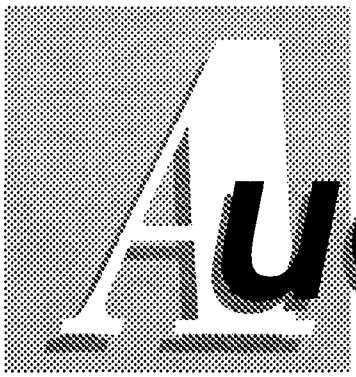

OFFICE OF THE INSPECTOR GENERAL

DEMAND DATA FOR SECONDARY ITEMS

Report Number 92-001

October 8, 1991

Department of Defense

The following acronyms are used in this report.

AFLMC . . . . . Air Force Logistics Management Center
ANRDP . . . . . applicable nonrecurring demand percentage
CECOM . . . . . .U.S. Army Communications-Electronics Command
DAAS. . . . . Defense Automatic Addressing System
DLA . . . . . .Defense Logistics Agency
DSU . . . . . direct support unit
DS4 . . . . . .Direct Support Unit Standard Supply System
GFM . . . . . Government-furnished materiel
ICP . . . . . inventory control point
ISSL. . . . . initial spares support list
MILSTRIP. . Military Standard Requisitioning and Issue Procedures
NAS . . . . . Naval air station
NSC . . . . . Naval supply center
SAILS . . . . . .Standard Army Intermediate Level Supply System
SBSS. . . . . Standard Base Supply System
SPR . . . . . .special program requirements
ULLS. . . . . Unit Level Logistics System

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884

October 8, 1991

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (PRODUCTION AND LOGISTICS)
ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Report on Demand Data for Secondary Items (Report No. 92-001)

This final report is provided for your information and use. Comments from the Air Force and Defense Logistics Agency were considered in preparing this report. Navy comments were received too late to include in this report. Comments were not received from the Assistant Secretary of Defense (Production and Logistics) or the Army.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, the Assistant Secretary of Defense (Production and Logistics) and the Assistant Secretary of the Army (Financial Management) are requested to provide final comments on the unresolved recommendations and unresolved issues by December 9, 1991. See the "Status of Recommendations" section at the end of each finding for the unresolved recommendations and the specific requirements for your comments.

DoD Directive 7650.3 also requires that comments indicate concurrence or nonconcurrence with the findings and with the recommendations addressed to you. If you concur, describe the corrective actions taken or planned, the completion dates of actions already taken, and the estimated dates for completion of planned actions. If you nonconcur, state your specific reasons for each nonconcurrence. If appropriate, you may propose alternative methods for accomplishing desired improvements.

Recommendations are subject to mediation in accordance with DoD Directive 7650.3 in the event of nonconcurrence or failure to comment. We also ask that your comments indicate concurrence or nonconcurrence with the internal control weaknesses highlighted in Part I.

The courtesies extended to the audit staff are appreciated. If you have any questions on this audit, please contact Mr. Charles Hoeger or Mr. Terrance Wing at (215) 737-3881 (DSN 444-3881). The planned distribution of this report is listed in Appendix F.

Edward R. Jones
Deputy Assistant Inspector General
for Auditing

Enclosure

cc:
Secretary of the Army
Secretary of the Navy
Secretary of the Air Force

Office of the Inspector General, DoD

AUDIT REPORT NO. 92-001 October 8, 1991
(Project No. 0LD-0041)

DEMAND DATA FOR SECONDARY ITEMS

EXECUTIVE SUMMARY

Introduction. In FY 1990, requisitioners sent approximately 27 million orders to DoD's wholesale supply system. DoD and Military Department procedures provide that requisitioners assign demand codes to these orders to indicate whether the requirement is recurring or nonrecurring. Inventory control points accumulate the historical demand data and use it to calculate stockage levels, compute procurement and repair requirements, and develop replenishment budgets. Excessive inventories have been a matter of high level concern in recent years. This has been highlighted by recent Senate hearings and related General Accounting Office reports, as well as Inspector General audit reports, and DoD has a number of initiatives in process to reduce inventories. A contributing factor to excessive inventories is overstatement of requirements in computing quantities to buy. Misclassifying demands as recurring can be a significant factor in overstatement of future requirements.

Objectives. The objectives of the audit were to determine if requisitioners were accurately classifying and reporting demand data for requirements for secondary items, if inventory managers were properly accumulating demand data, and if internal controls over demand data classification and accumulation were effective.

Audit Results. Controls over the classification and recording of demand data were inadequate. While most of the demand transactions were accurately processed, some supply data systems were improperly programmed to classify and report nonrecurring requirements as recurring demand. In addition, there were inconsistencies among the Military Departments and Defense Logistics Agency's inventory managers in their use of nonrecurring demand data.

- Demand transactions for nonrecurring requirements were erroneously classified as recurring demand; and demand transactions for some routine maintenance were erroneously classified as nonrecurring demand. In addition, recurring demand data for some requirements were counted twice in computing stockage levels. We estimated that requisitioners erroneously classified and reported demand transactions valued at approximately $127.6 million. Approximately $125.8 million of the $127.6 million were for nonrecurring demands that were erroneously classified as recurring demands (Finding A).

- The Military Departments and the Defense Logistics Agency were inconsistent in their use of nonrecurring demand data, requisitioner cancellation requests, and serviceable materiel returns to forecast requirements. Nonrecurring demand data were either totally excluded, partially included, or totally included in requirements forecasts. In addition, requisitioner cancellations and serviceable return data were not consistently used to adjust demand data to improve the accuracy of requirements forecasts. As a result, demand forecasts were overstated and items with like demand data would, depending on the inventory control point that managed the item, have different computed requirements (Finding B).

Internal Controls. Internal controls were not established to ensure that requisitioners were accurately classifying and reporting demand data for requirements for secondary items. In addition, internal controls were not sufficient to ensure that inventory control points were properly accumulating requisitioner demand data. See Findings A. and B. for details on these weaknesses and Part I for details of the specific internal controls tested.

Potential Benefits of Audit. The report does not identify quantifiable monetary benefits. The effect of misclassifying demand data will depend on the techniques used by individual inventory control points to forecast requirements and the requirement/asset position of the items at the time of the misclassification. However, although our tests were done at only a few activities, the conditions reported are systemic in the standard data systems that are used to classify, report, and accumulate demand data and have broad application to the accuracy of DoD inventory managers' inventory investment, procurement requirements and replenishment budgets. We believe significant monetary and other benefits can be achieved by a more disciplined and consistent demand categorization, reporting, and accumulation process in DoD (see Appendix D).

Summary of Recommendations. We recommended that procedures and internal controls be established or revised to ensure that demand data are properly classified and reported.

We also recommended that the Assistant Secretary of Defense, Production and Logistics, [ASD (P&L)] provide additional guidance to the Military Departments and the Defense Logistics Agency (DLA) on the use of nonrecurring demand data and requisitioner cancellation requests in forecasting materiel requirements.

Management Comments. Comments were not received from the ASD (P&L) or the Army. We request their comments by December 9, 1991. The Navy's comments were received too late for inclusion in this report. They will be considered as comments to the final report. The Air Force concurred with the findings and recommendations and additional comments are not required. The DLA provided comments to Recommendation B.1.a. and concurred with Recommendation B.2. and additional comments are not required.

Part II contains a full discussion of management comments and Part IV contains a complete copy of the Air Force and DLA comments.

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This report was prepared by the Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, DoD. Copies of the report can be obtained from the Information Officer, Audit Planning and Technical Support Directorate, at (703) 693-0340.

PART I - INTRODUCTION

Background

The Military Departments and the Defense Logistics Agency (DLA) inventory control points (ICPs) provide spare parts support to military customers. The ICPs manage (procure, stock, and distribute) over 4 million secondary supply line items in the DoD supply system. Secondary supply items include consumables (such as nuts and bolts) and reparables (such as transmissions and engines) used to maintain and support major end items of equipment.

Each Military Department and DLA has developed its own automated systems to manage secondary items. A critical factor affecting the efficiency and economy of the systems is the degree of accuracy in forecasting future issue requirements. A major data element used in forecasting future issue requirements is demand data provided by requisitioners. Demand is defined as an indication of a requirement for issue of serviceable materiel and is generally classified as recurring or nonrecurring. ICPs use reported demand data to forecast future issue requirements, to determine how much materiel to buy or repair and where to position the materiel, and how much funds to budget for future periods. In FY 1990, requisitioners submitted approximately 27 million demand transactions to wholesale inventory control activities.

DoD's Corporate Information Management initiative, a part of the Defense Management Report improvements, is intended to eliminate separate Military Department and Defense agency data systems and to provide standardized systems that can relate to each other, as well as relate to systems across all of DoD. The Corporate Information Management initiative will change supply, inventory, and accounting processes and create design requirements for new DoD-wide integrated systems. One of the functions included in the systems to be integrated will be requirements determination for secondary items.

Objectives

The objectives of the audit were to determine if requisitioners were accurately classifying and reporting demand data for requirements for secondary items, if inventory managers were properly accumulating demand data, and if internal controls over demand data classification and accumulation were effective.

Scope

The audit evaluated demand transactions submitted by requisitioners through the Defense Automatic Addressing System (DAAS) to 18 wholesale ICPs that manage secondary supply line items. The

demand transactions reviewed included requisitions, passing and referral orders (documents used to transmit customers' requirements to another supply source for supply action), and issue transactions.

We requested that DAAS collect demand transactions routed through DAAS from February through May 1990. The DAAS data showed that there were approximately 7.6 million demand transactions processed to the 18 ICPs during this period. We used the DAAS data to judgmentally select requisitioners and ICPs for review. Data on the criteria used to select the activities are in Appendix A.

At the requisitioner level, we tested demand transactions to evaluate the accuracy of demand classification and reporting, with an emphasis on ensuring that nonrecurring requirements were properly classified and reported. At ICPs, we tested demand accumulation processes to determine if demand data were properly accumulated and categorized. We also evaluated differences in the policies and procedures of using nonrecurring demand, requisitioner cancellation requests, and serviceable returns in forecasting materiel requirements. Details on the audit tests are in Appendix A.

This economy and efficiency audit was made from January 1990 through January 1991 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD, and accordingly included such tests of internal controls as were considered necessary. Activities visited or contacted during the audit are listed in Appendix E.

Internal Controls

We evaluated internal controls over classifying, reporting, and accumulating demand data. We reviewed the Military Departments' policies, procedures, and systems relating to classifying and reporting demand data to ensure that requisitioners assigned the correct demand code to demand transactions submitted to ICPs. We reviewed the Military Departments' and DLA's policies, procedures, and systems relating to demand accumulation to ensure that demand data were properly accumulated. As discussed in Findings A. and B. of this report, additional controls were needed to ensure that requisitioners accurately classified and reported demand data for wholesale materiel and that ICPs properly accumulated demand data to forecast future requirements.

The audit identified material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Controls were not established or effective to ensure that procedures and policies used to classify, report, and accumulate demand data were in accordance with applicable regulations. All recommendations in

this report, if implemented, will correct the weaknesses noted in our review. We did not identify the monetary benefits to be realized by implementing the recommendations. The effect of misclassifying demand data will depend on the technique used to forecast requirements by the individual ICPs and the requirement/asset position of the line items affected at the time of the misclassification. A copy of our final report will be provided to the senior official responsible for internal controls within the Army, Navy, Air Force, and DLA.

Prior Audits

Inspector General, DoD, Report No. 91-106, "Military Department Requirements for Currently Procured Wholesale Inventories for Consumable Items," June 28, 1991, reported that demand data in the Air Force Economic Order Quantity Buy/Budget Computation System (D062 system) was inaccurate, the appropriate demand code was not reported on requisitions entered into the Air Force Logistics Command Exchangeable Production System, and item managers did not verify atypical demands or abnormal demand patterns. The audit evaluated ICPs requirements data for selected procurement actions over $50,000 to determine if the requirements supported continuation of the procurement. The report recommended that the Commander, Air Force Logistics Command, periodically test the accuracy of demand rates used in the D062 system and also issue guidance to classify and reiterate accurate demand coding of requisitions for input to the Exchangeable Production System. The report also recommended that the Commanders of the Army Materiel Command and the Air Force Logistics Command modify the automated requirements computation system to analyze demand data and to identify and refer potentially abnormal demands and demand trends to item managers for evaluation. The Army and Air Force concurred with the recommendations.

Inspector General, DoD, Report No. 90-087, "Special Program Requirements for Logistics Support," June 27, 1990, reported that the Military Departments submitted special program requirement (SPR) requisitions for purposes not intended by the SPR program, and did not properly code the requisitions so that inventory managers could recognize the requisitions as nonrecurring requirements associated with SPRs and thereby discount the requirements when making future inventory decisions. The report recommended that the Military Departments establish internal controls to include an assessment of the necessity for submitting SPR requests to DLA and of the accuracy of demand coding on SPR requisitions. The Military Departments concurred with the finding and recommendations and initiated corrective actions.

PART II - FINDINGS AND RECOMMENDATIONS

A. DEMAND DATA CLASSIFICATION AND REPORTING

Requisitioners erroneously classified and reported demand data to wholesale ICPs. Demand transactions for nonrecurring requirements for initial stockage requirements, stock level changes, and modification programs were classified as recurring demand; and ICPs sometimes counted recurring demand transactions for the same requirements twice. Additionally, demand transactions for some recurring requirements for routine maintenance were classified as nonrecurring demand. These conditions occurred because automated retail supply systems were not properly programmed to accurately classify and report demand data, requisitioners manually entered the incorrect demand code on transactions, there were no procedures to preclude the double reporting of certain demand transactions, and there were no internal controls to ensure that demand data were properly classified and reported. As a result, we identified about $127.6 million of demand data submitted to ICPs, used to compute future requirements and position stocks, that were inaccurate. Approximately $125.8 million of the $127.6 million were for nonrecurring demands that were erroneously reported as recurring demands. The remaining $1.8 million were for recurring demands that were erroneously reported as nonrecurring demands.

DISCUSSION OF DETAILS

Background

DoD Manual 4000.25-1-M, "Military Standard Requisitioning and Issue Procedures," (MILSTRIP) provides guidance to requisitioners on classifying and reporting demand data. Demand codes from DoD Manual 4000.25-1-M are listed in Appendix B. Requisitioners generally have the option of classifying and reporting demands as either recurring or nonrecurring. Recurring demand is assigned to requisitions for materiel that the requisitioner either uses or expects to use on a repetitive basis, such as materiel for stock replenishment or for recurring maintenance programs. Nonrecurring demand is assigned to requisitions for materiel that is a onetime requirement, such as an initial request for stockage or for equipment modifications.

ICPs accumulate requisitioners' demand data and use the data as a basis to forecast future requirements to determine what, when, and how much to buy and where to store the materiel. For consumable items, demand data are the primary factor used to forecast requirements. For reparable items, demand data are used along with other data, such as maintenance failure rates and flying hours, to forecast requirements.

ICPs calculate a forecasted requirement generally for a 1-month or 3-month period. Monthly or quarterly demand forecasts are applied to established stock levels (procurement lead times, procurement cycles, and safety levels) to develop an item's stockage objective. For example, if the quarterly demand forecast is 10 units and the procurement lead time is 18 months, the stockage objective for the procurement lead time requirement would be 60 units. The ICPs periodically apply on-hand and due in assets against an item's stockage objective forecast and initiate a procurement action when the combined assets have dropped to or below an item's reorder point. Inaccurate demand data not only affect the specific demand transactions that are erroneously classified and reported, the data also have a continuing multiplier effect on the various stock levels used to compute and forecast requirements. Further, inaccurate demand classification and reporting overstate or understate requirements and result in ICPs investing funds in the wrong item, thereby denying funds for the replacement of needed items. Overstated requirements may result in premature or unnecessary procurements, excess stocks, and excess transportation and storage costs; while understated requirements may result in backorders and disruptions in planned maintenance repairs of components and end items.

Initial Requests for Stockage or Increased Stock Levels

The Military Departments' mechanized retail supply systems were erroneously programmed to code demand transactions for initial request for stockage or increased stock levels (order and ship time, safety level, and operating level) as recurring demand. DoD and Military Department requisitioning procedures provide that a request for a onetime requirement, for example, an initial request for stockage, will be classified and reported as a nonrecurring demand. Army and Navy procedures also provide that a request to increase retail stock levels is an example of a onetime requirement that will be reported as a nonrecurring demand. We found, however, that the Military Departments' mechanized retail supply systems, used to compute requirements for initial stocks and increased stock levels and to generate demand transactions for these requirements to ICPs, were incorrectly programmed to code these demand transactions as recurring demand. We estimated that $86.9 million of the $127.6 million of demand data that were erroneously classified and reported was for demand transactions for initial stockage requests or increased stock levels that were coded as recurring demand.

Army requisitioners. Four Army activities that requisitioned wholesale stocks to provide supplies to supported units were selected for review. Two activities were direct support units (DSUs) that used the automated DSU Standard Supply System (DS4) to requisition materiel. The other two activities were intermediate supply support activities that used the automated

Standard Army Intermediate Level Supply System (SAILS) to requisition materiel. Both systems were incorrectly programmed to assign a recurring demand code to demand transactions for initial stockage requirements and increased levels.

We evaluated supply records maintained by the four activities to determine the number and value of demand transactions for initial stocks or increased stock levels that were incorrectly coded as recurring demand. For the two DSUs and one of the intermediate supply support activities, we evaluated 1 month's requisitioning data and for the other intermediate supply support activity we reviewed 1 week's data. The activities submitted erroneously coded recurring demand transactions for 257 initial stockage requests and 45 increases to retail stock levels valued at approximately $452,000 and $89,000, respectively. Of the 302 demand transactions, 279 valued at $190,000 were forwarded by the retail supply activities to the wholesale level. The remaining demand transactions were either filled from excess stocks or not forwarded to the wholesale level because of requisitioning processing problems.

During our evaluation of DSU requisitioning procedures, we visited a unit that received supply support from one of the DSUs selected for review. The unit used the Unit Level Logistics System (ULLS) to determine stock levels and to requisition materiel. In our discussions with unit personnel, we were informed that the ULLS was also incorrectly programmed to record demand transactions for initial stockage requirements and increased levels as recurring demand. The ULLS also was programmed to code all ULLS generated demand transactions as recurring demand. The unit was in the process of deploying overseas and we were unable to review specific transactions to measure any effect.

We discussed the DS4, SAILS, and ULLS programming logic for initial stockage requirements and increased stock levels with personnel at the U.S. Army Logistics Center, Fort Lee, Virginia. The personnel were unable to provide us with the reasons why the systems were incorrectly programmed. However, they did provide us with data to show that they had recognized and taken some actions to correct the deficiencies.

U.S. Army Logistics Center personnel recognized that the DS4 system needed reprogramming. The Logistics Center developed a change proposal in August 1990 that recommended changing the DS4 system to code demand transactions for initial stockage requests and increased levels as nonrecurring demands. However, the proposal was not implemented because the deficiency will be corrected sometime in 1994 or 1995 when both the DS4 and SAILS systems are scheduled to be replaced. We found no study or analysis to determine the effect of the delay in reprogramming the systems. There are approximately 125 DSUs that use the DS4 system and 55 activities that use the SAILS system.

The ULLS was also being changed to assign a nonrecurring demand code to demand transactions for initial stockage requirements and increased stock levels. A phased worldwide implementation was planned to begin in May 1991. However, all other types of demand transactions generated by ULLS will automatically be assigned a recurring demand. Unit personnel will not have the option to override ULLS to assign a nonrecurring demand code to requirements for equipment modifications or other onetime occurrences. The automatic coding of recurring demand does not meet the intent of DoD MILSTRIP demand coding procedures. Approximately 2,300 requisitioners use ULLS.

Navy requisitioners. Demand transactions from one Naval supply center (NSC) were evaluated. The NSC used the Uniformed Automated Data Processing System - Stock Point to manage retail stocks and requisition materiel. The system was incorrectly programmed to code demand transactions for initial stockage requirements and increased levels as recurring demand. In FY 1990, the NSC submitted to the four DLA ICPs included in our review, erroneously coded recurring demand transactions for initial stockage requirements for 3,148 line items valued at approximately $1.4 million. We could not determine the comparable volume of activity related to increased stock levels because the necessary data were not available. Responsible Navy personnel were not able to provide us with reasons why the system was incorrectly programmed.

Air Force requisitioners. We evaluated demand transactions from one Air Force base. The Standard Base Supply System (SBSS) is used throughout the Air Force to manage retail stocks and requisition materiel. The SBSS was incorrectly programmed to code initial stockage requirements and increases to stock levels as recurring demand transactions. We attempted to evaluate supply records maintained at the Air Force base to identify the number and value of recurring demand transactions for initial stockage requirements and increased stock levels. However, these types of demand transactions were not uniquely coded or readily identifiable.

We then contacted the Air Force Logistics Management Center (AFLMC), Gunter Air Force Base, AL, which maintained a data base of supply records for 12 Air Force bases that are representative of the various types of bases throughout the world. AFLMC routinely used data from the 12 bases to identify data in the SBSS and to evaluate the effect of proposed SBSS changes. We requested that AFLMC develop a computer program to identify initial stockage demand transactions for consumable items processed to the 18 ICPs included in our audit. AFLMC interrogated its data base and, based on changes in stock record balances, provided us data on demand transactions for initial stockage requirements and increased stock levels. Based on the AFLMC data, we estimated that all Air Force bases generated erroneously coded recurring demand transactions valued at about $85 million annually for initial stockage requests and increased

stock levels. Air Force personnel were unable to provide us with reasons why the SBSS was incorrectly programmed. However, they did state that they will do a study to evaluate this issue. Appendix C provides data on the AFLMC analysis and how we arrived at our estimate.

Modification Programs and Initial Spares Support Lists

Requisitioners erroneously coded demand transactions for materiel for modification programs and initial spares support lists as recurring demand. These transactions are onetime occurrences that should be coded as nonrecurring demand. We evaluated contractor demand transactions for Government-furnished materiel (GFM) for Army and Air Force modification programs, Air Force depot demand transactions for materiel for Time Compliance Technical Order kits for modification programs, and Air Force base demand transactions for initial spares support lists. We estimated that $3.4 million of the $127.6 million of demand transactions that were erroneously classified and reported as recurring demand were for modification programs and initial spares support lists.

Government-furnished materiel for modification programs. The Federal Acquisition Regulation permits purchasing offices to authorize contractors to request GFM for use on contracts. Demand transactions for GFM were processed through the purchasing offices and routed to the appropriate ICP. We evaluated demand classification and reporting procedures at one Army and one Air Force ICP to determine if demand transactions for GFM for use in nonrecurring programs were properly classified as nonrecurring demand.

Army. We evaluated GFM demand transactions processed by the U.S. Army Communications-Electronics Command (CECOM) for nonrecurring programs from January through August 1990. Demand transactions for Army managed wholesale stocks were correctly coded as nonrecurring demand. However, 20 demand transactions valued at approximately $420,000 for contractor requested GFM managed by DLA ICPs were incorrectly processed by CECOM. The demand code field in the demand transaction was left blank. DoD MILSTRIP procedures provide that ICPs consider demand transactions with a blank demand code field as recurring demand. CECOM had no internal controls to ensure that demand codes for GFM demand transactions were properly classified and reported.

Air Force. We identified 144 active contracts at the Warner Robins Air Logistics Center that involved GFM issued to contractors. The 144 contracts involved both recurring programs for depot level maintenance and nonrecurring programs for equipment modifications. We judgmentally selected 10 contracts that Warner Robins personnel identified as involving modification programs or onetime maintenance actions to evaluate the accuracy of demand classification and reporting.

Five of the ten contracts did not have demands for GFM. For the remaining 5 contracts, there were 3,145 demand transactions valued at $2,044,000 for the 2-year period ended September 30, 1990. The Air Logistics Center incorrectly processed 3,085 of those transactions, valued at $2,017,000, as recurring demand. Of the 3,085 demand transactions, 160, valued at $1,227,000, were for Air Force managed reparable items*/ and 2,925, valued at $790,000, were for consumable items. There were no internal controls in place to ensure that demands for GFM were properly classified and reported.

Approximately 2,800 of the erroneously coded demand transactions, valued at $1 million, were for initial stockage requirements for GFM for contract F09603-90-C-0756. The demand transactions were prepared by Warner Robins personnel because the contractor did not have automated data network capabilities. The personnel processed the demands without entering a demand code in the transaction and ICPs treated the demands as recurring.

We also found that Warner Robins personnel did not consider excess materiel from an earlier contract in determining GFM initial stock requirements for contract F09603-90-C-0756 or to cancel backorders for GFM initial stockage demand transactions. Both the earlier contract, F09603-87-C-2072 and the later contract, F09603-90-C-0756, were for the maintenance and repair of C-130E aircraft. The maintenance and repair for contract F09603-87-C-2072 was performed in Korea, with the last aircraft inducted for repair in December 1989 and completed in June 1990. The maintenance and repair for contract F09603-90-C-0756 was performed in Malaysia, with the first plane inducted on May 28, 1990.

Warner Robins personnel submitted GFM initial stockage demand transactions for contract F09603-90-C-0756 during the period from March 7 through April 25, 1990. Potential excess materiel from contract F09603-87-C-2072 was not considered in determining GFM initial stockage requirements. In addition, after the excess materiel was received for use on the current contract, the excess materiel was not evaluated to determine if outstanding backorders could be canceled. We did a limited test of backorders and found eight line items that had backorders valued at $14,600 that could have been canceled.

Time compliance technical order kit materiel. A time compliance technical order kit contains all parts and materiel required to complete a modification on a single aircraft, end item of equipment, or component specified in a technical order. Demand transactions for materiel to be assembled into time

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*/ Air Force ICPs did not use these types of demand transactions to forecast requirements for reparable items.

compliance technical order modification kits were erroneously coded as recurring demand. Warner Robins personnel, who were assembling the kits, correctly coded the transactions as nonrecurring demands, but a system problem in the Air Force's Stock Control and Distribution System sometimes changed the nonrecurring demand transactions to recurring demands when the transactions were forwarded to the wholesale level. The Stock Control and Distribution System is the standard system used by all Air Force depots.

The Warner Robins' kit unit requisitioned materiel from the depot supply system. If the depot had the materiel to satisfy the requirements, the materiel was provided to the kit unit. If not, the demand transactions were generally forwarded to the appropriate wholesale ICP. At our request, Warner Robins personnel ran a computer program to identify materiel issued from the Warner Robins' depot and from various wholesale ICPs to the kit unit for the 8-month period ended August 1990. There were approximately 1,600 issues valued at about $5.1 million for consumable items.

We judgmentally selected a sample of 38 issues valued at $195,400 to determine if the nonrecurring demand code assigned by the kit unit were correctly processed through the depot supply system to the wholesale ICPs. The depot supply system erroneously changed the nonrecurring demand code to a recurring demand code for 10 of the 38 issues valued at $12,200. We could not verify the validity of the demand data for 11 other issues valued at $68,300 because of incomplete supply data. We were unable to determine the specific causes for the depot supply system problem.

Initial spares support lists. Demand transactions for initial spares support lists (ISSL) materiel were erroneously coded as recurring demand. When new weapons systems are fielded, the bases receiving these systems must have the spares and repair parts for the initial support of the new systems. The method used to identify the range and depth of the items needed for initial support of the systems is called the ISSL process. Air Force bases receiving new systems must evaluate ISSL data to determine if sufficient materiel is stocked to satisfy the ISSL requirements.

If a particular ISSL item is new to a base, the stock level is loaded into the SBSS. If ISSL items are already stocked at the base and the stock level is less than the required ISSL quantity, the stock level is increased. The resulting demand transactions are generally initiated within specified time frames before the receiving bases acquire the new systems. Demand codes are generally assigned by the SBSS, but the codes can also be manually assigned. ISSL requirements are onetime occurrences that should be coded as nonrecurring demands.

We evaluated supply data from four Air Force bases and identified 277 line items valued at $1.9 million that were input into the bases' SBSS as ISSL requirements during FYs 1989 and 1990. Demand transactions were processed for 156 of the ISSL requirements valued at $1,173,000. A nonrecurring demand code was correctly assigned to 66 of these demand transactions valued at $214,000. However, an erroneous recurring demand code was assigned to the other 90 transactions valued at $959,000. Of the 277 line items, the remaining 121 issue requirements valued at $729,000 were loaded in the SBSS, but were not submitted to ICPs. However, when and if the requirements are submitted, the SBSS was incorrectly programmed to automatically code the requirements as recurring demands.

Demands Counted Twice by Inventory Control Points

ICPs were counting the same demand twice on customer requisitions for items that retail supply activities normally stocked but were out of stock. This occurred because the ICPs counted both the customer requisitions forwarded to them and the later replenishment requisitions submitted by the retail supply activities. Demand was also counted twice when retail supply activities re-requisitioned materiel that was reported as shipped by the ICPs but was not recorded as received at the retail level. We estimated that $34.3 million of the $127.6 million of demand data that were erroneously classified and reported was for recurring demand transactions for the same requirements that were counted twice by ICPs.

Materiel stocked at retail supply activities. Retail supply activities provide supply support to designated customer units or activities. Customers submit requisitions to supply activities for needed materiel. Supply activities accumulate recurring customer demands to determine the range and depth of items to stock, and requisition the materiel from wholesale ICPs. When the on-hand and due-in quantity of a stocked item reaches its reorder level, the supply activities will generate a recurring demand transaction to the wholesale supply system to replenish its stock.

Customer demands for items normally stocked at the supply activity that cannot be filled from on-hand stocks are either backordered for later delivery or submitted to the wholesale system. Retail supply activities accumulate recurring demand data for customer demand transactions submitted to the wholesale system. The demand data are used to support or to increase stock level quantities that are included in future stock replenishment demand transactions submitted to ICPs.

Wholesale ICPs accumulate retail supply activities' replenishment demand transactions to forecast requirements. The ICPs also accumulate demand data from the customer requisitions that were not filled by the retail supply activities and use these demands

in forecasting requirements. Since customer demands that could not be filled from retail stocks are included in supply activities' future replenishment requisitions, the same requirement was being accumulated twice at the wholesale level to forecast requirements.

To determine the extent of this condition, we analyzed DAAS data from February through May 1990 and supply records at selected activities. Based on our analysis, $34.3 million of customers' demands were accumulated twice, once based on the supply activity replenishment requisitions and once based on the customer requisitions, to forecast wholesale requirements. The demand transactions for the $34.3 million were considered as erroneously classified and reported.

Army. DSUs maintain an authorized stockage list to provide support to customers. Items on authorized stockage lists are either demand based or nondemand based. Items are stocked as demand based because of repetitive recurring customer demands. Nondemand based items are stocked based on other specified criteria. Customers requisition materiel from the DSUs and if materiel is not available the DSU will generally forward the requirement to the appropriate wholesale ICP. DSUs accumulate recurring demands for both requisitions that they fill or requisitions that are passed to the wholesale level. The demands are used by the DSU to maintain or increase stock levels for authorized stockage list, demand based items.

We examined high priority requisitions that were forwarded to wholesale ICPs for customer requirements for authorized stockage list items that were not filled at the DSU level. During a 3-month period, one DSU submitted 752 high priority requisitions, valued at approximately $172,000, to the wholesale system for unfilled authorized stockage list items. Of the 752 requisitions, 64 were for nondemand based items, and 357 were for demand based items. Records were not available to determine the status of the remaining 331 items. The demands for the 357 transactions, valued at $63,900, would be accumulated twice at the wholesale level, once based on the customer demand and once based on the DSU's next replenishment requisition.

To determine the magnitude of the double reporting of these type transactions, we interrogated DAAS data for the period February through May 1990 for 69 of the 125 DSUs. Approximately 51,000 recurring demand transactions valued at $144 million were customer requisitions for authorized stockage list items that were forwarded to wholesale ICPs. Reparable items accounted for $117 million, and $27 million were for consumable items. Data were not available to show the dollar value of the demand transactions for items managed by the ICPs as demand based items. However, we believe that based on our analysis of one DSU requisitioning activity, a significant portion of the $144 million was for demand based items.

Navy. NSCs maintain stocks to support customers. The range and depth of stocks generally are based on customer demands. Customer's requirements for items normally stocked at the NSCs that are not filled at the NSCs are forwarded to the wholesale level. We determined that 215,000 customer demands valued at $206 million were submitted by NSC Norfolk to DLA ICPs during the period February through May 1990. To measure the double reporting of demand, we selected a random sample of these demands to determine how many were for items stocked at the NSC. We estimated that demand data for about 70,000 customer demands valued at about $33.7 million would be counted twice by the DLA ICPs. Appendix C contains data on the sample and audit projection.

Air Force. Air Force bases maintain stocks in their SBSS to provide support to customers. Customer recurring demands were used to maintain or increase stock levels and were forwarded to the wholesale level when the demands could not be filled by the SBSS. We obtained supply data from four Air Force bases as of November 1990 that showed there were 542 requisitions valued at $577,000 that had demand data accumulated in the SBSS and that also were forwarded to wholesale ICPs. Future SBSS stock replenishment requisitions to the wholesale ICPs would also include these demands.

Pseudo receipts. The Army's DS4 and SAILS supply systems maintain requisition status for materiel due-in from wholesale ICPs. After a specified time has elapsed, from the date of a wholesale stock shipment, without confirmation of receipt by the customer, the systems request the customers to research the shipment and acknowledge receipt if the materiel had been received or to initiate action to track the shipment through transportation channels if the materiel has not been received. However, after three followups with no response from the customer, the systems administratively record the materiel as received without actual verification of receipt by the customer. The administratively recorded receipts will close out the systems' due-in records and are called psuedo receipts. Army Regulation 710-2, "Supply Policy Below the Wholesale Level," states that the objective of pseudo receipts is to compensate for supply support activities' failure to properly process receipt documents.

After the psuedo receipts are processed, the Army retail supply systems recalculate stockage requirements based on the nonreceipt of the materiel. If the materiel is still needed, a demand transaction will be submitted to the appropriate ICP. In our review at one activity operating under the DS4 system and one activity operating under the SAILS system, recurring demand transactions were being generated when materiel not received was being rerequisitioned. We believe this condition resulted in a double counting of demand at the wholesale level. Demand was

originally counted when the initial requirement was processed and counted a second time when the demand transaction for the materiel was resubmitted.

Summary data were not available to show the extent of pseudo receipts and the re-requisitioning of needed materiel. For a 2-week period, for the two activities reviewed, we were able to identify 49 line items that had psuedo receipts processed with a value of about $10,700. Materiel valued at $4,300 (40 percent) was re-requisitioned with a recurring demand code for 27 line items. The demand data for the $4,300 of re-requisitioned materiel was considered as erroneously classified and reported. Data were available to show that Army Forces Command activities processed $8.4 million of pseudo receipts for the 6-month period ended June 30, 1990.

The Navy and Air Force did not have data that we could readily analyze to determine if a similar condition existed. However, both Services do have wholesale shipments of materiel that were lost or not received by their customers. We analyzed FY 1990 billing adjustment data maintained by DLA for four ICPs and found $28 million of billing adjustments for lost or short shipments. Details were not available to allocate the $28 million by Military Department, but we reviewed 1 month of data for the Defense Industrial Supply Center and found Navy adjustments for $245,000 and Air Force adjustments for $369,000. We could not determine what portion, if any, of these requirements were re-requisitioned or the demand coding that would be assigned to these documents.

Other Demand Coding Errors

We observed that, according to Navy or local activity procedures, some Navy activities submitted demand transactions with erroneous demand codes to wholesale ICPs. These transactions accounted for $2.9 million of the total estimated $127.6 million of demand data that were erroneously classified and reported to ICPs.

Philadelphia Naval Shipyard. The Philadelphia Naval Shipyard is a major Naval industrial activity involved in the maintenance and overhaul of ships. The Shipyard's procedures provide that demand codes will be assigned to demand transactions based on type of work performed and on the project code. We compared the project code identified in the applicable DAAS data with shipyard project codes and associated demand codes to determine if the transactions were correctly coded. We found that 2,911 requisitions valued at $1.8 million were erroneously classified as nonrecurring demand from February through May 1990. These demand transactions were for routine maintenance and should have been coded as recurring demand. Shipyard personnel informed us that a contractor did not follow established procedures and incorrectly coded the demand transactions.

Naval Aviation Depot, Norfolk. The Naval Aviation Depot, Norfolk, is responsible for repairing and maintaining aircraft and selected equipment. Generally, the work is repetitive maintenance and materiel requirements are considered recurring. Within the aviation depot, a Product Support Directorate performed nonrecurring work involving modifications of aircraft and equipment. Requisitions generated by the Product Support Directorate for materiel for modification work were assigned designated serial numbers. The DAAS data base showed that, from February through May 1990, there were 479 requisitions valued at $320,000 that were for modifications that were erroneously coded as recurring demand.

Naval Air Station, Norfolk. The Naval Air Station (NAS), Norfolk, maintained both wholesale and retail stocks. Demand transactions were either forwarded directly from the NAS to wholesale ICPs or for funding purposes, certain stock funded demand transactions were submitted through the NSC, Norfolk, to the appropriate wholesale ICP. There were about 31,000 NAS, Norfolk, demand transactions from February through May 1990. Approximately 10,100 transactions were submitted with a blank demand code. Therefore, the transactions were processed by ICPs as recurring demands. Approximately 3,300 of the 10,100 transactions were requisition documents that should have had a demand code in card column 44 of the transaction and 6,800 transactions were referral orders that should have had a demand code in card column 72 of the transaction. We could not determine why a demand code was not assigned to these transactions. As a result of our audit, Navy personnel were researching this problem to determine the cause. DoD MILSTRIP procedures provide that demand codes are a mandatory entry in demand transactions. However, we found no internal controls to ensure that demand codes were always entered on the transactions.

Navy procedures provide that demand transactions with a reason code "W" indicate an initial outfitting allowance and imply nonrecurring demand. Our analysis of DAAS data for NAS, Norfolk, demand transactions showed that 144 demand transactions valued at $752,000 had a reason code "W", but were coded as recurring demand.

RECOMMENDATIONS FOR CORRECTIVE ACTION

1. We recommend that the Assistant Secretary of Defense (Production and Logistics) establish policies prohibiting the duplication of demand data, for the same requirements, in the forecasts of future issue requirements. The policies should specifically address:

a. Recurring demand transactions for customer requirements for materiel stocked at retail supply points that are forwarded to the wholesale level because the requirements could not be filled from retail stocks.

b. Recurring demand transactions for materiel that was previously requisitioned from the wholesale system and reported as shipped, but that was not reported as received by the requisitioner.

2. We recommend that the Assistant Secretary of the Army (Installations, Logistics, and Environment), Assistant Secretary of the Navy (Research, Development and Acquisition), and the Air Force Deputy Chief of Staff (Logistics):

a. Modify automated retail supply systems to code demand transactions for initial stockage requirements and increased stock levels as nonrecurring demand.

b. Establish internal controls to ensure that demand codes are classified in accordance with DoD Manual 4000.25-1-M, "Military Standard Requisitioning and Issue Procedures," and Military Department procedures that implement DoD Manual 4000.25-1-M. Emphasis should be placed on ensuring that all demand transactions contain a valid demand code and demand transactions for nonrecurring type requirements are properly classified and reported.

3. We recommend that the Assistant Secretary of the Army (Installations, Logistics, and Environment) modify the Unit Level Logistics System to permit the appropriate coding of nonrecurring demand on demand transactions.

4. We recommend that the Air Force Deputy Chief of Staff (Logistics):

a. Modify the Air Force Depot Stock Control and Distribution System to ensure that nonrecurring demand transactions prepared by the depot's kit unit and forwarded to the wholesale system are not changed to recurring demands.

b. Establish procedures to require that demand transactions for initial spares support list items be coded as nonrecurring demands.

MANAGEMENT COMMENTS

Comments on the draft report were not received from the Assistant Secretary of Defense (Production and Logistics) or the Assistant Secretary of the Army (Financial Management). The Navy's comments were received too late for inclusion in this report and will be considered as comments to the final report. Air Force comments are summarized below.

The Air Force Deputy Chief of Staff (Logistics) concurred with the finding and recommendations and provided dates of completion for planned actions. The Air Force stated that automated systems will be changed to ensure that demand transactions for initial

stockage requirements, increased stock levels, and initial spare support list items are coded as nonrecurring demand. Major commands will be required to ensure that demand transactions contain a valid demand code. In addition, demand transactions with quantities greater than the normal demanded quantity will be reviewed and treated as nonrecurring if the quantity is a one-time requirement. A complete text of the comments is in Part IV.

AUDIT RESPONSE TO MANAGEMENT COMMENTS

We consider the Air Force's comments to be responsive and require no further comments. However, we request that the Assistant Secretary of Defense (Production and Logistics) and the Assistant Secretary of the Army (Financial Management) provide comments indicating concurrence or nonconcurrence with the finding and each applicable recommendation, as required by DoD Directive 7650.3.

STATUS OF RECOMMENDATIONS

		Response Should Cover:			
Number	Addressee	Concur/ Nonconcur	Proposed Action	Completion Date	Related Issues*
1	ASD (P&L)	X	X	X	
2	ASA (I,L&E)	X	X	X	IC
3	ASA (I,L&E)	X	X	X	IC

* IC = material internal control weakness

B. DEMAND DATA ACCUMULATION AT THE WHOLESALE LEVEL

There were inconsistencies among the ICPs of the Military Departments and DLA in their use of nonrecurring demand data, requisitioner cancellations, and serviceable materiel returns in forecasting requirements. In addition, demand data submitted by requisitioners were not properly accumulated.

o The Army and DLA included some nonrecurring demand transactions in their requirements forecasts. The Navy and Air Force excluded nonrecurring demand in their forecasts.

o The Army, Air Force, and DLA adjusted demand data for requisitioner cancellation requests only if materiel ordered was not shipped while the Navy adjusted demand data regardless of shipment status.

o The Navy and DLA did not use serviceable materiel returns to adjust demand data.

These conditions occurred because there was no DoD guidance on the use of nonrecurring demand data in requirements forecasts, inadequate guidance on the use of requisitioner cancellations, lack of compliance with DoD guidance on serviceable materiel returns, and inadequacies in demand accumulation systems. The lack of distinction between nonrecurring and recurring demand data in computing stock levels and forecasting requirements can result in premature or unnecessary procurements and excess stocks.

DISCUSSION OF DETAILS

Background

Each of the Military Departments and DLA used different factors and methods to forecast requirements. How well they forecast requirements depends largely on the adequacy and accuracy of the data used in the requirements determination process and the process for identifying logistics support requirements. Customer demand data is the primary factor used to compute requirements for consumable items and is one of other factors related to program data, such as flying hours and end item attrition rates, used to compute requirements for reparable items. To improve the accuracy of their forecasts, ICPs generally adjust demand data for requisitioner cancellations and serviceable materiel returns.

The ICPs of the Military Departments and DLA use automated supply systems to accumulate demand data and forecast requirements. However, they use various techniques to forecast customer nonrecurring data. DoD Directive 4140.59, "Determination of Requirements for Secondary Items After the Demand Development Period," June 13, 1988, states that demand and leadtime

forecasting techniques shall identify and exclude atypical demand data that might unduly influence forecasts. However, no DoD policy or procedural guidance exists on whether or how to use nonrecurring demand transactions in requirements forecasts for secondary items.

Use of Nonrecurring Demand

The Military Departments and the DLA were inconsistent in their use of nonrecurring demand data to forecast requirements. Nonrecurring demands were totally excluded, partially excluded, or totally included in requirements forecasts. The lack of uniformity means that, depending only on which wholesale source of supply managed the items, transactions with the same demand coding would result in different computed requirements. Arbitrary inclusion of nonrecurring demand in requirements forecasts for future periods, without regard to the type of requirements coded by the customers, could result in excessive inventory levels for secondary items. The following sections describe how each of the Military Departments and DLA use nonrecurring demand in their requirements forecast processes.

Army. Army Regulation 710-1, "Centralized Inventory Management of the Army Supply System," states, "In general, all past demands not identified as special program needs will be used in the demand computation process. Each wholesale subordinate command will determine those demands that should not be included in the process." The Commodity Command Standard System Operating Instruction No. 18-710-102 states that recurring and nonrecurring demands will be used to forecast requirements unless specifically exempted. Cited exemptions included special programs, such as initial issue and overhaul requirements. Therefore, individual requirements for special programs are not used in forecasted requirements but are added to the forecasted demand to calculate total requirements. For nonrecurring demands that are not specifically identified as special programs, ICPs have the capability to program their systems to use all, some, or none of the submitted nonrecurring demand data in requirements forecasts. In 1985, the Army Materiel Command directed Army ICPs to include 100 percent of nonrecurring demands, except for certain special program requirements, in their requirement forecasts. As a result, Army ICPs made no distinction between nonrecurring demands and recurring demands in computing stock levels and forecasting requirements. Without such distinction, the Army will have overstated requirements, which can result in premature or unnecessary procurements, excess stocks, and excess transportation and storage costs. Army personnel were unable to provide us with any rationale for why 100 percent of nonrecurring demand was used.

Navy. The Navy accumulated nonrecurring demand data but did not use these demands to forecast requirements. The Navy's requirements forecasting model assumed that customer nonrecurring

demand transactions were preceded by planning information in sufficient time to allow ICPs to acquire assets to meet demand. The model was also programmed to analyze demand trends and to exclude demands related to abnormal demand trends from requirements forecasts.

Air Force. For consumable items, the Air Force accumulated nonrecurring demand but did not use the demand data to forecast requirements. Before May 1988, the Air Force used nonrecurring demand for consumable items to forecast requirements for line items that had a projected annual demand under $2,500. However, in May 1988, the Air Force changed its system to exclude these demands from its requirements computation. The justification for the change was that "current procedures can cause a growth of inapplicable inventory and may ultimately have an impact on budget calculations."

For reparable items, the Air Force's forecasted requirements were not based on supply transactions processed by requisitioners. Requirements were primarily based on maintenance data item failures, attrition rates, and program data; not on customer requisition transactions.

Defense Logistics Agency. The majority of items managed by DLA are consumable items. All nonrecurring demands for materiel classified as low or medium dollar value items were generally forecasted as recurring demand. Low dollar value items have annual demands under $400 and medium dollar value items have annual demands between $400 and $4,500. Nonrecurring demands for high dollar value items were forecasted at varying percentages, 0 to 100 percent. The percentage, "Applicable Nonrecurring Demand Percentage," (ANRDP), was determined by the automated supply system based on a mathematical formula that evaluated nonrecurring demands for the previous four quarters. ICP inventory managers had the capability to override the system percentage and use their own percentage.

In February 1985, DLA Headquarters directed its ICPs to program the ANRDP at 100 percent. This action resulted in nonrecurring demands for high dollar value items being forecasted the same as recurring demand. Guidance promulgated in February 1990, directed the ICPs to use the supply system computed ANRDP unless otherwise justified, and not to program the ANRDP at 100 percent across-the-board. The decision was based on DoD initiatives to more effectively manage DoD resources. DLA's objective was to reduce the depth of stock both in store and being procured for use after FY 1990.

We evaluated actions taken by the Defense General Supply Center (the Center) to comply with the DLA guidance. Center personnel informed us that they had developed a computer program to

establish the ANRDP at 100 percent for items that had experienced 50 or more demands over a 12-month period. As of December 1990, the program was applicable to 5,200 high dollar value items. The 50 demand criteria were not based on any study or analysis. We took a sample of 103 high dollar value items to evaluate the impact. By programming the ANRDP at 100 percent, $2.3 million of nonrecurring demand was used to forecast requirements. If the ANRDP had not been programmed at 100 percent, the computer would have used $1.1 million of nonrecurring demand submitted for the 103 items to forecast requirements. DLA Headquarters personnel were not aware of the Center's computer program. When we advised them of the program they stated that they believed it was in conformance with DLA guidance.

The following examples compare and contrast the Military Departments and DLA's procedures and coordination on the use of nonrecurring demand in forecasting requirements.

o As new equipment is installed or old equipment modified on ships, allowance lists are developed or revised to provide spare and repair parts to support the equipment. The requirements for these spare and repair parts are financed under the Navy Outfitting Program. Navy procedures provide that Navy Outfitting Program requisitions will be coded as nonrecurring demand. Based on analysis of DAAS data, we identified about 234,000 nonrecurring demand transactions, valued at approximately $76.2 million, that were submitted for Navy Outfitting Program requirements to Army, Navy, and DLA ICPs between February and May 1990. Approximately $370,000 of the nonrecurring demands were sent to Army ICPs and in accordance with Army procedures, the nonrecurring demands were forecasted the same as recurring demand. Nonrecurring demand transactions valued at $53.7 million were submitted to Navy ICPs and, in accordance with Navy procedures, the demand data were not used in forecasting requirements. Nonrecurring demand transactions valued at $22.1 million were submitted to four DLA hardware ICPs. Depending on the type of item requisitioned, either 100 percent of the demand or the ANRDP percentage was used to forecast requirements.

o Army ICPs generated nonrecurring demand transactions for customer requirements for initial issues of spare parts. These requirements were for materiel to support new or modified equipment. The demand transactions contained a project code that the Army ICPs' supply system recognized as a special program and did not use the demands to forecast requirements. We analyzed supply data maintained at CECOM and found that for the 9-month period ended September 1990, the Command submitted approximately $1 million of nonrecurring initial issue demand transactions to DLA ICPs. Although the demand transactions contained the special program project code, DLA procedures provided that either 100 percent of the demand or the ANRDP percentage would be used to forecast requirements.

o Based on analysis of DAAS data, we determined that approximately $317 million of nonrecurring demand was submitted to Army ICPs during the period February through May 1990. About $106 million of that total was for nonrecurring demand transactions submitted to CECOM. About $59 million of the $106 million was coded for special programs and, in accordance with Army procedures, was not used in developing demand forecasts. The remaining $47 million was not identified to any special program and was treated as recurring demands in forecasting requirements.

o In March 1990, the Chief of Naval Operations directed the Naval Supply Systems Command to establish nonrecurring demand procedures for requisitions submitted by ships designated for decommissioning. The purpose of the procedures was to avoid creation of inapplicable inventory levels for those ships. The Navy Supply Systems Command prepared draft procedures that directed all ships, known to be within 2 years of decommissioning, to submit requisitions for DLA managed materiel and Ships Parts Control Center managed materiel as nonrecurring demand. In accordance with the Navy procedures, nonrecurring demands were not used by the Ships Parts Control Center to forecast materiel requirements. Navy personnel attempted to develop similar processes for requisitions submitted by these ships for DLA materiel. However, because of system incompatibilities, procedures for isolating and accumulating these transactions at DLA ICPs were not developed and these nonrecurring demands were included in the DLA ICPs' requirements forecasts.

Cancellation Requests

Demand data were not always adjusted for customer cancellations. MILSTRIP procedures provide that demand data previously recorded will be adjusted by the quantity actually canceled or diverted into a storage activity based on a cancellation request. If the item was shipped prior to the cancellation request, no adjustment was to be made. The Army, Air Force, and DLA supply systems adjusted demand data in accordance with the MILSTRIP procedures. However, in the Navy, demand data were adjusted regardless of whether or not materiel was shipped or diverted into storage. We agree with the Navy's procedures. A customer cancellation indicates a discontinued need for previously requisitioned materiel. The MILSTRIP policy to adjust demand data only if materiel was not shipped to the customer has no relationship to the customer's discontinued need for the materiel. The MILSTRIP procedures result in overstated requirements forecasts.

Return of Serviceable Materiel

The Army, Navy, and DLA did not implement DoD policy to adjust demand data for serviceable materiel returns. DoD Instruction 4100.37, "Retention and Transfer of Materiel Assets,"

provides that retail activities will report serviceable or economically repairable materiel that is excess to their requirements to DoD wholesale supply managers for reutilization. DoD Directive 4140.59 states that for requirements computation systems that consider customer requisitions as demands, demand data rates shall be adjusted for serviceable materiel returns. In addition, the adjustment of individual line item demand by serviceable materiel returns shall not be constrained to a percentage of demand. The Army used serviceable materiel returns to reduce demands. However, contrary to DoD Directive 4140.59, they used serviceable materiel returns to offset only a percentage of demands. This condition was recently reported in Inspector General, DoD, Report No. 91-106. Therefore, we have not included a recommendation to the Army on this condition in this report.

The Navy and DLA did not use serviceable materiel returns to adjust demand data. DoD Directive 4140.59 states that if a DoD Component desires an exception to the requirement of adjusting demand data for serviceable materiel returns, the Component will request an exception from the ASD (P&L). No exceptions were requested.

We recognize that cancellation requests may be processed after materiel is shipped and, if the materiel is subsequently returned as serviceable returns, a duplicate demand reduction may occur. Under existing procedures there is no way to relate serviceable materiel returns to previous requisition cancellation actions. However, requisition cancellations do not account for a significant part of excesses reported under the materiel returns program and these would have no material effect on adjustments to demand data.

Air Force Demand Accumulation System

Demand data in the Air Force Economic Order Quantity Buy/Budget Computation System (D062 system), used to accumulate demand and forecast requirements for consumable items, were not supported by demand data in weekly transaction registers. In our analysis of Air Force kit unit requisitioning procedures (Finding A), we attempted to track demand data from the kit unit for four line items into the D062 system. For two of the four line items we were unable to determine if the demand data were accurately recorded. Data in weekly transaction registers, used to identify demands in the D062 system, did not support summary demand data in the D062 system. This problem was also reported in Inspector General, DoD, Report No. 91-106 and accordingly, an additional recommendation is not required.

Referral Orders from Navy Requisitioners

Most secondary items used by the Navy are managed by Navy or DLA ICPs. However, where Army or Air Force ICPs were assigned as the DoD wholesale manager, their procedures did not properly

accumulate demand data for Navy referral orders. Navy requisitioning procedures generally provide that customers direct their requisitions to Navy retail supply activities. MILSTRIP procedures require that customers enter the demand code in card column 44 of the requisition document. The Navy supply activity can fill the requisition or refer it to another supply source. When the requirement is referred, Navy procedures provide that the demand code be put in card column 72 of the referral order. Card column 44 of the referral order is blank or is coded to show that the Navy supply activity satisfied some portion of the original requisition. Navy and DLA automated systems recognize and accumulate demand codes shown in card column 72 of referral orders. However, Army and Air Force ICP supply systems were not programmed to recognize demand data in card column 72 of referral orders. The systems were programmed to recognize demand data only in card column 44. As a result, referral orders with nonrecurring demand in card column 72 would be processed as recurring demand because card column 44 would be blank or would not contain a valid demand code.

RECOMMENDATIONS FOR CORRECTIVE ACTION

1. We recommend that the Assistant Secretary of Defense (Production and Logistics):

a. Provide guidance to the Military Departments and Defense Logistics Agency on the use of nonrecurring demand transactions in computing requirements for secondary items.

b. Revise DoD Manual 4000.25-1-M, "Military Standard Requisitioning and Issue Procedures," to require that demand data transactions be adjusted for requisitioner cancellation requests regardless of whether or not the materiel was shipped or diverted to a storage activity.

c. Provide guidance for the consistent treatment of demand data for Navy referral orders submitted to Army and Air Force inventory control points.

2. We recommend that the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Director, Defense Logistics Agency establish procedures to comply with the provisions of DoD Directive 4140.59, "Determination of Requirements for Secondary Items After the Demand Development Period," that require demand data to be adjusted for serviceable materiel returns. If an exception to the requirement is desired, request an exception from the Assistant Secretary of Defense (Production and Logistics).

MANAGEMENT COMMENTS

Comments on the draft report were not received from the Assistant Secretary of Defense (Production and Logistics). Navy comments were received too late for inclusion in this report and will be

considered as comments to the final report. Comments from the Defense Logistics Agency are summarized below.

The Deputy Comptroller, Defense Logistics Agency, concurred with Recommendation B.2. and stated that DLA will request a revision or exception to the DoD policy that requires that demand data be adjusted for serviceable materiel returns.

The Deputy Comptroller also provided comments to Recommendation B.1.a., which was addressed to the Assistant Secretary of Defense (Production and Logistics). The Deputy Comptroller nonconcurred with the draft report recommendation, stating that inventory control points receive demands from multiple users and it is the recurrent nature of the total demand received, not the individual requisition coding, that defines recurring or nonrecurring demand for forecasting purposes. The Deputy Comptroller further stated that DLA's ANRDP formula is used to determine how much of the demand that is coded as nonrecurring actually recurs. A complete text of the comments is in Part IV.

AUDIT RESPONSE TO MANAGEMENT COMMENTS

The Deputy Comptroller's response to Recommendation B.2. is responsive and additional comments are not required.

Concerning DLA's comments to Recommendation B.1.a., we agree that the ANRDP is a method to calculate the percentage of nonrecurring demands to include in requirements forecasts. However, DLA uses the ANRDP only for items classified as high dollar value items. Nonrecurring demand transactions for medium and low dollar value items are forecasted at 100 percent recurring, the same as recurring demands. DoD's 1980 Stockage Policy Analysis Working Group clearly identified nonrecurring requirements for purposes such as initial outfitting and allowance changes as inappropriate for use in computing inventory levels. Our audit work showed the inconsistent patterns of use of nonrecurring demands among DoD's ICPs. The use of nonrecurring demand or method of predicting future needs for such requirements, whether by inclusion in demand forecasts or as additives, should not be dependent on which DoD ICP manages the items involved. We have clarified the recommendation and request that the ASD (P&L) provide comments to the final report.

STATUS OF RECOMMENDATIONS

		Response Should Cover:			
Number	Addressee	Concur/ Nonconcur	Proposed Action	Completion Date	Related Issues*
1	ASD (P&L)	X	X	X	

* IC = material internal control weakness

PART III - ADDITIONAL INFORMATION

APPENDIX A - Selection of Requisitioning Activities and Audit Tests

APPENDIX B - Demand Codes Contained in DoD Manual 4000.25-1-M

APPENDIX C - Audit Projections and Analyzing Audit Results

APPENDIX D - Summary of Potential Monetary and Other Benefits Resulting from Audit

APPENDIX E - Activities Visited or Contacted

APPENDIX F - Report Distribution

APPENDIX A: SELECTION OF REQUISITIONING ACTIVITIES AND AUDIT TESTS

Selection of Requisitioning Activities

The DAAS was established to provide automatic routing of logistics data for DoD. Included in these data are demand transactions from retail activities to wholesale ICPs. We requested that DAAS collect demand transactions routed through DAAS from February through May 1990 to 18 ICPs that manage spare parts and reparable items. The DAAS data showed that there were approximately 7.6 million demand transactions submitted by about 24,000 requisitioners.

From the DAAS data, we established a data base to profile how individual requisitioners classified and reported demand transactions. We used this data base to judgmentally select requisitioning activities for review to determine if demand transactions were properly classified and reported. The activities were primarily selected based on the volume of transactions, the type of activity, the supply system used to requisition materiel, and where the pattern of demand codes on demand transactions indicated questionable demand coding practices (for example, demand transactions were coded as almost 100 percent recurring).

The retail level requisitioners selected for on-site reviews included four Army, four Navy, and two Air Force activities. The supply systems used by the Army requisitioners to manage retail stocks were the DS4, SAILS, and the ULLS. The systems used by the Navy requisitioners involved those used by Naval supply centers, Naval aviation depots, Naval air stations, and Naval shipyards. The systems used by the Air Force requisitioners were the Depot Stock Control and Distribution System and the SBSS. The SBSS is the standard system used by all Air Force bases.

From our on-site reviews, we found that demand transactions initiated by Army and Navy requisitioners contained data, other than a demand code, that were compatible only with nonrecurring demand or the data indicated why a demand transaction was generated. The data were fund codes, project codes, advice codes, and a requisitioner's DoD activity address code. We evaluated our data base to determine if the demand code assigned by requisitioners were compatible with the other data contained in the demand transaction. When we found incompatibilities, we contacted appropriate Military Department personnel to determine the basis for incompatibilities.

We also did on-site reviews at two wholesale ICPs that processed contractor demand transactions for GFM for equipment modifications and requisitioned materiel to assemble kits for modification programs. The two wholesale ICPs also generated demand transactions for initial spare parts support for new or modified weapon systems.

Audit Tests

At the requisitioning sites visited, we found that demand codes were primarily assigned by the requisitioner's mechanized supply system. Demand codes that were manually assigned were generally assigned based on other criteria, such as the project code for which the materiel was being ordered. We judgmentally selected demand transactions from our DAAS data base and from requisitioner supply records to evaluate the mechanized supply systems' computer logic and any other criteria used to assign demand codes. The number of transactions selected varied by requisitioner and was based on our evaluation of the adequacy of the computer logic and the controls in place to ensure that manually assigned demand codes were proper. The times reviewed also varied because of the types of supply data available and the length of time the supply data were maintained.

APPENDIX B: DEMAND CODES CONTAINED IN DOD MANUAL 4000.25-1-M

Demand transactions contain a demand code entered by the activity creating the transaction. The demand code is a mandatory entry that indicates to the management element of a distribution system whether the demand is recurring or nonrecurring as follows.

CODE	EXPLANATION
I	INACTIVATED ITEM DEMAND. This code will be entered only for requisitions (A0_) applicable to inactivated items.
N	NONRECURRING DEMAND. A request made for a requirement known to be a onetime occurrence, for example, a modification work order kit or an initial request for stockage. Requisitions will be coded nonrecurring when the demand is anticipated to be nonrepetitive.
O (Alpha)	NO DEMAND.*/ A request submitted for substitute items that are acceptable in lieu of previously requisitioned but delayed items and for initial fill of prepositioned war reserve materiel stock consumable item requirements. Also may be prescribed by the program manager on the basis of a nonrepetitive program requirement for which use of demand code N or P is determined to be inappropriate.
P	NONRECURRING DEMAND FOR SPECIAL PROGRAM REQUIREMENTS. A request made to identify a requisition for special programs or requirements for which stocks were known to have been acquired by the inventory control point in anticipation of such demands.
R	RECURRING DEMAND. A request for materiel made periodically or anticipated to be repetitive by an authorized requisitioner for consumption, use, or stock replenishment. The requests encompass most demands; therefore, a demand will be considered recurring when a doubt exists.
S	COMMISSARY RESALE DEMAND. A request made for perishable and nonperishable subsistence items for resale only. Commissary demands for troop issue subsistence will be identified with R and N only.

*/ When no demand code is entered in the requisition, the inventory control point will consider such demand as R.

APPENDIX C: AUDIT PROJECTIONS AND ANALYZING AUDIT RESULTS

Audit Estimates and Projections of Erroneous Demand Classification and Reporting

From our audit tests and data obtained from the AFLMC, we were able to estimate and project the dollar value of recurring demand transactions that should have been classified and reported as nonrecurring demands for two of the conditions identified in the audit.

Initial Requests for Stockage and Increased Stock Levels. The Air Force SBSS was incorrectly programmed to code demand transactions for initial stockage requirements and increased stock levels as recurring demand. We attempted to design a sampling plan to statistically project the impact of this condition. However, due to uncertanties of the universe of these transactions, we were unable to do the normal statistical projection with stated confidence and precision levels. We, therefore, developed an estimate based on a mathematical relationship model and on computations used by the AFLMC.

AFLMC maintains a data base of supply records for 12 Air Force bases, which the Air Force considers a representation of Air Force bases worldwide. AFLMC validates the supply data and uses the data bank extensively to evaluate the SBSS. The results of AFLMC tests and evaluations are used to measure the dollar effect, Air Force wide, of proposed changes to the SBSS and to develop retail supply policy.

We requested AFLMC to identify initial stockage demand transactions forwarded to the 18 ICPs included in our audit. AFLMC evaluated supply data for 5 of the 12 Air Force bases included in its data bank and provided us data on demand transactions for consumable items for initial stockage requirements and increases to stock levels. The data showed that from September 30, 1989, to March 31, 1990, each of the five bases, on the average, submitted recurring demand transactions valued at about $340,000 for initial stockage requirements and increased stock levels to the 18 ICPs.

Using the AFLMC mathematical model, we estimated that, annually, Air Force requisitioning activities erroneously classified approximately $85 million of demand transactions for initial stockage requirements and increased stock levels as recurring demand. The mathematical model computation multiplied the average of $340,000 for the 5 Air Force bases by 125 Air Force bases. AFLMC considers the 125 Air Force bases to be the significant Air Force bases that use the SBSS. Since the AFLMC figures were for 6 months, we multiplied the results of the mathematical model by 2 to provide an annual estimate.

AFLMC also advised us that the average of $340,000 per base will decrease to approximately $245,000 when a proposed change to the SBSS stockage criteria is implemented. The change was scheduled for the later part of FY 1991.

Materiel Stocked at Retail Supply Activities. Customer recurring demands for items stocked at retail supply activities that were passed to wholesale ICPs were used to calculate both retail and wholesale supply levels. As a result, these demands were counted twice by the ICPs to forecast requirements, when the customer demand is received and when the retail supply activities future replenishment requisition is received. We designed a sampling plan to statistically project the effect of this condition at NSC, Norfolk.

In the DAAS data base, there were 215,294 demand transactions valued at $205.6 million that were submitted by the NSC, Norfolk, to the four DLA ICPs in our audit. We randomly selected and reviewed 455 demand transactions valued at $144,500, to determine what portion of the sample was for recurring demands for stocked items that the NSC used to calculate supply levels. We found that 149 demand transactions valued at approximately $69,800 met this criteria.

We also found that some demand transactions were for very large quantities of materiel that made up a significant portion of the $205.6 million universe. We reviewed 27 of these demand transactions valued at about $124 million and found that the demands were rejected by the ICPs because of the large quantities requisitioned.*/ The ICPs also did not use the $124 million to forecast requirements. As a result, to adjust the universe for these large dollar demands, we excluded demand transactions valued at over $100,000, except where the requisitioner indicated, with the use of an advice code, that the demand quantity was valid. Excluding these demands, the adjusted universe for projection was $69.8 million. Using the results of our sample, we projected that $33.7 million of demand for the same requirement were counted twice by ICPs. The sample results were projected with a 90-percent confidence level and a sampling precision of +/- 3.9 percent for dollars.

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*/ Demand transactions in the DAAS data base were captured prior to being received and processed at ICPs. As a result, some of the demand transactions contained requirements for quantities that according to ICP procedures were considered as excessive and were rejected by the ICPs.

We also evaluated the DAAS data for five other NSCs and used the data from the NSC, Norfolk sample to estimate the portion of the other five NSCs demands that were counted twice by ICPs. The universe from the DAAS data for the five NSCs was $95 million. We adjusted the universe the same as we did our analysis of NSC, Norfolk's demands to compensate for large dollar value transactions that would possibly be rejected by the ICPs and arrived at a new universe of $81.5 million. Applying the results of the NSC, Norfolk analysis, we estimated that $39.5 million of demands from these five NSCs were counted twice by ICPs.

Analyzing Audit Results

Our audit tests showed that requisitioners were erroneously classifying and reporting demand data to ICPs. Nonrecurring demands were classified and reported as recurring demands, recurring demands were classified and reported as nonrecurring demands, and recurring demands were submitted twice for the same requirement. The effect of the erroneous demand data depended on the Military Departments or DLA's ICPs that processed the demand transaction and the supply position of the materiel requisitioned.

Military Department and DLA ICPs have different techniques for using demand data to forecast requirements. All ICPs use recurring demands to forecast requirements. However, non-recurring demands are not used by Navy and Air Force ICPs to forecast requirements, but generally used by Army and DLA ICPs to forecast requirements. Therefore, the effect, overstatement, or understatement of requirements varied. An example follows.

In our analysis of Air Force demand transactions for initial stockage requirements and increased stock levels for consumable items, we estimated that $85 million of these demands were erroneously coded as recurring demand (Finding A). The effect of the erroneous demand coding depended on the ICP that accumulated the demands. Approximately $44.6 million were sent to Air Force and Navy ICPs and used to forecast requirements. If the demand transactions had been properly coded as nonrecurring, the demands would not have been used to forecast requirements. Approximately $2 million was sent to Army ICPs and treated the same as recurring demands. About $38.4 million were for DLA materiel and depending on the type of item requisitioned, the demands were either forecasted at 100 percent or the Annual Nonrecurring Demand Percentage.

The effect of erroneous demand codes also varies according to the ICPs supply position of materiel requisitioned. Effect varied from none to causing ICPs to invest funds in the wrong item; thereby denying funds for replacement of other needed items.

There was no immediate effect if an item was in an excess position. However, if an item was being procured, there could be an immediate effect. We did not attempt to determine the supply position of the various items that had demand data erroneously classified and reported by requisitioners. To illustrate the effect of supply position, we analyzed supply data for 56 items managed by the Defense Industrial Supply Center where we identified that requisitioners reported and classified erroneous demand data. The demand transactions were for initial stockage requirements that were erroneously coded as recurring demand. The demand transactions were valued at $131,600 and represented 17 percent of the ICPs annual demand for the items. The demands were processed in July 1990 and procurements were in process for 36 of the 56 items. The other 20 items were either in an excess supply position or had not reached their reorder point.

APPENDIX D: SUMMARY OF POTENTIAL MONETARY AND OTHER BENEFITS RESULTING FROM AUDIT

Recommendation Reference	Description of Benefits	Type of Benefit
A.1. through A.4.	Economy and Efficiency Accurate classification and reporting of demand data for wholesale stocks.	Undeterminable. We found no reasonable basis to quantify future monetary benefits that would be realized by implementing our recommendations. More accurate classification and reporting of demand data should improve inventory managers' requirements forecasts and preclude unnecessary or premature purchases of wholesale inventory.
B.1. through B.2.	Economy and Efficiency More consistent accumulation and use of demand data in forecasting requirements by the Military Departments and DLA's ICPs.	Undeterminable. We found no reasonable basis to quantify future monetary benefits that may be realized by implementing our recommendations. More consistent accumulation and use of demand data will improve the accuracy of requirements forecasts so as to maximize supply availability and to minimize investment in inventory.

APPENDIX E: ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Assistant Secretary of Defense (Production and Logistics), Supply Management Policy, Washington, DC
Defense Logistics Systems Standardization Office, Alexandria, VA

Department of the Army

Headquarters, Deputy Chief of Staff (Logistics), Supply Policy, Washington, DC
Headquarters, Army Materiel Command, Alexandria, VA
U.S. Army Aviation Systems Command, St. Louis, MO
U.S. Army Communications and Electronics Command, Fort Monmouth, NJ
U.S. Army Materiel Command, Systems Integrated Management Activity, St. Louis, MO
U.S. Army Logistics Center, Fort Lee, VA
U.S. Army Forces Command, Fort McPherson, GA
U.S. Army Training and Doctrine Command, Fort Monroe, VA
Headquarters, Army Depot Systems Command, Chambersburg, PA
Tobyhanna Army Depot, Tobyhanna, PA
Headquarters 101st Airborne Division, Fort Campbell, KY
U.S. Army Armor Center, Fort Knox, KY

Department of the Navy

Headquarters, Naval Supply Systems Command, Washington, DC
Headquarters, Naval Air Systems Command, Washington, DC
Fleet Materiel Systems Office, Mechanicsburg, PA
Ships Parts Control Center, Mechanicsburg, PA
Naval Aviation Supply Office, Philadelphia, PA
Naval Aviation Maintenance Office, Patuxent River, MD
Naval Aviation Depot, Norfolk, VA
Naval Supply Center, Charleston, SC
Naval Supply Center, Oakland, CA
Naval Supply Center, Puget Sound, WA
Naval Supply Center, Norfolk, VA
Naval Air Station, Norfolk, VA
Philadelphia Naval Shipyard, Philadelphia, PA
Integrated Logistics Overhaul Team, U.S. Naval Base, Philadelphia, PA

Department of the Air Force

Headquarters, Deputy Chief of Staff (Logistics and Engineering), Supply Policy, Washington, DC
Headquarters, Air Force Logistics Command, Dayton, OH
San Antonio Air Force Logistics Command, San Antonio, TX
Warner Robins Air Logistics Center, Robins Air Force Base, GA
Dover Air Force Base, Dover, DE
Randolph Air Force Base, San Antonio, TX

APPENDIX E: ACTIVITIES VISITED OR CONTACTED (cont'd.)

Department of the Air Force (cont'd.)

Griffis Air Force Base, Rome, NY
McGuire Air Force Base, Wrightstown, NJ
Air Force Logistics Management Center, Gunter Air Force Base, AL
Air Force Standard Systems Center, Gunter Air Force Base, AL
Air Force Audit Agency, Dover Air Force Base, DE
Air Force Audit Agency, San Antonio Air Logistics Center, TX

Defense Logistics Agency

Headquarters, Defense Logistics Agency, Cameron Station, VA
Defense Construction Supply Center, Columbus, OH
Defense Electronics Supply Center, Dayton, OH
Defense General Supply Center, Richmond, VA
Defense Industrial Supply Center, Philadelphia, PA
Defense Automatic Addressing System Office, Dayton, OH
Defense Operations Research Office, Richmond, VA
Defense Systems Automation Center, Columbus, OH

APPENDIX F: REPORT DISTRIBUTION

Office of the Secretary of Defense

Assistant Secretary of Defense (Production and Logistics)
Assistant Secretary of Defense (Public Affairs)

Department of the Army

Secretary of the Army
Assistant Secretary of the Army (Financial Management)
Auditor General, U.S. Army Audit Agency

Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)
Auditor General, Naval Audit Service

Department of the Air Force

Secretary of the Air Force
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Air Force Audit Agency

Defense Agency

Director, Defense Logistics Agency
Director, Defense Logistics Studies Information Exchange
Director, Defense Contract Audit Agency

Non-DoD Activities

Office of Management and Budget
U.S. General Accounting Office, NSIAD Technical Information Center

Congressional Committees:

Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
Senate Ranking Minority Member, Committee on Armed Services
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Ranking Minority Member, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations

PART IV - MANAGEMENT COMMENTS

Department of the Air Force

Defense Logistics Agency

Final Report Page No.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

23 JUL 1991

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING
OFFICE OF THE INSPECTOR GENERAL
DEPARTMENT OF DEFENSE

SUBJECT: DoD(IG) Draft Audit Report on Demand Data for Secondary Items, May 30, 1991 (DoD(IG) Project No. OLD-0041) - ACTION MEMORANDUM

This is in response to your memorandum requesting comments on the findings and recommendations made in subject report. Please note the audit tasks the Assistant Secretary of the Air Force (Research, Development, and Logistics) for action. Request all references to this office be changed to read Air Force Deputy Chief of Staff (Logistics).

Recommendation 2a, page 33: We recommend that the Assistant Secretary of the Army (Installations, Logistics, and Environment), Assistant Secretary of the Navy (Research, Development and Acquisition) and the Air Force Deputy Chief of Staff (Logistics): Modify automated retail supply systems to code demand transactions for initial stockage requirements and increased stock levels as nonrecurring demand. 17

Air Force Comments: Concur. The retail level standard base supply system (SBSS) will be changed so that when a demand level is increased during the automatic releveling process, any resulting requisition for stock will contain the nonrecurring demand code. The same will also apply when establishing the initial demand level. Estimated completion date: Oct 1, 1992.

Recommendation 2b, page 33: We recommend that the Assistant Secretary of the Army (Installations, Logistics, and Environment), Assistant Secretary of the Navy (Research, Development and Acquisition) and the Air Force Deputy Chief of Staff (Logistics): Establish internal controls to ensure that demand codes are classified in accordance with DoD Manual 4000.25-1-M. Emphasis should be placed on ensuring that all demand transactions contain a valid demand code and demand transactions for nonrecurring type requirements are properly classified and reported. 17

Final Report Page No.

Air Force Comments: Concur. The Air Force Deputy Chief of Staff for Logistics will advise the Major Commands that demand codes must be classified in accordance with DoD Manual 4000.25-1-M and AFM 67-1, Volume I, Part One, and Volume II, Part Two. Emphasis will be placed on ensuring that demand transactions contain valid demand codes. In addition, changes will be made to the SBSS to flag demand transactions for new items or nonstocked items and code them as nonrecurring demand transactions to the inventory control point. Likewise, demand transactions for stocked items with quantities significantly greater than the normal demanded quantity will be flagged for manual review and treated as nonrecurring if the quantity is a one time requirement. Estimated completion date: Oct 1, 1992.

17 Recommendation 4a, page 33: We recommend that the Air Force Deputy Chief of Staff (Logistics): Modify the Air Force Depot Stock Control and Distribution System to ensure that nonrecurring demand transactions prepared by the depot's kit unit and forwarded to the wholesale system are not changed to recurring demands.

Air Force Comments: Concur. The finding describes the process in the D033 system (AFLC Retail Stock Control and Distribution System). The D033 has been replaced by the new D035K system (Wholesale and Retail Receiving Shipping System). The last conversion base, WR-ALC, was converted from D033 to D035K on Jul 8, 1991. The new system program logic perpetuates the nonrecurring demand code on the input. The code does not change to recurring as it did with the D033 system. Estimated completion date: Jul 8, 1991.

17 Recommendation 4b, page 34: We recommend that the Air Force Deputy Chief of Staff (Logistics): Establish procedures to require that demand transactions for Initial Spare Support List (ISSL) items be coded as nonrecurring demands.

Air Force Comments: Concur. AFM 67-1, Volume I, Part One, Chapter 12, Paragraph 5f(1) was amended Jun 25, 1991 and now requires requisitions for initial ISSL levels be submitted as nonrecurring demands. The SBSS will be changed to code initial ISSL requisitions as nonrecurring Jun 1, 1992.

We appreciate the opportunity to comment on the draft report. Our point of contact is Major Rita Torner, AF/LGSS, 695-4895.

JAMES W. HOPP, Maj Gen, USAF
Director of Supply
DCS/Logistics

cc: SAF/FMPF
AF/LGAA
AF/LGS

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
CAMERON STATION
ALEXANDRIA, VIRGINIA 22304-6100

IN REPLY REFER TO DLA-CI

05 AUG 1991

MEMORANDUM FOR DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITING, DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on the Audit of the Demand Data for Secondary Items (Project No. OLD-0041)

Enclosed is a response to your memorandum dated 30 May 91. The attached positions have been approved by Ms. Helen T. McCoy, Deputy Comptroller, Defense Logistics Agency.

4 Encl

JACQUELINE G BRYANT
Chief, Internal Review Division
Office of Comptroller

TYPE OF REPORT: AUDIT DATE OF POSITION: 2 Aug 91

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Draft Report on Demand Data for Secondary Items (Project No 0LD-0041)

FINDING A: DEMAND DATA CLASSIFICATION AND REPORTING
Requisitioners erroneously classified and reported demand data to wholesale inventory control points (ICP's). Demand transactions for nonrecurring requirements for initial stockage requirements, stock level changes, and modification programs were classified as recurring demand; and ICP's sometimes counted recurring demand transactions for the same requirements twice. Additionally, demand transactions for some recurring requirements for routine maintenance were classified as nonrecurring demand. These conditions occurred because automated retail supply systems were not properly programmed to accurately classify and report demand data, requisitioners manually entered the incorrect demand code on transactions, there were no procedures to preclude the double reporting of certain demand transactions, and there were no internal controls to ensure that demand data were properly classified and reported. As a result, we identified about $127.6 million of demand data submitted to ICP's, used to compute future requirements and position stocks, that were inaccurate Approximately $125.8 million of the $127.6 million were for nonrecurring demands that were erroneously reported as recurring demands. The remaining $1.8 million were for recurring demands that were erroneously reported as nonrecurring demands.

DLA COMMENTS: This finding does not apply to DLA, except for our very small base retail operations, which are outside the scope of the DoD IG study Requisition coding is done by the requisitioners. Wholesale managers, including DLA, have no control over how demand codes are determined.

MONETARY BENEFITS: None
DLA COMMENTS:
ESTIMATED REALIZATION DATE:
AMOUNT REALIZED:
DATE BENEFITS REALIZED:

ACTION OFFICER: Michael Pouy, DLA-OSP, 47975
PSE APPROVAL: JAMES J. GRADY, JR , Deputy Executive Director, Supply Operations, 19 JUL 91

DLA APPROVAL: Helen T McCoy, Deputy Comptroller

TYPE OF REPORT: AUDIT DATE OF POSITION: 2 Aug 91

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Draft Report on Demand Data for Secondary Items (Project No. 0LD-0041)

FINDING B: DEMAND DATA ACCUMULATION AT THE WHOLESALE LEVEL
There were inconsistencies among the Military Departments and DLA in their use of nonrecurring demand data, requisitioner cancellations, and serviceable materiel returns in forecasting requirements. In addition, demand data submitted by requisitioners were not properly accumulated.

o The Army and DLA included nonrecurring demand transactions in their requirements forecasts. The Navy and Air Force excluded nonrecurring demand in their forecasts.

o The Army, Air Force, and DLA adjusted demand data for requisitioner cancellation requests only if materiel ordered was not shipped while the Navy adjusted demand data regardless of shipment status.

o The Navy and DLA did not use serviceable materiel returns to adjust demand data.

These conditions occurred because there was no DoD guidance on the use of nonrecurring demand data in requirements forecasts, inadequate guidance on the use of requisitioner cancellations, lack of compliance with DoD guidance on serviceable materiel returns, and inadequacies in demand accumulation systems. As a result, items with like demand had different computed requirements.

DLA COMMENTS: PARTIALLY CONCUR. The findings are accurate as written, but we object to the allegations that they are improper. Specific comments are provided under the recommendations.

MONETARY BENEFITS: NONE
DLA COMMENTS:
ESTIMATED REALIZATION DATE:
AMOUNT REALIZED:
DATE BENEFITS REALIZED:

INTERNAL MANAGEMENT CONTROL WEAKNESS:
( ) Nonconcur (Rationale must be documented and maintained with your copy of the response.)
(X) Concur; however, weakness is not considered material. (Rationale must be documented and maintained with your copy of the response.)
( ) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

ACTION OFFICER: Michael Pouy, DLA-OSP, 47975
PSE APPROVAL: JAMES J GRADY, JR , Deputy Executive Director, Supply Operations, 19 JUL 91

DLA APPROVAL: Helen T McCoy, Deputy Comptroller

TYPE OF REPORT: AUDIT DATE OF POSITION: 2 Aug 91

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Draft Report on Demand Data for Secondary Items (Project No. 0LD-0041)

RECOMMENDATION B.1.a.: We recommend that the Assistant Secretary of Defense (Production and Logistics) provide guidance to the Military Departments and Defense Logistics Agency to preclude the use of nonrecurring demand transactions in developing demand forecasts for secondary items.

DLA COMMENTS: NON-CONCUR: The audit presents no data or analysis to support this recommendation. The report does not quantify the impact on the supply system of including nonrecurring demands in the forecast, and offers no rationale for excluding them.

There are three different demand codes classified as 'non-recurring'. Demand codes P (program demand) and O (no demand) should be and are excluded from the forecast. These demand codes are used primarily to indicate that the actual demand is accounted for elsewhere in the supply system and therefore should not be added to the recurring demand forecast. DLA excludes this demand from the forecast.

Demand code N indicates a demand that the customer does not expect to recur on a regular basis. Such demands may be classified properly by the requisitioner as non-recurring, but in fact be recurring when viewed from the wholesale level. The ICP receives demands from multiple users and it is the recurrent nature of the total demand received, not the individual requisition coding, that defines recurring or non-recurring demand for forecasting purposes. That is the purpose of DLA's Applicable Nonrecurring Demand Percentage (ANRDP) formula, to determine how much of the demand that is coded as non-recurring actually recurs.

A more appropriate recommendation would be:

'Provide guidance to treat non-recurring demand correctly in developing demand forecasts for secondary items.'

DISPOSITION:
( ) Action is ongoing; Final Estimated Completion Date:
(X) Action is considered complete

MONETARY BENEFITS: NONE
DLA COMMENTS:
ESTIMATED REALIZATION DATE:
AMOUNT REALIZED:
DATE BENEFITS REALIZED:

INTERNAL MANAGEMENT CONTROL WEAKNESS:
(X) Nonconcur. (Rationale must be documented and maintained with your copy of the response.)
( ) Concur; however, weakness is not considered material. (Rationale must be documented and maintained with your copy of the response.)

ACTION OFFICER: Michael Fouy, DLA-OSF, 47975
PSE APPROVAL: JAMES J. GRADY, JR., Deputy Executive Director, Supply Operations, 19 JUL 91

DLA APPROVAL: Helen T. McCoy, Deputy Comptroller

TYPE OF REPORT: AUDIT DATE OF POSITION: 2 Aug 91

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Draft Report on Demand Data for Secondary Items (Project No. OLD-0041)

RECOMMENDATION B.2 : We recommend that the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Director, Defense Logistics Agency, establish procedures to comply with the provisions of DoD Directive 4140.59, "Determination of Requirements for Secondary Items After the Demand Development Period," that require demand data to be adjusted for serviceable materiel returns. If an exception to the requirement is desired, request an exception from the Assistant Secretary of Defense (Production and Logistics).

DLA COMMENTS: CONCUR. DLA will request a revision/exception to this policy.

DISPOSITION:
(X) Action is ongoing; Final Estimated Completion Date: 30 Sept 1991
( ) Action is considered complete.

MONETARY BENEFITS: NONE
DLA COMMENTS:
ESTIMATED REALIZATION DATE:
AMOUNT REALIZED:
DATE BENEFITS REALIZED:

INTERNAL MANAGEMENT CONTROL WEAKNESS:
( ) Nonconcur (Rationale must be documented and maintained with your copy of the response)
(X) Concur; however, weakness is not considered material. (Rationale must be documented and maintained with your copy of the response.)
( ) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

ACTION OFFICER: Michael Pouy, DLA-OSP, 47975
PSE APPROVAL: JAMES J. GRADY, JR., Deputy Executive Director, Supply Operations, 19 JUL 91

DLA APPROVAL: Helen T McCoy, Deputy Comptroller

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