REPORT TO

THE CONGRESS OF THE UNITED STATES

IMPROVED INVENTORY CONTROLS NEEDED FOR THE DEPARTMENTS OF THE ARMY, NAVY, AND AIR FORCE AND THE DEFENSE SUPPLY AGENCY

DEPARTMENT OF DEFENSE

BY

THE COMPTROLLER GENERAL

OF THE UNITED STATES

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To the President of the Senate and the
Speaker of the House of Representatives

The General Accounting Office has reviewed controls over depot inventories in the Department of Defense and found a need for substantial improvements. Our review was directed primarily toward examining into the accuracy of the inventory records for depot stocks held by the Departments of the Army, Navy, and Air Force and the Defense Supply Agency.

This report presents our conclusion that increased emphasis and attention is needed at all levels of management to improve the accuracy, and therefore the usefulness, of inventory stock records.

During fiscal years 1965 and 1966, stock records of selected depot inventories--averaging in value about $10.4 billion--had to be adjusted up or down an average of $2.4 billion annually in order to bring them into agreement with the physical inventory quantities.

We believe that these inaccuracies in the inventory stock records resulted from inadequate control over documentation affecting inventory records as well as over the physical assets. Such inaccuracies would, of course, adversely affect any supply system's responsiveness to requisitions for material. Only when inventory records are accurate and current can they be relied upon for determining whether requisitions can be filled or whether procurements or repair actions are necessary.

In commenting on our review, Department of Defense officials agreed, in general, with our findings and proposals for corrective actions. We were advised that each of the military services and the Defense Supply Agency had initiated specific programs to eliminate the inventory control problems discussed in this report and were installing new procedures designed to provide more accurate inventory controls. We were told that the installation of the new procedures had advanced to the point where results could be expected shortly.

We are reporting this matter to the Congress so that it may be apprised of the need for improvements in the control of depot inventories and of the actions that the Department of Defense has indicated the military services and the Defense Supply Agency have taken or planned to improve and strengthen the management controls over these inventories.

Copies of this report are being sent to the Director, Bureau of the Budget; the Secretary of Defense; the Secretaries of the Army, Navy, and Air Force; and the Director, Defense Supply Agency.

Comptroller General
of the United States

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REPORT ON

IMPROVED INVENTORY CONTROLS

NEEDED FOR THE

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DEPARTMENT OF DEFENSE

INTRODUCTION

The General Accounting Office has performed a limited review of the effectiveness of inventory controls in the Department of Defense. Our review was directed primarily toward examining into the accuracy of the inventory records for depot stocks held by the Departments of the Army, Navy, and Air Force and the Defense Supply Agency. Also, it was concerned with the degree of compliance at selected locations, with the Departments' and the Agency's prescribed policies and procedures for maintaining stock record accuracy through scheduled physical inventory programs, and with the extent to which inadequate physical inventory practices and the associated adjustment of inventory records may have contributed to any record inaccuracies at those locations.

This review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Our field work was conducted during the period June 1966 to January 1967 at selected activities of the Departments of the Army, Navy, and Air Force and the Defense Supply Agency. Additional information concerning the scope of our review is shown on page 26.

BACKGROUND

The military departments' task of supply management is to provide materiel support to their organizations at a minimum cost. So that supply economy may be achieved, no more money should be invested in inventories than is necessary for effective support. If this objective is to be attained, accurate and current records of quantities of specific items in the inventory must be available for use in determining whether user requisitions can be satisfied and whether, on the basis of requirements computations, procurement actions are necessary. This entails controlling and accounting for an enormous number of items and an even greater number of transactions which daily affect the status of items in the inventory.

The basic authority which sets forth the policy to be followed by the Department of Defense in establishing control of and accounting for its inventory is provided for under sections 2202 and 2701 of Title 10, United States Code. Through these sections the Secretary of Defense is directed to prescribe regulations which will achieve the efficient, economical, and practical operation of an integrated supply system to meet the needs of the military departments without duplicate or overlapping operations or functions and to have records of major equipment items and stored supplies of the military departments maintained on both a quantitative and a monetary basis so far as practicable.

To accomplish this task, the Secretary of Defense has assigned the responsibility for inventory management to his Assistant Secretary for Installations and Logistics. As a part of its implementation of the above policy, the Department of Defense has directed that all items held in stock be physically inventoried not less than once each year either by full count or by statistical sampling techniques; however, exceptions are permitted for slow-moving items and other items, provided that storage conditions and lack of movement ensure adequate physical protection and accuracy of records. Also, the Department of Defense has directed that inventory records and reports be reconciled promptly on the basis of physical inventories.

Within the Department of Defense the basic record of accountability which shows by item the receipt, issue, adjustment, disposal actions, balances on hand, and other supply management data is the stock record account. The Departments now generally maintain this record of their commodities on automatic data processing equipment. Effectiveness of overall supply management is contingent upon the accuracy of stock records and financial records. In an effort to attain this accuracy, periodic physical inventories are required to be performed and the stock record balances adjusted to the actual quantities on hand.

Each of the three military departments and the Defense Supply Agency have published policies and procedures which direct the frequency for, and the procedures to be followed in, taking scheduled physical inventories of depot stocks. These procedures generally require a complete count at least annually of those items which have a high-dollar value, either because of unit cost or because of a large quantity of annual issues, and of those items requiring special attention or which are classified or pilferable. For other items the Departments, in most cases, direct that the physical inventories be accomplished by means of statistically sampling lots comprised of similar items. The results of the physical inventories by statistical sampling must meet prescribed accuracy objectives or the items sampled are subjected to a complete physical count.

The procedures of the military departments provide for special physical inventories which are one-time, unscheduled physical counts of one or more line items (1) when the stock record shows a balance on hand but the warehouse indicates no stock physically available to fill a request for the material (hereinafter referred to as warehouse denial), (2) to correct a suspected discrepancy between the recorded stock record balance and the assets on hand, and (3) on request from the inventory manager or another appropriate official. Therefore, these inventories are recognized by all the supply components of the Department of Defense to be emergency measures which are not meant to substitute for the scheduled physical inventory program.

To provide assurance that actual physical locations of stock are correctly identified in the appropriate records,

the commands require either a complete or a statistical sample comparison of the recorded location of stock with the physical location or vice versa. They also prescribe that prompt reconciliations of the stock records with the physical counts be accomplished and that necessary adjustments be made to the stock records. Likewise the commands provide for suitable research to be conducted in an effort to determine causes for differences revealed by physical inventories and to make necessary procedural changes to preclude the recurrence of the problems.

Each of the military departments has established separate organizations that are responsible for the logistical mission and supply system management within the department. The principal organizational elements that carry out the functions necessary to that accomplishment are the inventory control point (ICP), stock control activity, and storage activity.

An ICP is responsible for systemwide direction and control of a number of categories of similar commodities. This responsibility includes development of worldwide quantitative and monetary inventory data. The stock control activity is responsible for maintaining inventory data on the quantity, ownership, location, etc., to determine availability of material for issue and to facilitate distribution and management of material. The storage activity is responsible for physical handling of the material incident to receipt, storage, and issue. These elements may be combined for groups of items in one organization at one location or grouped geographically in various combinations.

Inventories in the Department of Defense are valued at about $37 billion, excluding aircraft, ships, and supplies and equipment in the hands of using units. Our report pertains to approximately $10.4 billion worth of these inventories, representing equipment and supplies held in major depots of the military departments. (See app. II.) This does not include inventories of vehicles and ammunition, The inventories included in our review are referred to as depot inventories throughout this report.

FINDINGS

NEED FOR IMPROVEMENTS IN THE CONTROL OF INVENTORIES

Increased emphasis and attention are needed at all management levels, in our opinion, to improve the reliability and usefulness of the inventory records for control of depot inventories within the Department of Defense. We found that substantive differences existed between stock record balances and the actual quantities of items in inventories throughout the depot supply systems.

The depot supply activities in the Department of Defense adjusted inventory records up or down an average of *$2.4* billion annually in fiscal years 1965 and 1966, in order to bring the stock record balances into agreement with physical inventory quantities. The depot inventory for these 2 years averaged about $10.4 billion. The ratio of annual gross adjustment to total inventory for fiscal years 1965 and 1966 was approximately *29* and 18 percent, respectively.[1] The existence of this degree of inaccuracy and unreliability in the inventory records is not, in our opinion, conducive to the maintenance of effective and economical supply support.

The frequent and voluminous adjustments made to the stock records by the supply activities in an effort to correct the records were due, in large part, to an exceedingly large number of unscheduled special inventories. These special inventories, which were conducted primarily because of the lack of reliability of the records, frequently restricted the supply activities' capability to

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[1] One of the major factors contributing to this decline in percentage of gross adjustment was the Army Aviation Materiel Command's (AVCOM) reduction of gross adjustments from $817 million in fiscal year 1965 to $145 million in 1966. The gross adjustment in 1965 resulted in large part from complete inventories conducted at two depots that stored AVCOM items. Similar complete inventories were not conducted in 1966.

perform prescribed scheduled physical inventories. We found that, with the exception of the Air Force, the regularly scheduled physical inventories frequently were not taken and that, when taken, the results frequently revealed inaccurate stock records to an extent not considered acceptable by the supply activities' own standards.

Many factors have contributed to the existence of limited control over inventories. One of the primary factors, in our opinion, was the magnitude of inaccurate stock locator cards at the inventory locations. This not only had an adverse effect on supply actions but generated the need for conducting many of the special inventories. Other factors, which we feel contributed to inadequate inventory control, as reflected by the significant amount of inventory adjustments, were that:

1. Physical inventories were frequently made without proper control of documentation for receipts and issues occurring during the period of the inventory.

2. Proper reconciliation between the physical inventory count and the stock records was often not made at the completion of these inventories and causes of the imbalances were not determined.

3. Prescribed inventory control procedures were not always followed by supply personnel.

Details of the more significant conditions noted during our review are discussed in the following sections.

Significant differences between stock record balances and items in depot inventories

During our review we found that significant differences existed between stock record balances and actual quantities of items in depot inventories. This is demonstrated by the high ratio of gross dollar adjustments to the average annual inventory. In fiscal years 1965 and 1966 this ratio ranged from about 13 percent to 60 percent

for Department of Defense (DOD) wholesale supply services. The percentages for each of the DOD servicesare shown in appendix II.

At the two Army depots included in our review, we found that significant imbalances existed between the accountable stock record balances maintained at inventory control points and the depot stocks physically on hand. Between December 1965 and September 1966 these two depots took scheduled physical inventories of 26 lots by prescribed statistical sampling methods. An inventory lot generally comprises a number of items of the same Federal supply class. Of the 26 lots, 20 failed to meet the prescribed accuracy objective. For these 20 lots, 7 to 40 percent of the items sampled did not agree with the stock record balances. The overall average error rate for the 20 lots was about 15 percent.

The Naval Supply Systems Command monitors the systemwide accuracy of Navy stock records through quarterly reports of physical inventory performance which are submitted by Navy stock points. For fiscal years 1965 and 1966, these reports showed that an average overall stock record error rate of about 21 percent was experienced by all Navy stock points. However, the Navy's actual systemwide stock record error rate may be significantly higher than this reported 21-percent rate since this statistic included the number of Defense Supply Agency (DSA) items that were inventoried but excluded those which required adjustment.

For example, at one supply center included in our review, the quarterly reports of physical inventory performance for fiscal years 1965 and 1966 showed that about 28 percent of the Navy line items inventoried required stock record adjustments. The quarterly reports showed that stock record adjustments, totaling $33 million, were required for about 145,000 Navy items of the total 507,000 items physically inventoried in fiscal years 1965 and 1966.

We found that 268,000 DSA-owned items at this Navy stock point had been included in the total number of inventoried line items. Any adjustments required for these items were made by DSA and were not included in the 145,000 adjustments made by the Navy. Elimination of the DSA line

items from the computation of the percentage of inventoried Navy items requiring stock record adjustments would then show that stock record adjustments were required for about 61 percent of the Navy line items inventoried at this supply center. On the basis of this result, we believe that the total reported error rate for the Navy does not present a true picture of existing conditions.

During our review at the DSA supply activities, we found that in fiscal year 1966 one of the Defense depots conducted scheduled statistical sample physical inventories of 42 lots representing 541,012 line items managed by five Defense Supply Centers. The results of these inventories showed that 22, or 52 percent, of the lots sampled failed to meet the statistically acceptable accuracy criteria.

Exceedingly large number of special inventories

DOD supply activities, in an effort to locate stocks required for accomplishment of their supply support mission, depend to a great extent on an exceedingly large number of special inventories to resolve suspected differences between stock record balances and items on hand. In our opinion, the widespread use of such inventories, in lieu of improved inventory control practices, is costly and ineffective. Furthermore, the excessive workload associated with taking these special inventories frequently restricts accomplishment of scheduled systematic physical inventories.

Scheduled physical inventories, unlike special inventories, provide for systematic selection and scheduling of items for physical inventory on the basis of priorities established according to the characteristics of the items, such as dollar value, criticality, or classified sensitivity. The objective of regularly scheduled physical inventories is to achieve and maintain an acceptable degree of accuracy for each item in store rather than just to give attention to those item balances that are suspect or in an emergency situation.

The data furnished to us by the Army Materiel Command indicate that its depots, which are responsible for 514,000 line items of depot stocks, conducted over 900,000 special inventories between January 1965 and June 1966. From this

it appeared that, in addition to regularly scheduled physical inventories, it was necessary to count each item an average of 1.7 times during the 18-month period. However, some items were counted many times. For example, one depot conducted, within a 30-day period, five or more special inventories for each of 92 items.

For fiscal year 1966, the Air Force Logistics Command indicated that its five active Air Materiel Areas (AMA) had conducted special inventories of *277,254* line items. This number of special inventories are equal to about 30 percent of the total items in their inventories. At the two Navy supply centers included in our review, we found that, in fiscal years 1965 and 1966, approximately 90 percent of the inventory effort was concentrated on special inventories.

On the basis of our observations, we believe that a large number of these special inventories were generated by warehouse denials. For example, at one of the Navy supply centers included in our review, we found that about 37 percent of the *436,000* special inventories conducted in fiscal years 1965 and 1966 were generated because of warehouse denials. At one of the Air Force AMAs, we found that, for calendar years 1965 and 1966, approximately 19 percent of its 109,000 special inventories were necessary because of warehouse denials.

In their reports and in discussions with us, the officials of the supply management commands of the Army and the Navy cited the workload associated with the taking of special inventories as a reason for not taking their prescribed scheduled physical inventories. However, information obtained from the Air Force indicated that the AMAs conducted, with few exceptions, all of their scheduled inventories.

Inaccurate stock locator records and weakness in receipt control

The magnitude of inaccurate stock locator records as well as weaknesses in receipt control had, in our opinion, an adverse effect on supply actions and generated the need for conducting many special inventories,

In order that the warehouse personnel may be directed to the correct location to obtain material needed to fill requisitions, 'locator records are maintained by the depots to show item identification and warehouse location. Errors exist when there is a locator record for a particular item but the item is not found at that location or when there is no locator record for an item found at a particular location,

During the period September 1965 through November 1966, Army ICPs averaged over 15,500 warehouse denials a month. Our review indicated that inaccuracies in, or the absence of, stock locator records for specific items at Army depots contributed to this large number of warehouse denials. Army personnel analyzed *3,475* of these denials that were processed during the 4-month period ended in September 1966 by the two depots included in our review, This analysis showed that 35 percent of the denials were the result of inaccurate or missing stock locator records.

We concluded that, at the *Army* depots included in our review, adequate controls did not exist to provide reasonable assurance that (1) assigned warehouse locations for storage of incoming material receipts were being recorded in the computerized locator records and (2) incoming stocks were being stored in designated warehouse 'locations.

At these depots (1) a stock locator division is responsible for assigning warehouse storage locations for incoming materiel receipts, (2) a data processing division is responsible for input of assigned stock locations into computerized locator records, and (3) a storage division is responsible €or storage of stocks in designated warehouse locations. We found that no centralized control existed over the interrelated functions of these divisions to provide assurance that materials were being stored in

designated storage locations and that the storage .locations were being entered in the computerized locator records.

The Navy found that a systemwide error rate of about 13 percent existed in stock locator records as a result of location audits performed at stock points from July *1964* through June *1966.* On an average annual basis, the location audits revealed that, of the *6* million audited stock locations, about *778,000* were discrepant. The discrepancies revealed by the location audits included (1) material in storage but not shown on stock locator and/or stock records and (2) actual storage location of material in disagreement with the recorded storage location.

The two Navy supply centers included in our review, in our opinion, did not have effective controls over unbroken lot receipts' to ensure that materials were being properly stored and processed to accountable records within the prescribed 5-day period.

We found that, if proof of storage was not furnished by the storage division within a reasonable period of time, the receipt control procedures at these supply centers did not provide for follow-up action. Without the signed warehouse copy of the receipt document, the receipt control division at these supply centers could not, under existing procedures, process this type of material receipt to the stock record accounts.

At one Navy location, we tested the receipt processing time required for *54* receipts of unbroken lots which were logged in at the central receiving warehouse during the period February *1966* to July *1966.* We found that the processing time required for 38, or *70* percent, of these receipts ranged from *6* to *72* days with an average processing time of 18 days. We found also that three material receipts, valued at about *$34,000,* had been in storage for varying periods, ranging from *76* to *200* days, but had not been recorded on the accountable records. After we brought

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[1] Materials belonging to the same commodity class, which are logged in at a central receiving point but €or which receipt and storage documentation is furnished to receipt control only after the material has been stored.

this matter to the attention of officials, the three material receipts were processed to the accountable records.

During the 3-month period ended September 1966, the Air Force AMAs conducted special inventories on about 72,000 items as a result of preinventory location surveys which showed that no recorded stock balances existed for about 51,000 items in storage and that stock locator records had not been established for another 21,000 items in storage. In this regard, at one of the AMAs included in our review, we found that location surveys and follow-up special inventories conducted during the period January 1, 1965, to June 30, 1966, resulted in the location of $37 million worth of unrecorded assets.

In an effort to improve controls over the proper recording and storage of assets, the Air Force Logistics Command developed a debit suspense receipt system during fiscal years 1965 and 1966. Under this system, the AMAs will post material receipts to stock records prior to storing the material in an assigned warehouse location; however, the system provides for an automated suspensing and matching of posted receipt documents with documents evidencing proof of storage. If an automated match-up is not obtained within 5 days, a computerized printout of unmatched receipt documents is obtained and follow-up action, including a special inventory if necessary, is taken. Thereafter, the unmatched debit suspense documents are automatically aged and printed out periodically until stored receipts are located.

The debit suspense system was introduced at the Ogden AMA in July 1966, and full implementation of the system at all the AMAs is scheduled for January 1968. The debit suspense system, if properly implemented, should improve stock record accuracy and supply effectiveness by reducing the incidence of recorded assets in storage which cannot be located.

Our review of inventory adjustments of $5,000 or more that were processed from November 1966 to January 1967 by two Defense supply centers showed that they could not locate stock shown on stock records for 101 items having a value of $1.9 million for periods averaging 2 months. As a result of the temporary losses of stock for 16 of the 101 items, approximately 100 high-priority requisitions

for stock, valued at about $106,000, were backordered[1] for an average period of 17 days. The maximum time prescribed by DOD for filling high-priority requisitions is 3 days. We noted that 21 of these requisitions were for support to Southeast Asia and that they were in a backorder status for periods ranging from 3 to 51 days. The majority of these temporary losses of stock were generally attributable to inadequate receipt control and storage locator records at activities storing DSA-owned items.

Prescribed inventories not accomplished

During fiscal years 1965 and 1966, the DOD supply activities, except for those of the Department of the Air Force, generally did not accomplish the regular periodic inventories prescribed by their own directives. In addition, we observed inventory practices during our review which raised questions as to whether the data reported on physical inventories taken by the supply activities accurately portrayed the extent and result of their inventory activity. Our findings and observations are presented below by supply service.

Army

The overall data for the period February 1965 to June 1966 submitted for the 20 Army depots showed that 55 percent took no complete inventories, 45 percent took no Sample inventories, and 25 percent performed no location record audits. The reasons given for these failures to conduct scheduled physical inventories were (1) utilization of total inventory resources for special inventories, (2) conversion to new or revised major logistical systems, and (3) the workload influx caused by the Southeast Asia buildup had a severe impact on the inventory programs.

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[1] Backorders represent requisitions that could not be filled within prescribed time periods by the supply depot and, therefore, were suspensed awaiting availability of the requisitioned item.

Navy

Statistical data prepared by the Naval Supply Systems Command showed that 66 percent of the line items at Navy supply activities were physically inventoried in fiscal year 1965 and 88 percent in fiscal year 1966. These percentages were computed by using both special inventories and scheduled inventories and relating the total to the number of line items in the inventory. We believe that this is not a satisfactory means of measuring the effectiveness of a physical inventory program because the number of special inventories taken does not necessarily represent physical inventories of different line items. As indicated on page 9, the same line items are frequently counted many times through special inventories,

At the Navy locations included in our review, which were the two supply centers that stored the greatest number of items, we found that special inventories accounted for approximately 90 percent of the inventory effort. On the basis of their approved inventory programs, these activities were required to perform scheduled inventories annually on approximately 920,000 line items in fiscal years 1965 and 1966. However, during these fiscal years, scheduled inventories were taken on less than 6 percent of the items scheduled for physical inventory.

Air Force

Our review in the Air Force showed that the supply activities generally accomplished the prescribed physical inventories and location surveys. During fiscal years 1965 and 1966, they reported average overall stock record accuracy rates ranging from 86.7 percent to 99.7 percent.

However, our review at selected supply activities indicated that the reported high rates of stock record accuracy for certain categories of stock may have been overstated. Although the line items scheduled for regular physical inventory were selected on the basis of statistical sampling, action taken after the items were selected but before the scheduled inventories were taken raise some doubts as to the validity of the results as a basis for projecting to the universe.

For example, in August 1966 one of the supply activities conducted a statistical physical inventory of B-52 aircraft spares. The sample consisted of 75 items. No major stock variances were revealed, and an accuracy rate of 100 percent was computed for the lot. We found that 37 of the 75 sample items had been special inventoried about 1 week after the sample selection and about 2 weeks before the scheduled inventory. As a result, the stock records were adjusted for major stock variances. If these adjustments had not been processed immediately before the scheduled sample inventory, the results of the scheduled sample inventory would have reflected major stock variances for 10 of the 75 sample items.

Defense Supply Agency

Available DSA data showed that its supply activities had about 1.9 million active line items on hand. During fiscal years 1965 and 1966, approximately 40 and 9 percent, respectively, of the DSA active items were physically inventoried by complete or statistical sampling methods. In addition, the data indicated that the DSA supply activities accomplished less than 50 percent of the required location audits,

DSA officials indicated that one of the reasons for the substantial decrease from 1965 to 1966 in the number of line items physically inventoried was the need for increased support to Southeast Asia. They indicated also that the failure to accomplish the majority of the location audits was due in large part to the implementation of a new depot system known as MOWASP (Mechanization of Warehousing and Shipment Procedures).

Under MOWASP all Defense supply centers and depots will utilize standardized computer systems and uniform programs. This system is being designed to improve warehousing operations and stock locator accuracy by mechanization of various warehouse functions, including computerized assignment of warehouse stock locations for material receipts, previously performed manually. Also, DSA Headquarters officials informed us that they recognized the need for better inventory performance reporting in order to

better monitor and evaluate the inventory program. They also indicated that revisions were under development which they believed would give them the means to attain more effective control over the physical inventory program.

Receipt and issue documentation not adequately controlled and proper reconciliations not performed

Our review revealed that physical inventories were frequently made without proper control of documentation for receipts and issues occurring during the inventory cycle. The inventory cycle is the time period from establishment of the recorded balances for the line items to be included in the physical inventory through the actual count and summarization of those line items to the reconciliation of the recorded balances with the physical quantities. Also we found that, in a number of instances, personnel failed to perform proper reconciliations of the stock record balances with the physical stock position as of the physical inventory cutoff date.

All DOD supply activities follow the practice of taking open physical inventories; that is, receipt and issue of material continues during the inventory cycle. Therefore, it is necessary to identify and control the documents for transactions occurring during the inventory cycle. Also, it is necessary to perform a reconciliation of the physical counts with the stock records that will ensure the same effect from any interim transactions on both the recorded balances and the determination of the physical stock positions as of the cutoff date. Adjustment must be made to the records for any differences between the recorded balances and the physical stock positions that remain at the completion of the reconciliation. If the foregoing procedures are accomplished properly, the stock records should then show the physical stock position as of the inventory cutoff date.

During our review of Army supply activities, we tested the adjustments that one ICP made to 26 of its stock records for major variances between the recorded balances and the physical stock position as of the inventory cutoff date. We found that 19 percent of the records were adjusted incorrectly because personnel failed to adequately control the documentation for transactions occurring during the inventory cycle and failed to properly consider these transactions in performing reconciliations.

At two other Army ICPs, our tests showed a number of cases where major stock variances between the stock records and the physical inventory counts were researched inadequately and reconciled improperly. These activities allegedly reconciled the stock records with the physical inventory counts for 71 major variances, amounting to about $532,000, that were revealed by physical inventories taken and reported to the ICPs by one depot. We found that, in performing the reconciliations, personnel failed to properly take into consideration the effect of transactions that occurred during the inventory cycle. This resulted in erroneous reconciliations for 18 percent of the 71 major variances.

Personnel at two **DSA** depots did not follow the prescribed procedures for control of documentation in the performance of physical inventories taken in 1965 and 1966. We examined into the control that one **DSA** depot exercised over the documents for transactions that occurred during its physical inventory cycles. As a result of physical inventories conducted by the depot, adjustments totaling about $540,000 were made to the records for 550 items.

Our review indicated that the depot reported inaccurate quantities for about 14 percent of the 550 items which resulted in invalid adjustments totaling about $130,000. We found that these invalid adjustments resulted from the depot's failure to adequately control the documentation for transactions occurring during the inventory cycle and to properly consider these transactions in arriving at a physical stock position as of the inventory cutoff date.

We believe that adequate control of the documentation for transactions occurring during the inventory cycle could have eliminated a significant part of the erroneous adjustments to the stock records. In our opinion, adequate research of the major adjustments could have shown these errors, made their correction possible, and reduced their recurrence.

Physical inventory adiustments not researched

We found that suitable research of adjustments to the stock records for major differences disclosed by physical inventories was frequently not accomplished by the DOD supply activities. Although each supply command's criteria vary slightly, the commands have prescribed procedures for research of major adjustments that are designed to determine causes for the differences and to make provisions for eliminating them or reducing their recurrence.

We found that two Army ICPs processed inventory adjustments for about $197 million in 1966 and failed to research a substantial number of the adjustments representing major stock variances. At another Army ICP, we found that eight of 17 alleged reconciliations were considered proper and not in need of research on the basis of a comparison of a second physical inventory count with the stock record as adjusted by the first physical inventory count.

For example, on August 18, 1966, a depot inventory group physically counted 57 units of a particular item (FSN 1420-629-2626). The ICP's stock record for this item showed a zero balance as of the inventory cutoff date. On August 27, 1966, without performing any research, the ICP adjusted its stock record for the item to show an on-hand quantity of 57 units. The stock record then agreed with the count reported by the depot.

The Army requires a second physical count and research for all major variances. Therefore, on September 1, 1966, the depot made another physical count of the item and again reported an on-hand quantity of 57 units. The ICP personnel compared the reported results of the second physical count, 57 units, with the stock record balance which, as a result of adjustments made to record the first physical count, showed 57 units. They determined that, since the second physical count and the stock record balance agreed, no research was necessary.

We found that, at one of the Navy supply activities, a procedure had been established that provided for postaudits and follow-up corrective action on all inventory

adjustments valued at $2,000 or more. However, we found that the procedure had been of little value because no follow-up corrective action had been taken.

During fiscal year 1966 postaudits were performed on 1,923 inventory adjustments which met the $2,000 or more criteria. We found that no analysis had been made of the results of the fiscal year 1966 postaudits and that the results of these audits had not been reported to any organizational element above the group responsible for the postaudits. We found also that no corrective measures had been taken to eliminate or minimize the causes of recurring inventory errors identified by the postaudits. After we brought this situation to the attention of officials at the supply center, they informed us that, in the future, postaudit results would be turned over to a quality assurance group for review and follow-up action.

We found that, at one DSA supply center, approximately 33,700 stock records were adjusted in fiscal years 1965 and 1966 to reflect physical inventory gains and losses totaling about *$93* million, or a net inventory gain of approximately *$43* million. However, subsequent investigations of these adjustments showed that many of them were incorrect. After the correcting entries were made, the net inventory gain of *$43* million was reduced to $1.8 million.

On the basis of our review, we believe that the investigations of physical inventory adjustments, when made, generally were not conducted in sufficient depth to establish the basic causes for the adjustments. In those instances where a single transaction or a group of transactions appeared to account for all or a major portion of the physical inventory adjustment, it was usually assumed that incorrect transaction entries were the reason for the discrepancy. The investigative practices observed at one center are illustrated by the following example.

Water chlorination kits (FSN 6850-270-6225)

In June 1966 the center personnel concluded their investigation of a physical loss adjustment of 8,3411 units of a water chlorination kit having a total value of about $28,360. This loss adjustment had been posted to the stock accounts in January 1966. The investigation developed the following information.

Month adjustment posted to stock records	Reason for adjustment	Quantity increase or decrease(—)
1965:		
May	Physical inventory	11,829
September	Not given	640
1966:		
January	Physical inventory	—8,341
March	Physical inventory (special)	5,201
April	Not stated	1,300
June	Physical inventory (special)	—9,404
	Net increase	1,225

On the basis of the above data, the investigative personnel concluded that no further investigation or corrective action was necessary inasmuch as the series of adjustments appeared to be offsetting.

In other cases we reviewed, we could find no evidence that the investigations attempted to establish the basic causes for the physical inventory adjustments. In our opinion the investigative practices are not in accord with DSA procedures and are not conducive to improvement of stock record accuracy.

Internal audit reports show stock record inaccuracies and related difficulties as a continuing problem

We reviewed 35 reports issued between January 1964 and June 1966 by the internal audit groups of the DOD organizations. These reports indicated that differences between stock records and items on hand were a continuing problem. Also they frequently called attention to failures to:

1. Conduct prescribed physical inventories.

2. Control documentation for transactions occurring during the inventory cycle.

3. Properly reconcile stock records with the physical stock position as of the inventory cutoff date.

4. Properly adjust stock records for differences.

Furthermore, they noted problems caused by:

1. Erroneous locator records.

2. Poor counting.

3. Selection of nonrepresentative samples for statistical inventorying.

4. Lack of ownership identification for items owned by two or more managers but stored at one location.

In the majority of instances the internal audit recommendations for improving the accuracy of the records or solving the inventory control problems were directed to stricter adherence to the prescribed procedures.

In our opinion, the audit coverage, except for the Air Force, was adequate in scope and frequency of review. During the period reviewed, the Air Force auditors had issued only one report on one phase of inventory control at the

depot level. We believe that the area is sufficiently important to warrant greater attention.

In fiscal years 1965 and 1966, the Navy internal auditors issued two Navy-wide reports that showed an overall 28 percent difference between the physical inventories and the stock records at 18 Navy and three Marine Corps stock points, However, these reports failed to deal with the causes for such conditions. We believe that in-depth reviews of previously identified problem areas should be considered by the internal audit groups.

Agency comments

We brought our findings to the attention of the Secretary of Defense on May 3, 1967, and proposed that the military departments and the Defense Supply Agency be directed to take the necessary steps to concentrate management attention on the factors that have contributed to the present conditions and to achieve more positive enforcement of the existing policies and procedures relative to the maintenance of an acceptable degree of stock record accuracy for depct inventories.

We proposed further that the Secretary of Defense establish a group, composed of representatives from the military departments and the Defense Supply Agency, to study the problems of inventory control in depth with an objective of resolving the broad basic causes for these problems and to make recommendations that will correct the conditions uniformly throughout the Department of Defense.

At the Secretary's request, the Deputy for Supply and Services, Office of the Assistant Secretary of Defense (Installations and Logistics), commented on our findings and proposals by letter dated July 21, 1967 (see app. III), and stated that the Department of Defense concurred, in general, with our findings. He advised us that current management actions, including concentration of management attention on the factors contributing to the present conditions and increased emphasis on positive enforcement of existing policies and procedures, now under way within each of the military services and DSA are expected to effectively reduce

the problems associated with maintenance of stock record accuracy for depot inventories.

The Deputy for Supply and Services commented that each of the military services and DSA had initiated specific programs to eliminate the types of inventory control problems discussed in this report and were in the process of installing new procedures which were aimed at more accurate inventory control. We were advised that the installation of the new procedures had advanced to the point where fruitful results could be anticipated within a relatively short period of time. We were advised also that the need for establishment of a special inventory study group would be reconsidered and, if necessary, organized after an evaluation of the results was obtained from the new procedures.

Conclusions

We believe that the increased emphasis which DOD has stated that the military services and DSA are placing on more positive enforcement of the existing policies and procedures for control of depot inventories should, if effectively pursued on a continuing basis, result in greater stock record accuracy and increased supply effectiveness. As a part of our continuing interest in the supply management activities of the Department of Defense, we intend to give further attention to the need for improvement in the control of depot inventories and to test the effectiveness of the new inventory programs and procedures that are currently being implemented by the military services and DSA.

On the basis of other studies we have made of inventory controls and supply system responsiveness, we believe that, in addition to the specifics cited in this report, there are certain broad basic factors which have a significant bearing on the effectiveness of inventory controls in the Department of Defense. For example, we believe that the organizational structure of the supply systems in some cases may contribute substantially to the difficulties encountered in control of inventories.

The responsibility for physical receipt, storage, and issue of stocks of the same item is frequently decentralized to several storage activities. The management and

accounting responsibility for these same stocks is centralized at another supply activity which has no direct authority or control over the practices of the storage activities. Thus, it is difficult to establish responsibility for errors or loss of control because no single organization has the direct authority, responsibility, or perhaps motivation to reconcile differences and ensure closer control.

For the immediate future, we intend to concentrate our efforts on the organizational structures, alignment of responsibilities and authority, and numbers and types of personnel. We also intend to examine into the policies, procedures, and practices used by the military services and DSA relative to the receipt and storage of material, and into the processing of related transaction documents affecting the inventory records. In connection with this work, we intend to consider the organizational structure and methods used in commercial enterprises to determine if there are any techniques that may have application to the solution of inventory control problems in the Department of Defense.

SCOPE OF REVIEW

In response to the May 1966 report on the Economic Impact of Federal Procurement issued by the Subcommittee on Economy in Government of the Joint Economic Committee in which it indicated continued interest in the adequacy of inventory controls in the DOD, we initiated a review of this matter at selected locations in June 1966.

Our work included review and analysis, as deemed necessary, of overall reported or accumulated figures--quantitative and monetary, when available--for fiscal years 1965 and 1966 that were furnished to us by the military departments and by the DSA. These figures included total depot inventories, receipts and issues, adjustments resulting from physical inventories, and material availability. We also reviewed reports of scheduled and accomplished physical inventories, when available, and reports of audits conducted by the military departments' and DSA's internal audit organizations.

At the selected locations, our work included examination of the procedures and practices for control of receipts and issues of material, as well as observations of the taking of some physical inventories. We also reviewed the control exercised over documentation for transactions that occurred during the inventory cycle and tested the associated reconciliations of the stock records with the physical stock position as of the inventory cutoff date. We performed limited tests of the research of the adjustments on the part of the military departments that resulted from physical inventories. This prescribed research is intended to determine causes and to result in improvements to procedures or practices, whichever may be necessary.

Our review was conducted at the following locations in the military departments and DSA.

Department of the Army

Army Materiel Command, Headquarters, Washington, D.C.
Army Aviation Materiel Command, St. Louis, Missouri
Army Missile Command, Huntsville, Alabama

Army–Tank–Automotive Center, Warren, Michigan
Army Weapons Command, Rock Island, Illinois
Red River Army Depot, Texarkana, Texas
Sharpe Army Depot, Lathrop, California

Department of the Navy

Naval Supply Systems Command, Headquarters, Washington, D.C.
Aviation Supply Office, Philadelphia, Pennsylvania
Norfolk Naval Supply Center, Norfolk, Virginia
Oakland Naval Supply Center, Oakland, California

Department of the Air Force

Air Force Logistics Command, Headquarters, Dayton, Ohio
Ogden Air Materiel Area, Ogden, Utah
Oklahoma Air Materiel Area, Oklahoma City, Oklahoma

Defense Supply Agency

Defense Supply Agency, Headquarters, Alexandria, Virginia
Defense Electronics Supply Center, Dayton, Ohio
Defense General Supply Center, Richmond, Virginia
Defense Industrial Supply Center, Philadelphia, Pennsylvania
Ogden Defense Depot, Ogden, Utah
Richmond Defense Depot, Richmond, Virginia

APPENDIXES

PRINCIPAL OFFICIALS OF THE DEPARTMENT OF DEFENSE AND THE DEPARTMENTS OF THE ARMY, NAVY, AND AIR FORCE RESPONSIBLE FOR ADMINISTRATION OF THE ACTIVITIES DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
DEPARTMENT OF DEFENSE		
SECRETARY OF DEFENSE:		
Robert S. McNamara	Jan. 1961	Present
DEPUTY SECRETARY OF DEFENSE:		
Cyrus R. Vance	Jan. 1964	June 1967
Paul H. Nitze	July 1967	Present
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS):		
Thomas D. Morris	Jan. 1961	Dec. 1964
Paul R. Ignatius	Dec. 1964	Aug. 1967
Thomas D. Morris	Sept. 1967	Present
DIRECTOR, DEFENSE SUPPLY AGENCY:		
Vice Adm. Joseph M. Lyle	July 1964	June 1967
Lt. Gen. Earl C. Hedlund	July 1967	Present
DEPARTMENT OF THE NAVY		
SECRETARY OF THE NAVY:		
Paul H. Nitze	Nov. 1963	June 1967
Robert H. B. Baldwin (acting)	July 1967	Aug. 1967
Charles F. Baird (acting)	Aug. 1967	Sept. 1967
Paul R. Ignatius	Sept. 1967	Present
UNDER SECRETARY OF THE NAVY:		
Paul B. Fay, Jr.	Feb. 1961	Jan. 1965
Kenneth E. BeLieu	Feb. 1965	June 1965
Robert H. B. Baldwin	July 1965	June 1967
Charles F. Baird (acting)	July 1967	Present

PRINCIPAL OFFICIALS

OF THE DEPARTMENT OF DEFENSE AND

THE DEPARTMENTS OF THE ARMY, NAVY, AND AIR FORCE

RESPONSIBLE FOR ADMINISTRATION OF THE ACTIVITIES

DISCUSSED IN THIS REPORT (continued)

	Tenure of office	
	From	To
DEPARTMENT OF THE NAVY (continued)		
ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS AND LOGISTICS):		
Kenneth E. BeLieu	Feb. 1961	Feb. 1965
Graeme C. Bannerman	Feb. 1965	Present
CHIEF OF NAVAL OPERATIONS:		
Adm. David E. McDonald	Aug. 1963	Present
COMMANDER, NAVAL SUPPLY SYSTEMS COMMAND (note a):		
Rear Adm. John W. Crumpacker	May 1961	Apr. 1965
Rear Adm. Herschel J. Goldberg	May 1965	July 1967
Rear Adm. Bernhard H. Bieri, Jr.	Aug. 1967	Present
DEPARTMENT OF THE ARMY		
SECRETARY OF THE ARMY:		
Stephen Ailes	Jan. 1964	July 1965
Stanley R. Resor	July 1965	Present
UNDER SECRETARY OF THE ARMY:		
Paul R. Ignatius	Mar. 1964	Dec. 1964
Vacant	Dec. 1964	Mar. 1965
Stanley R. Resor	Mar. 1965	July 1965
David E. McGiffert	July 1965	Present

PRINCIPAL OFFICIALS

OF THE DEPARTMENT OF DEFENSE AND

THE DEPARTMENTS OF THE ARMY, NAVY, AND AIR FORCE

RESPONSIBLE FOR ADMINISTRATION OF THE ACTIVITIES

DISCUSSED IN THIS REPORT (continued)

	Tenure of office	
	From	To
DEPARTMENT OF THE ARMY (continued)		
ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS AND LOGISTICS):		
Daniel M. Luevano	July 1964	Oct. 1965
Dr. Robert A. Brooks	Oct. 1965	Present
DEPUTY CHIEF OF STAFF FOR LOGISTICS:		
Lt. Gen. R. W. Colglazier, Jr.	July 1959	July 1964
Lt. Gen. Lawrence J. Lincoln	Aug. 1964	Present
ARMY MATERIEL COMMAND:		
Gen. Frank S. Besson, Jr.	July 1962	Present
DEPARTMENT OF THE AIR FORCE		
SECRETARY OF THE AIR FORCE:		
Eugene M. Zuckert	Jan. 1961	Sept. 1965
Dr. Harold Brown	Oct. 1965	Present
UNDER SECRETARY OF THE AIR FORCE:		
Dr. Brockway McMillan	June 1963	Sept. 1965
Norman S. Paul	Oct. 1965	Oct. 1967
Townsend Hoopes	Oct. 1967	Present
ASSISTANT SECRETARY OF THE AIR FORCE (INSTALLATIONS AND LOGISTICS) (formerly Materiel):		
Robert H. Charles	Nov. 1963	Present

PRINCIPAL OFFICIALS

OF THE DEPARTMENT OF DEFENSE AND

THE DEPARTMEHTS OF THE ARMY, NAVY, AND AIR FORCE

RESPONSIBLE FOR ADMINISTRATION OF THE ACTIVITIES

DISCUSSED IN THIS REPORT (continued)

	Tenure of office	
	From	To
DEPARTMENT OF THE AIR FORCE *(continued)*		
COMMANDER, AIR FORCE LOGISTICS COMMAND:		
Gen. Mark E. Bradley, Jr.	July 1962	Aug. 1965
Gen. Kenneth 3. Hobson	Aug. 1965	July 1967
Gen. Thomas P. Gerrity	Aug. 1967	Present

[a]Formerly the Bureau of Supplies and Accounts, reorganized in May 1966.

DEPARTMENT OF DEFENSE

CONUS DEPOT INVENTORY MANAGEMENT DATA

FOR FISCAL YEARS 1965 AND 1966

	1965				
	Air Force	Navy	Army	Defense Supply Agency	DOD total
	(Dollar value in millions)				
Average annual inventory	3,810	3,105	1,455	2,104	10,474
Receipts	1,308	536	510	1,870	4,224
Issues	2,645	873	515	1,968	6,001
Physical inventory adjustments:					
Gain	603	223	438	206	1,470
Loss	-752	-202	-432	-184	-1,570
Net	-149	21	6	22	-100
Gross	1,355	425	870	390	3,040
Percent of gross physical adjustment to average annual inventory	35.56%	13.69%	59.79%	18.54%	29.02%
	(Line items, actual (note a))				
Average annual inventory	956,483	827,985	497,435	2,350,700	4,632,603
Receipts	750,106	2,648,208	(b)	2,157,700	5,556,014
Issues	3,472,667	6,082,546	(b)	15,081,100	24,636,313

Note: Inventory Management Data was supplied to us by the Department of the Army (Army Materiel Command), Navy (Naval Supply Systems Command), Air Force (Air Force Logistics Command), and the Defense Supply Agency. The data supplied by the Army Materiel Command (AMC) for fiscal year 1965 covered only the period 2-1-65 to 6-30-65.

Air Force	Navy	Army	[illegible]	DOD total
		(Dollar value in millions)		
3,743	3,104	1,[illegible]	1,[illegible]	10,426
1,758	607	[illegible]	[illegible]	6,321
1,887	1,16[illegible]	1,[illegible]	[illegible]	7,377
406	204		16[illegible]	1,001
-314	-19[illegible]	[illegible]	[illegible]	-835
92	[illegible]		-1[illegible]	166
720	[illegible]	[illegible]	[illegible]	1,836
19.24%	14.85%	[illegible]	[illegible]	17.61%
		(Line items, [illegible])		
930,783	824,626	5[illegible]	2,[illegible]	4,691,884
1,051,458	2,681,461	[illegible]	[illegible]	11,[illegible]95,821
4,912,618	6,317,010	4,[illegible]	[illegible]	24,665,[illegible]81

[a]A comparison cannot be drawn between the number of line item receipts and issues because generally receipts are made in bulk [illegible] which is recorded as one line item receipt, while shipments [illegible] breaking down this bulk form into smaller line item [illegible] receipt [illegible] additional using activities.

[b]This data not provided by AMC for fiscal year [illegible].

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

SS
INSTALLATIONS AND LOGISTICS

JUL 21 1967

Mr, William A. Newman, Jr.
Director, Defense Division
General Accounting Office
Washington, D. C. 20548

Dear Mr. Newman:

Reference is made to your letter of May 3, 1967 which forwarded for review and comment a draft report on Control of Depot Inventories in the Department of Defense (DoD) (OSD Case #2605).

The draft report is based on a limited review of the effectiveness of inventory controls in the DoD, particularly with those pertaining to the accuracy of depot inventory records, and to the degree of compliance with prescribed policy and procedural directives addressed to the maintenance of stock record accuracy.

The General Accounting Office (GAO) concluded from its review that substantive differences existed between stock record balances and the actual quantities of items in inventory. Those imbalances were generally attributable to the failure to: (1) establish and maintain accurate locator cards, (2) conduct regularly scheduled physical inventories, (3) adequately control documentation representing movement of stock during the physical inventory cycle, (4) adequately perform or validate reconciliations of the stock record with the physical inventory stock positions prior to posting adjustments, and (5) perform post-adjustment research to isolate causes for the significant discrepancies and to take appropriate corrective action.

Based on the overall conclusion that needed improvements must come through the concentration of management attention on the factors that have contributed to the present conditions, the report recommends that the Military Departments and the Defense Supply Agency (DSA) be directed to take necessary steps to achieve more positive enforcement of existing policies and procedures, and that a group be established to study the problems of inventory control in depth.

Generally, the types of deficiencies cited in the report are valid. However, actions now under way within each of the Military Services and the Defense Supply Agency should result in significant improvements.

The effectiveness of inventory controls at all levels is a matter of continuing concern to the DoD. The introduction of computers into the management system and the consequent transfer of accountable records from local control to centralized ADP equipment have introduced some new dimensions into the management process. While many cost and effectiveness advantages have been achieved as a result of these management innovations, the remote control of stocks on hand as well as specific warehouse locations, created transitional problems that always result from conceptual changes in basic procedures. Coupled with this was the advent of hostilities in Vietnam as well as the need for more highly competent personnel assigned to the inventory control task. Both of these latter factors further complicated the many transitional problems that were already apparent.

These problems were recognized, but the pressures to maintain a continuing flow of high priority essential military supplies to Vietnam often precluded the orderly process of converting from one system to another. However, each of the Military Services and DSA initiated specific programs to eliminate these deficiencies. For example, the Army initiated a six-phase program in September 1966. Three of these phases were completed by the end of December 1966 but not in sufficient time to be reflected in the draft report prepared by your staff. The major phase, which involves the establishment of new inventory procedures, will be phased in between May and October 1967. Likewise, the Navy, Air Force and DSA are in the process of installing new procedures which are aimed at more accurate inventory control.

The draft report recommends that the Secretary of Defense take necessary steps to direct the Military Departments and DSA to concentrate management attention on the factors that have contributed to the present conditions and to achieve more positive enforcement of existing policies and procedures. The Military Departments and **DSA** are now doing this and it is anticipated that current management actions will effectively reduce the problems associated with maintaining accurate physical inventories. This office will continue to review the progress being made under the programs now under way to assure the development of inventory control procedures that will appropriately reflect an acceptable degree of accuracy.

The draft report also recommends the establishment of a special group to study this problem in depth. It is believed advisable at this time to continue with the installation of the new procedures now under way by the Military Services and DSA since they have advanced to the point where fruitful results can be anticipated within a relatively short period of time. After evaluation of the results obtained from these new procedures, the need for establishment of the special group will be reconsidered and, if necessary, such a group will be organized.

In the meantime, a positive exchange of views between the GAO and DoD with respect to this problem as well as the effectiveness of the procedures now being installed by the Military Services and DSA would be welcomed and such an exchange is encouraged. A follow-on survey by GAO after the procedures have been in effect for a reasonable period of time might also serve a useful purpose.

Sincerely,

Paul H. Riley

PAUL H. RILEY
Deputy Assistant Secretary of Defense
(Supply and Services)

U.S. GAO Wash., D.C.