into restricted area with improper identification badges or badges improperly displayed,

--entry gained to warehouse locations through improperly secured doors, and

--unauthorized removal of stocks from storage locations.

NIS reported similar breaches in its July 24, 1984, report on its fraud investigative survey of the Philadelphia Naval Shipyard.[5] On three separate days during June 1984, investigators gained access to the Shipyard's "Controlled Industrial Area." On one occasion, at least 33 persons were observed in the area without proper identification. Two of the buildings entered contained classified material, including a cryptological equipment repair facility. Moreover, the investigators were able to drive a Navy pickup truck on and off the compound twice with no one attempting to identify its occupants or to inspect its cargo.

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[5]Navy Shipyard, Philadelphia, Pennsylvania, Fraud Investigative Survey, U.S. Naval Investigative Service, July 24, 1984.

MARINE CORPS INVENTORY-MANAGEMENT PRACTICES

The Marine Corps procures, stores, and distributes military stocks on a wholesale level at one ICP and storage activity at the Marine Corps Logistics Base, Albany, Georgia, and one other storage activity at the Marine Corps Logistics Base, Barstow, California. The Albany and Barstow storage activities manage about 41,000 and 46,000 line items, respectively. For fiscal year 1985, the combined average inventory at the two locations was about $1.8 billion. The Marine Corps also has retail supply activities located at Marine Corps bases that requisition, store, and distribute material.

During our review, we found that

--inventory records varied from on-hand balances for relatively large percentages of sample items reviewed at the wholesale level and one retail supply activity;

--causative research at both the wholesale and retail levels did not determine underlying causes for many inventory discrepancies, and there was no quality control over the counting of inventory at the wholesale level; and

--one retail activity was not identifying, segregating, and properly safeguarding controlled items, including some classified items.

INACCURATE INVENTORY RECORDS

Accurate inventory records are essential to the economic and effective supply support of U.S. military forces. Inaccurate records can result in undesirable conditions such as unmet customer needs due to the inability to find and issue material which, according to the records, is available in stock.

Inventory records were inaccurate for relatively large percentages of judgmentally selected samples of items that we inventoried at the Albany Logistics Base's remote wholesale storage activity and the 2nd Force Service Support Group's Supported Activities Supply System (SASSY) Management Unit, one of the retail activities we visited. The SASSY management unit is the using unit that performs all phases of supply accounting for the Service Support Group.

The Marine Corps' ICP reported that physical-inventory adjustments at the wholesale level amounted to less than 1 percent of total dollar value inventoried during fiscal years 1981 through 1985. However, the reported adjustment ratios did not include adjustments if causative research disclosed that

clerical or accounting errors caused the discrepancies. For example, if causative research disclosed that discrepancies were caused by unprocessed receipts or issues of material, the accountable records would be adjusted, but the amounts would not be included in the reported adjustment ratio.

Our sample showed a much higher inventory-adjustment ratio at the wholesale level than the overall ratios being reported by the Marine Corps; however, we included all inventory adjustments in computing our ratio. We counted 13 items and found imbalances between on-hand quantities and accountable records for 10 items. At the time we asked ICP personnel to do causative research on the 10 items, we found that causative research was already being done on 8 of the items due to previously reported imbalances. Causative research by the Logistics Base disclosed that accountable records for the 10 sample items with discrepancies should be adjusted a total of $2,437,500, or 19 percent, of total dollar value inventoried. Causative research resulted in a nonconclusive finding for the causes of the adjustments on 8 items. One item, a 7.62 MM machine gun, with a gain of 36 units was still being researched at the completion of our work.

The SASSY Management Unit managed 62,500 line items during fiscal year 1985. We sampled 60 of these items consisting of controlled and general stock and found 25 inventory imbalances, a 42-percent error rate when comparing on-hand counts with inventory records. This translates into a 39-percent dollar-value error rate. The 25 inaccuracies consisted of 16 losses valued at $328,000 and 9 gains valued at $110,850. Officials could not reconcile the discrepant items.

CAUSATIVE RESEARCH NOT IDENTIFYING CAUSES

At the Logistics Base, causative research was not identifying underlying causes for many inventory discrepancies researched, and there was no quality control over physical-inventory counting. Also, the SASSY Management Unit was unable to identify causes for many of the inventory discrepancies disclosed in our sample.

DOD's stated objectives for doing causative research on inventory discrepancies are to provide item managers with indications of failures in control systems and of potential areas for improvement, reduce similar discrepancies in the future,

ensure that proper adjustments were made to inventory records, and evaluate indicators of trends or system problems so that corrective actions can be taken. DOD also requires that causes be classified based on error-cause codes, analyzed, and evaluated.

Our review disclosed that the ICP and remote storage activity were researching inventory discrepancies and classifying errors by cause code, but the research was not identifying underlying causes for many discrepancies. For example, causes could not be determined for about 25 percent of the inventory errors classified by the ICP during fiscal year 1985. Another 25 percent was attributed to erroneous inventory counts; however, the ICP had not reported this information or other statistics on error causes to the remote storage activities for determination of underlying causes.

ICP personnel told us that they would start reporting the statistics on causes for inventory discrepancies to remote storage activities for their use in identifying underlying causes and corrective measures. They will also request the Quality Assurance and Internal Review offices to investigate underlying causes for recurring errors.

DOD requires quality control tests of physical-inventory counts as one means of ensuring acceptable performance levels and identifying sources of errors that cause inaccurate inventory records on wholesale assets. We found, however, that the remote storage activity at the Logistics Base was not making quality-control checks of inventory counts. As discussed above, bad inventory counts were identified as a recurring cause of discrepancy errors. The Director of the remote storage activity stated that he was aware of the quality-control deficiency and that action was being taken to correct the problem.

CONTROLLED ITEMS IMPROPERLY HANDLED

Controlled inventory items are those items designated as having characteristics which require that they be identified, accounted for, secured, segregated, or handled in a special manner to ensure their safety or integrity. The SASSY Management Unit was not identifying and properly storing classified items until we and base personnel developed a data processing program to identify classified and other controlled items. The Unit had four classified items and many pilferable items commingled with noncontrolled items.

System to identify controlled items not used

Prompt and accurate processing of receipts is a prime requisite of an effective supply system. According to Marine Corps procedures, special handling and controls should be established for the storage and subsequent distribution of classified, sensitive, and pilferable items.

The SASSY Management Unit was not identifying security codes for controlled items in its system. In fact, activity officials were unaware that their inventory contained classified items until we and Marine Corps personnel developed a data processing program that identified such items. Of the 61,000 line items managed by the Unit, 299 were controlled items, and 8 of these were originally determined to be classified. However, subsequent verification at the ICP revealed that 4 items were incorrectly coded.

We inventoried the classified items and found that they were stored with general merchandise under conditions with less security than required. Further, classified items were being handled by personnel without proper security clearances. After identification, we were told that the items were moved to a more secure location. The classified items were

--klystrons used in the tracking radar of the improved Hawk System,

--circuit cards used in the acquisition radar of the improved Hawk System,

--graphic firing scales used to plot elevation and azimuth for howitzers, and

--circuit cards used in a tracking radar.

In addition, the SASSY Management Unit was commingling pilferable-coded items with noncontrolled items. For example, at one warehouse, we found that 10 pilferable-coded items from our sample were commingled with noncontrolled items. At another warehouse, some items that warehousemen thought were pilferable were locked in a cabinet, but other pilferable-coded items were commingled with noncontrolled items. DOD regulations require special protective measures for pilferable material--including caged or fenced and locked security areas, assignment of control to specific individuals, restricted access to storage areas, and procedures to control movement of these items within the storage installations. Marine Corps personnel said that they had submitted a work request to build a pilferable-item security cage at one warehouse.

DEFENSE LOGISTICS AGENCY INVENTORY-MANAGEMENT PRACTICES

Inventory management is one of the Defense Logistics Agency's largest and most complex missions. DLA procures, stores, and distributes some 2.4 million supply items used by the military services. These items make up about 56 percent of all items in the defense supply system. Generally, DLA manages consumable supply items including food, clothing, medical, fuels, spare parts, and general supplies. Nonconsumables and items peculiar to weapon systems are normally managed by the military services; however, DLA is being called on more and more to support weapon systems with supply items. At the end of fiscal year 1984, DLA's inventories were valued at about $10.5 billion. During that year, DLA's sales to the military services and other DOD components were about $15 billion.

Through review of prior reports and work at selected DLA inventory-management activities, we determined that many long-standing problems still exist. During our review, we found continuing problems in such area as

--inventory-records accuracy,

--material-receipt confirmation,

--inventory-discrepancy research,

--control over requisitioning;

--physical security, and

--cataloging.

INVENTORY-RECORDS ACCURACY PROBLEMS

Inventory-adjustment rates are intended to be a measure of inventory-records accuracy. They are expressed as a percentage of gross inventory adjustments (the sum of inventory gains and losses) to both average inventory value and the value of material inventoried. DLA's inventory adjustment rates indicate that it may have a significant problem with the accuracy of its inventory records.

Physical-inventory adjustments are accounting transactions intended to make book balances agree with the quantity of items in storage. They are expressed as either inventory gains or losses and may result from such events as physical-inventory counts and stock-discrepancy reports. Inventory-management activities are allowed to reverse these adjustments if causative research shows that the adjustments are due to prior erroneous transactions, such as duplicate recording of a receipt or issue transaction. Physical-inventory adjustments and reversals of prior adjustments are reported quarterly to DOD; however,

reversals are not included in the computation of adjustment rates.

Inventory variances indicate the amount of turbulence in the accountable records in any reporting period. To obtain a complete picture of inventory-records accuracy, management should look at both reported adjustments and reversals. At the end of fiscal year 1985, the average value of DLA's inventory was about $7.7 billion (excluding fuel inventories), of which about $2.5 billion was physically inventoried. As table VI.1 shows, DLA's inventory-adjustment rates are substantially higher than the rates for DOD activities as a whole.

Table VI.1: Inventory Adjustments Fiscal Year 1985

	ARMY	NAVY	AIR FORCE	MARINES	DLA	TOTAL
	Thousands					
AVG. VALUE of INVENTORY	$19,073,384	$23,920,963	$18,885,005	$1,773,918	$7,673,035	$71,326,305
VALUE OF ITEMS INVENTORIED	19,736,998	14,848,915	10,808,348	2,926,221[a]	2,518,166	40,838,648
VALUE OF INVENTORY ADJUSTMENTS						
GAINS	$289,886	$248,035	$261,903	$13,557	$213,803	$1,027,184
LOSSES	262,620	212,581	243,592	15,319	193,635	927,747
SUB-TOTAL	$552,506	$460,616	$505,495	$28,876	$407,438	$1,954,931
GROSS ADJUSTMENT RATES WITHOUT REVERSALS						
AVG. VALUE RATE	2.0%	1.9%	2.7%	1.62%	5.3%	2.7%
INVENTORIED VALUE RATE	5.0%	3.1%	4.7%	.98%	16.2%	4.8%
VALUE OF INVENTORY ADJUSTMENTS REVERSALS						
GAIN REVERSALS	$ 29,259	$ 284,829	$ 28,689	$ 1,922	$223,422	$ 568,122
LOSS REVERSALS	389,102	457,008	30,950	887	282,237	1,160,184
SUB-TOTAL	$418,361	$ 741,837	$ 59,639	$ 2,809	$505,659	$1,728,306
TOTAL ADJUSTMENTS	$970,867	$1,202,453	$565,134	$31,685	$913,097	$3,683,237
GROSS ADJUSTMENT RATES WITH REVERSALS						
AVG. VALUE RATE	5.1%	5.0%	3.0%	1.79%	11.9%	5.2%
INVENTORIED VALUE RATE	9.9%	8.1%	5.2%	1.08%	36.3%	9.0%

[a]In addition to doing a 100-percent inventory, the Marines also count follow-up inventories.

SOURCE: DOD's inventory control effectiveness report

DOD does not have a standard adjustment rate ceiling; however, in 1981, the Congress expressed concern when the Navy's rate reached 4 percent of average inventory value. That concern gave rise to a congressional investigation of inventory adjustments at the naval supply centers and, eventually, to hearings on DOD inventory management.[1]

We physically inventoried 14 different supply items at the DLA depot at Mechanicsburg, Pennsylvania, as follows:

--5 pilferable medical items,

--4 controlled substance medical items,

--3 clothing and textiles items,

--1 pilferable industrial item, and

--1 sensitive industrial item.

The recorded inventory value for these items was $4,417,875. Our inventory count disclosed that 7 items had gains totaling $13,830, and 1 item had a loss totaling $7,515. These counts are based on our reconciliation of transactions. (Depot personnel did not have time to perform causative research for us.) Table VI.2 shows examples of items that we inventoried.

Table VI.2: Inventory Variances at Mechanicsburg Depot

Item	Unit price	Number of units Gained	Number of units Lost	Value of[a] Gain	Value of[a] Loss
Syringe and needle	$ 5	1,107	-	$ 5,446	-
Diazepam injection	19	58	-	1,075	-
Summer flyers gloves	11	298	-	3,323	-
Flashlight	6	168	-	1,042	-
Sleeping bags	40	-	(187)	-	($ 7,515)

[a]Difference is caused by rounding in unit price.

WEAKNESSES IN MATERIAL-RECEIPT CONFIRMATION

In-transit materials are those which the contractor or vendor has indicated have been shipped but which have not been received at a government storage depot. DLA is authorized to pay for material before receipt under two methods--fast-pay and source acceptance. The fast-pay method provides for payments, under specified conditions, to contractors, based on submission of an invoice. The source-acceptance method provides for payment

[1]House Armed Services Committee, Subcommittee on Readiness, Progress Made by the Navy in Improving Physical Inventory Controls and the Magnitude, Causes, and Impact of Physical Inventory Adjustments in the Army, Air Force, and Defense Logistics Agency, Apr. 27, 1983.

when a government official accepts the material supplied by the contractor before it is delievered at its destination. Under fast-pay and source-acceptance procedures, materials are paid for, based on the vendor's notice of shipment or acceptance of materials by the government at the vendor's place of business.

In our recent report on DLA's general management, we reported that, in 1984, DLA paid $23 million for material for which it had no record of receipt.[2] As of November 1984, an additional $53 million of material that had been paid for was over 90 days past due. The government forfeits its right of recovery from vendors after 90 days when fast-pay procedures are used. As of March 1985, the balance of in-transit material over 90 days past due was $44 million, notwithstanding DLA corrective action.

We found that similar problems with in-transit shipments still exist. DLA becomes aware that material has not been received only if a customer or depot inquires about the shipment at the ICP. DLA requires customers to submit a receipt-confirmation form when a depot releases materials or a vendor ships material directly; however, supply centers do not use the receipt-confirmation cards as a control to ensure that material is received. In addition, during fiscal year 1985, the Defense Electronics Supply Center, for example, processed 19,620 RODs for deficient shipments:

--1,343, or 7 percent, for material not received;

--8,907, or 45 percent, for shipments received short of material; and

--9,370, or 48 percent, for other types of discrepant shipments such as condition, markings, or overages.

According to DLA officials, as of February 1986, DLA had reviewed in-transit materials valued at $51 million that were over 90 days past due. They indicated that over one-half of the material was over 180 days past due. They told us that the primary causes of not knowing whether material has been received is failure to properly post material receipts.

INVENTORY-DISCREPANCY RESEARCH NOT EFFECTIVE

DLA does not use available tools to identify and correct recurring inventory-management problems. According to DOD guidance, a purpose of causative research and discrepancy reporting is to identify and correct the causes or recurring problems. DLA primarily uses causative research to correct inventory records. Past audits have shown that causative-research results were frequently incorrect.

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[2]Progress and Challenges at the Defense Logistics Agency, GAO/NSIAD-86-84, Apr. 7, 1986.

RODs are used primarily to determine billing adjustments for discrepant shipments. These reports generally are not used to identify problem vendors. Reports of Survey and Government Property Lost, Damaged or Destroyed reports are used primarily to relieve accountable officers of responsibility for losses. These reports are not being used to identify recurring problem areas and trends so that corrective action might be taken.

Most of the above reports are untimely and incomplete. DOD investigative personnel have complained that untimely reporting makes investigations more difficult. Untimely reporting may also result in the loss of recourse against contractors. In a 1983 audit, the DOD Inspector General reported that customers were not reporting discrepancies in receipts under source-acceptance type shipments.[3] On three shipments, where material had not been received, the customers had not submitted discrepancy reports even though an average of 289 days had elapsed since the shipments were accepted at the source. Since the purchasing office's control over shipments to customers ceases at the time the contractor is paid, it is doubtful that after 289 days there would be any recourse to the contractor in these three shipments.

DLA officials told us that the agency is establishing an automated system that will gather cause data for evaluation and corrective action.

REQUISITIONING PROCESS CAN BE COMPROMISED

Customers with knowledge of requisitioning procedures and a valid DOD Activity Address Code (DODAAC) can order almost anything from the defense supply systems, except for such controlled items as drugs and precious metals. The DODAAC is the key to the supply system. With a valid DODAAC, material can be requisitioned and diverted to an unauthorized third-party address. The following observations are indications of potential problems with DODAACs:

--There are approximately 155,000 DODAACs in the system.

--An unknown number of DODAACs are assigned to organizations no longer authorized to use the system.

--DODAACs have been assigned to over 7,500 private contractors.

Issuing material to unauthorized requisitioners is not a new problem. During two separate crime-prevention surveys in 1978 and 1979, defense investigators used a DODAAC and an exception to the material-release procedures to obtain material from DLA depots without authorization.

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[3] Report on the Audit of Controls Over Receipts of Material Accepted at Source, DOD Office Inspector General, Feb. 14, 1984.

For almost 2 years, from May 1982 until January 1984, an Army contractor obtained 6,149 electronics parts valued at over $40,000 by submitting 59 unauthorized requisitions to the Defense Electronics Supply Center. The contractor, which had been authorized to submit one requisition to the Defense Electronics Supply Center using a CECOM DODAAC, continued to do so after the one authorized requisition. CECOM had paid for the material without question. The contractor was caught when a Defense Electronics Center item manager questioned an abnormally large quantity of an electronic part that the firm had requisitioned. In commenting on this case in 1984, the Assistant Comptroller of the Army noted that the conditions that allowed this contractor to defraud the government existed throughout DOD. The contractor was not prosecuted.

In another example in 1985, an Army security team penetrated the supply system and had items shipped to an unauthorized address. High-priority requisitions were transceived via the DOD Automated Digital Network to the New Cumberland Army Depot for input into the depot's standard-issue system. The transactions were entered into the system and processed for issue; the material was shipped within depot time standards. The security team concluded that their methodology could be used successfully at any Army depot using the same automated system.

DLA officials told us that a working group for supply-system security is being established to study ways to improve system security. Further, in August 1985, DOD proposed a policy change which would establish automatic termination dates for DODAACs, which will be assigned by contract rather than by contractor. DODAACs are currently assigned by contractor and do not have termination dates.

POTENTIAL PHYSICAL-SECURITY PROBLEMS

According to DLA regulations, supply items should be provided protective measures to prevent loss from theft or pilferage during receipt, storage, and shipment. Further, the extent of protection should be commensurate with the degree of susceptibility to theft or pilferage and experienced losses.

Physical security over inventories at the DLA depot at Mechanicsburg, Pennsylvania, needs improvement. We found pilferable material being stored outside of security cages at the depot. These items included such things as life preservers, telephones, battery cables, and canteens. This problem exists because there is little available secure storage space at the depot.

Recent physical security surveys by DLA have disclosed similar problems at DLA depots in Memphis, Tennessee; Columbus, Ohio; Tracy, California; and Mechanicsburg, Pennsylvania. Problems noted were

--material that had been removed from security areas for shipment being improperly protected at Memphis and Columbus,

--materials being left unattended on flat bed trucks at Mechanicsburg, and

--open containers were not annotated to reflect the adjusted inventory of items at Tracy.

FEDERAL CATALOG SYSTEM HAS TROUBLE MEETING ITS OBJECTIVES

The Federal Catalog System is intended to provide the government a means of knowing what items it stocks and preventing it from buying items already in the system under a different name or part number. The catalog contains about 5.5 million different supply items, each with a national stock number.

Cataloging items is one important way to ensure a smooth-running supply system. Because of the large number of new items entering the supply system each year, it is critical that the catalog system be uniform. The Congress first attempted to attain a common catalog system in 1929, but its use was not mandatory. Consequently, the military services and civil agencies continued to operate different systems of identifying and classifying items to satisfy their individual cataloging needs. World War II experiences convinced the Congress that the lack of uniformity of item identification and numbering led to confusion and duplication in purchasing, warehousing, handling, issuing, and maintaining supplies. Shortages and excesses of the same item were prevalent, but logistics managers had no mechanism for identifying these conditions. To stop the millions of dollars of waste, the Congress took actions in the post-World War II era to establish a standard Federal Catalog System.

The Federal Catalog System has trouble meeting its objectives because of deficiencies in the areas of item descriptions, item entry controls, and item deletion. As a result of these deficiencies, the government may incur unnecessary costs because the catalog system cannot effectively prevent duplicate items from entering or delete items that are no longer needed. Also, limited data on where items can be procured reduces the government's ability to make competitive procurements.

Item identification is the process of describing an item to distinguish it from all other items in the catalog. The military services have fallen far short of their responsibility to fully identify supply items in the catalog. As of September 30, 1985, 3.4 million, or 61 percent, of all items in the catalog did not have full item descriptions. During a 3-month period in 1985, 96 percent of 5,700 Army items entering the catalog had only minimum descriptive information--i.e., a manufacturer's code or part number only. About 70 percent of all items in the system had

only one identified source of supply. (Two or more sources are preferred.)

Item-entry control is a screening process intended to prevent unnecessary items from entering the catalog. The annual cost of new items entering the system is unknown but significant. For example, during 1981, 187,000 new stock numbers were entered into the Federal Catalog System at an estimated cost of about $115 million. An effective item-entry control system depends on accurate and sufficient data. Because the system lacks good data, this potentially effective precataloging control is unable to screen new items to avoid proliferation and duplication.

The catalog contains an undetermined number of duplicate items. Lack of descriptive data hinders the identification and elimination of duplicate items from the catalog. Duplication can result because many items do not have approved item names. Cataloging policy requires that each supply item have a single name, regardless of how many activities use the item. Catalogers should be using only approved item names for those new items entering the system. As of January 1985, there were about 30,000 approved item names; however, the catalog contains about 660,000 items without approved item names. Without an approved name, most items cannot be described, and proper classification is uncertain.

The catalog contains many items that could be duplicates. For example, the catalog contains

--113,000 different fixed wire wound resistors,

--56,000 different electric plug connectors,

--19,000 different electrical contacts, and

--14,000 different curcuit breakers.

The catalog system's item-deletion programs, which were established to identify and remove unneeded items from the system, have great potential but receive low priority and have had some problems. Program defects have resulted in needed items being deleted from the catalog and unneeded items being retained. In one case, over 7,000 items were automatically retained because the user did not have the time or personnel resources needed to properly screen them. A recent item-reduction study by DLA resulted in the removal of 1,300 duplicate items from the catalog at an annual saving of $1 million. However, item deletion receives a low priority. About 90 percent of DLA's cataloging resources are devoted to item entry.

In December 1985, the Assistant Secretary of Defense for Acquisition and Logistics approved six new initiatives to improve

the catalog system through better item identification. The initiatives are as follows:

--Challenge the use of unapproved item names in national stock number requests.

--Establish justification codes for failure to use approved item names.

--Require multiple reference sources of supply.

--Create an item name policy review committee.

--Establish goals for approved item names, adequate item descriptions, and reference numbers.

--Have complete correspondence of service and Federal Catalog Systems files.

DLA personnel told us that the agency is proposing a formal change to the Defense Item Identification System that will allow the system to automatically challenge all new items with nonapproved item names.

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