DEPARTMENT OF DEFENSE

AUDIT REPORT

DEFENSE LOGISTICS AGENCY REQUIREMENTS FOR
CURRENTLY PROCURED WHOLESALE INVENTORIES

No. 91-037

January 30, 1991

Office of the
Inspector General

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

REPORT
NO. 91-037

January 30, 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 the Audit of Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063)

This is the final report on the Audit of Defense Logistics Agency (DLA) Requirements for Currently Procured Wholesale Inventories for your information and use. Comments on a draft of this report were considered in preparing the final report. We performed the audit from August 1989 through June 1990. The overall audit objective was to determine if the quantities of supplies to be bought on forthcoming procurements at four DLA wholesale inventory control points (supply centers) that manage spare and repair parts were warranted by anticipated requirements. We also evaluated internal management control procedures to validate requirements before expending DoD funds. During fiscal year 1989, the four DLA supply centers managed about 2.7 million individual line items valued at about $7 billion and procured over $2 billion of materiel.

Most of the materiel being procured (purchase requests had been initiated, but contracts had not been awarded) by the four supply centers was warranted based on anticipated requirements. However, the supply centers could minimize the amount of materiel being purchased. Significant quantities of materiel on purchase requests at the supply centers were unreasonable (not warranted based on future requirements), and actual purchase of the materiel could have resulted in unnecessary or premature investments in inventory. The results of the audit are summarized in the following paragraph, and the details, audit recommendations, and management comments are contained in Part II of this report.

The supply centers initiated, or continued, purchase requests for quantities of supplies that were unnecessary or would be purchased earlier than necessary. As of August 1989, the four DLA supply centers that managed spare and repair parts had outstanding purchase requests valued at $1.2 billion for supplies. We estimated that $153.6 million of the $1.2 billion was for unreasonable supply quantities. We recommended that Military Department activities discontinue the submission of, and DLA discontinue the acceptance and support for, informal requirements forecasts; DLA develop specific procedures for supervisory review and approval of recommended purchases by the supply centers; and DoD amend policy guidance on the minimum procurement cycle period (page 5).

Management officials at Military Department and DLA activities were very responsive to our findings and promptly initiated corrective action. The Military Departments (primarily the Navy) reduced forecasted requirements by over $17 million, and DLA curtailed purchases valued at $10.2 million for items we brought to their attention during the audit.

The audit identified internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. There was a general lack of control over informal requests for future logistic support and a lack of procedures to ensure adequate supervisory review of purchase requests. The recommendations in this report, if implemented, will correct the weaknesses. We estimated that $68.6 million of recurring monetary benefits and $4.5 million in one time cost avoidances could be achieved by implementing the recommendations. A copy of this report will be provided to the senior officials responsible for internal controls within each of the Military Departments and DLA.

The Army, the Navy, and the Air Force concurred with the finding and Recommendation 1. The Army, however, did not specify its planned actions or estimated completion dates for those actions since it believed that present regulations prohibit the informal submission of materiel requirements to DLA. Because Army supply and maintenance activities were submitting informal forecasts to DLA, we believe the recommendation is still warranted and request that the Army reconsider its position and provide actions to be taken and approximate completion dates in its response to this report.

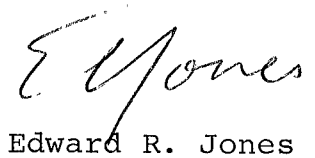
The Deputy Comptroller, DLA, partially concurred with the finding, but nonconcurred with the recommendations and internal control weaknesses identified in this report. DLA officials believe that existing guidance and procedures are adequate. We believe the recommendations are still warranted for reasons discussed in Part II of the report. DLA did not respond to the potential monetary benefits identified in Appendix H of $73.1 million, and to the reductions of purchases, identified in Appendix B, of $10.2 million. We request that the DLA provide

comments indicating concurrence or nonconcurrence with the estimated monetary benefits. If you nonconcur with the estimated monetary benefits or any part thereof or with the reductions in Appendix B, you must state the amount you nonconcur with and the basis for your nonconcurrence. Potential monetary benefits are subject to mediation in the event of nonconcurrence or failure to comment.

The Assistant Secretary of Defense (Production and Logistics) nonconcurred with Recommendation 3., on prohibiting the use of other than economic order quantity principles unless a cost/benefit analysis showed that benefits exceed costs. We believe the recommendation is still warranted for reasons discussed in Part II of the report.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Accordingly, the responses of the Assistant Secretary of Defense (Production and Logistics), the Army, and DLA on the unresolved issues in this report should be provided within 60 days of the date of this memorandum.

The cooperation and courtesies extended to our audit staff are appreciated. A list of the Audit Team Members is in Appendix J. Please contact Mr. James Helfrich or Mr. John Issel at our Columbus office at (614) 238-4141 (AUTOVON 850-4141) if you have any questions concerning the final report. Copies of the final report are being distributed to the activities listed in Appendix K.



Edward R. Jones
Deputy Assistant Inspector General
for Auditing

Enclosures

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

REPORT ON THE AUDIT OF DEFENSE LOGISTICS AGENCY REQUIREMENTS FOR CURRENTLY PROCURED WHOLESALE INVENTORIES

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Prepared by:
Logistics Support Directorate
Project No. 9LE-0063

REPORT ON THE AUDIT OF DEFENSE LOGISTICS AGENCY REQUIREMENTS FOR CURRENTLY PROCURED WHOLESALE INVENTORIES

PART I - INTRODUCTION

Background

In the Defense Logistics Agency (DLA), the Defense Construction Supply Center, the Defense Electronics Supply Center, the Defense General Supply Center, and the Defense Industrial Supply Center procure and manage spare and repair parts. In FY 1989, these supply centers procured over $2 billion of materiel and managed approximately 2.7 million National Stock Numbered (NSN) items valued at about $7 billion. The majority of the items were non-reparable spare and repair parts (referred to as consumable items).

The procurement process at the supply centers begins when their automated system determines that an item's inventory level has dropped to or below its reorder point. The supply centers' inventory management organization reviews the system's determination and other relevant data and initiates a purchase request for the item.

A purchase request represents the item manager's decision, as approved by a supervisor, to buy a quantity of materiel. The purchase request serves as the authorization for the procurement organization at the supply center to buy materiel either for inventory or for direct delivery to customers. The four supply centers purchase most materiel for inventory. After the purchase request is initiated, the supply center's procurement organization awards a contract and the contractor delivers the materiel.

The quantity of materiel ordered on the purchase request depends primarily on an estimate of future requirements and the availability of assets to satisfy those requirements. The estimate of future requirements is usually based on historical demand data and/or forecasts that the Military Departments and other Government related activities have provided to the supply centers. The centers' Standard Automated Materiel Management System (SAMMS) periodically computes a stockage objective (a maximum order quantity), compares the objective with asset availability, and recommends a quantity to buy when the quantity of assets is at or below an item's reorder point. The SAMMS also continuously monitors the relationship between estimated requirements and asset availability to identify potential overprocurements. If assets on hand and on order exceed prescribed limits, the SAMMS informs the supply center's inventory management organization of the potential to curtail purchase(s) in-process.

Objectives and Scope

The audit objective was to determine whether the quantities of supplies to be bought on forthcoming procurements at the DLA wholesale inventory control points were warranted by anticipated requirements. Specifically, we determined whether the factors that the supply centers used in deciding the quantities of supplies to be purchased were reasonable and whether the supply centers adjusted the quantities being purchased to reflect conditions that changed after the original decision to buy. Our audit related primarily to purchase requests, which are documents that represent decisions to purchase specific quantities of items, but for which the centers had not entered into contractual agreements.

The audit was conducted at four DLA supply centers. As of August 1989, the 4 centers had on file 185,733 outstanding purchase requests valued at $1.2 billion. We reviewed 380 outstanding purchase requests valued at $97.9 million, most of which were within the August 1989 sample universe. Our sampling plan and projections are discussed in Appendix A.

This economy and efficiency audit was performed from August 1989 through June 1990 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 shown in Appendix I.

Internal Controls

We evaluated internal controls used to ensure that the DLA supply centers were purchasing only those quantities of supplies needed to satisfy anticipated requirements. Accordingly, we reviewed DLA and supply center policies and procedures over the determination of spare parts requirements and the managerial evaluation of proposed purchases to ensure that there were no unnecessary investments in wholesale inventory. We evaluated the controls over the review and approval process relating to the initiation and continuation of purchase requests. Procedures and managerial controls were not adequate to ensure that forecasts of future requirements were reasonable. Also, purchase request approval procedures did not ensure that the supply centers procured only sufficient quantities of materiel to satisfy valid requirements. Details are provided in Part II of this report.

Prior Audit Coverage

Office of the Assistant Inspector General for Auditing, Report No. 88-020, "Minimum Economic Order Quantities," October 8, 1987, reported that the Military Departments and DLA implemented annual order quantity policies instead of normal economic order quantities in their procurement computations for spare and repair

parts. This was done to combat overpricing for small quantity buys and to reduce the number of procurement actions. The report concluded that the arbitrary use of 12-month procurement cycles was not the most cost-effective method of procuring consumable spare and repair parts. The report recommended that arbitrary 12-month procurement cycles be more narrowly applied to achieve the most substantial savings. The Military Departments and DLA agreed to initiate corrective actions.

Office of the Assistant Inspector General for Auditing, Report No. 88-140, "Requirements Forecasts on Supply Support Requests," April 27, 1988, reported that forecasted requirements on Supply Support Requests were often not well founded or adequately documented resulting in unreasonable investments in wholesale inventory. The report recommended that procedures and controls be implemented to correct causes of significant variances between forecasted and actual demands, to aid in computing forecasts, and to document the basis for forecasts. The Military Departments concurred and stated that the necessary controls would be established.

General Accounting Office Report No. NSIAD-90-105 (OSD Case No. B-238353), "Defense Logistics Agency's Excess Material on Order," March 6, 1990, stated that item managers were not making termination recommendations to contracting officers for most excess on-order items. The report also found that because of lax or nonexistent supervision, decisions not to recommend terminations were not reversed. GAO recommended that DLA develop and implement a cost comparison methodology to assist supply center personnel in making cost-effective termination decisions. DLA generally agreed with the recommendations and stated that corrective actions would be taken.

Office of the Assistant Inspector General for Auditing, Report No. 90-087, "Special Program Requirements for Logistic Support," June 27, 1990, concluded that the DLA supply centers provided adequate supply support in response to Special Program Requirements (SPR's), but the use of SPR's as a planning method for ensuring future supply support from DLA was usually unnecessary and frequently led to excessive investments in wholesale inventory. The report recommended that the DoD Components establish internal controls to ensure the necessity for, and reliability of, SPR forecasts; account for the wholesale inventory investments made to satisfy SPR's; and monitor the effectiveness of the SPR process. The Military Departments and DLA concurred with the finding and recommendations and initiated corrective actions.

Other Matters of Interest

During the audit, we discussed our conclusions on excessive purchases in-process with inventory management officials at the supply centers and other activities involved in the requirements determination process, as appropriate. As a result, the Military

Departments reduced forecasts of future requirements by over $17 million, and the supply centers promptly curtailed purchases for materiel valued at $10.2 million for 32 items. The purchases and items are identified in Appendix B.

PART II - FINDING AND RECOMMENDATIONS

Procurement of Materiel

FINDING

The Defense Logistics Agency's (DLA) supply centers prematurely or unnecessarily initiated purchase requests to acquire inventory and did not promptly curtail purchases in-process in response to indicated reductions in future requirements. These conditions occurred because of overstated, informal forecasts of future requirements, inadequate oversight of item manager decisions to buy or to continue to buy materiel, and economically unjustified use of lengthy procurement cycles in the calculation of requirements. As a result, of $1.2 billion of materiel being procured (contracts not yet awarded) in August 1989, the supply centers were buying excessive quantities of materiel valued at $153.6 million. Purchases of materiel valued at $116.8 million were premature, and purchases of materiel valued at $36.8 million were unnecessary. We estimated that those premature and unnecessary purchases represented about $68.6 million in avoidable costs to DoD.

DISCUSSION OF DETAILS

Background. A major objective in wholesale inventory management is to maintain an adequate stockage level while precluding premature or unnecessary investments in inventory. DoD Directive 4140.59, "Determination of Requirements for Secondary Items after the Demand Development Period," July 13, 1988, contains the principal guidance on requirements and inventory levels for DoD wholesale activities. DLA Manual 4140.2, "Supply Operations Manual," implements DoD guidance and provides criteria for establishing maximum stockage levels for the items the supply centers manage. As defined by DLA, the maximum stockage objective of an item represents the combination of assets on hand and due in that is needed to satisfy protectable war reserves, customer backorders, safety levels, procurement lead times, and procurement cycles. When the combined assets of an item fall to or below an item's reorder point, DLA's Standard Automated Materiel Management System (SAMMS) advises the item manager and, except for the majority of lower dollar value items, the item manager evaluates the requirements, decides on the quantity to buy, and initiates a purchase request. The item manager's buy decision is subject to various levels of supervisory approval, with the final approval level varying with the significance of the proposed purchase in relation to the annual procurement value at the particular DLA supply center. After a purchase has been initiated, SAMMS monitors the continuing need for procurement of an item and informs the item manager if materiel on order appears to be excessive to current requirements. DLA procedures require the item manager to review the potentially excessive procurements and

curtail buying, when appropriate. The item manager's decision is subject to the same approval levels as the decision to initiate a purchase. We sampled the purchase requests that were in-process at the supply centers in August 1989 to determine whether the supply centers had reasonable bases to initiate or continue the procurement process for the quantities of items on the purchase requests.

Evaluation of Purchase Requests. As of August 1989, the supply centers had 185,733 purchase requests valued at $1.2 billion in-process for spare and repair parts. For 8,487 purchase requests valued at $321.4 million, excessive quantities of materiel valued at $153.6 million were being bought. Of the $153.6 million, purchase of materiel valued at $116.8 million was premature and purchase of materiel valued at $36.8 million was unnecessary. We categorized a purchase quantity as premature if the quantity would be issued within 5 years after the projected date for issuing the quantity represented by the maximum stockage objective level. We categorized a purchase as unnecessary if the quantity would not be issued until more than 5 years after the projected date for issuing the quantity represented by the maximum stockage objective level, based on forecasted demands at the time of our audit. We based our estimates on a review of 380 outstanding purchase requests valued at $97.9 million. Appendix A provides a detailed discussion on our sample and projected results. We concluded that procurement of quantities of materiel valued at $14.0 million on 53 purchase requests was either premature or unnecessary. The principal reasons for the excessive supplies on the 53 purchase requests are discussed in the following paragraphs.

Forecasted Requirements. Twenty-one purchase requests valued at $8.5 million involved excessive quantities of supply valued at $7.0 million. This occurred because the purchase requests were based on overstated requirements forecasts that the Military Departments submitted. The overstated forecasts related primarily to inappropriate, "informal" requests for future logistics support that had been submitted to, and accepted by, the supply centers. In DoD, there are two formal methods, Supply Support Requests and Special Program Requirements, for requesting future logistics support from DLA, but the Military Departments did not use either of these approved methods in these instances. The informal requests pertained to support for both new and established weapon systems.

Requirements for New Weapon Systems. The Defense Construction Supply Center (DCSC), for example, was procuring materiel valued at $1.4 million on five purchase requests for two items related to the Navy's Air Cushioned Landing Craft. These purchase requests supported forecasted requirements of $3.7 million for the two items that were part of about $34 million of requirements that the Naval Sea Systems Command (NAVSEA) had informally submitted to three DLA supply centers to

obtain support for the Air Cushioned Landing Craft for FY's 1989 through 1991. Our review of actual demand and usage data for the two items indicated that the requirements forecasts were too high. We discussed the requirements forecasts with NAVSEA personnel who advised us that their forecasted quantities had been overstated because they had used an incorrect factor to compensate for an increase in fleet size. NAVSEA promptly adjusted its forecasted requirements for the two sample items from $3.7 million to $1.3 million and for all of the system's DLA related items from $34 million to $17 million. In response to the reduced requirements, DCSC canceled a purchase request for $520,946 relating to one of the two sample items and canceled other purchase requests valued at about $900,000 relating to other items DCSC was buying to support the system.

Requirements for Established Weapon Systems. At the time of the audit, DCSC was procuring 57 gear rotors (National Stock Number [NSN] 1615-01-145-2642) valued at $1.1 million based on an "informal" requirements forecast submitted by the Naval Aviation Depot at North Island, California. The gear rotors were to be used for maintenance on the Navy's CH-46 helicopter transmission. Since the quantities that the Naval Aviation Depot previously requisitioned were substantially less than the Depot had forecasted, the item manager, on several occasions, requested confirmation of the forecasted requirements. On each occasion, the requirement was confirmed. However, when we visited the North Island Depot in September 1989 to verify the validity of the forecast, we found that the Depot did not have a future maintenance program that required the gear rotors. The CH-46 transmission maintenance function had been transferred to the Naval Aviation Depot at Cherry Point, North Carolina, and our discussion with Cherry Point Depot managers disclosed that they had more than enough gear rotors to perform the transmission maintenance program through 1995. The North Island Depot had not advised the supply center that it did not have a future need for the rotors and that the Depot's previously forecasted requirements on its informal request were not valid. When we informed the supply center of this situation, the center promptly canceled the $1.1 million purchase.

Informal logistics support requests from Military Departments should be discontinued because there are insufficient controls and oversight procedures established to evaluate forecasted requirements in the requests. Informal requests with overstated forecasted requirements can easily lead to excessive investments in DLA's wholesale inventory without any oversight or accountability for the accuracy of the forecasts or the necessity of the investments. DoD has prescribed two formal methods of arranging for future logistic support that should be followed by the Military Departments and DLA's supply centers: Supply Support

Requests and Special Program Requirements. 1/ These methods can provide some control over the submission, acceptance, and investment processes to ensure that forecasted requirements are adequately substantiated and wholesale inventory investments relating to those requests are closely monitored.

Demand Based Requirements. For 21 purchase requests valued at $6.8 million, the quantities of materiel being procured were generally based, inappropriately, on historical demand data that the supply centers had accumulated for the items. The supply centers should not have been buying materiel valued at $4.6 million because either the basis for buying the quantity on the purchase request was not reasonable or the probable need for the quantity on the purchase request had diminished after the purchase request had been initiated.

Initiation of Purchase Requests. The supply centers initiated 10 purchase requests for materiel valued at $3.0 million, for which information available at the supply centers indicated that the item managers should not have proposed, and supervisors should not have approved, the purchase of $2.3 million of that materiel. For example, in February 1989, the Defense Electronics Supply Center (DESC) initiated a purchase request for 168 circuit breakers (NSN 5925-00-782-0113) valued at $23,426. The quantity represented a 2-year buy under Diminishing Manufacturing Source policies to satisfy anticipated Navy requirements. However, documentation in the supply center's item management file showed that in February 1986, the Navy, the principal user of the item, notified the supply center that it had found a suitable replacement and would no longer need the circuit breakers. Therefore, the item manager should not have proposed, and supervisors should not have approved, the purchase. Documentation showed that the buy was approved, but did not show the nature of the review or that the reviewers had known of or considered the implications of the Navy's discontinued interest before approval. After we discussed the matter with the item manager and supervisors, the center canceled the purchase request.

DESC initiated a purchase request in January 1990 for 141 antennas (NSN 5985-01-205-2959) valued at about $1.9 million. However, documentation in DESC's item management file showed that the Navy Aviation Supply Office had notified the center in July 1989 that the antennas were being reclassified from consumable to reparable and that management of the item was being assumed by the Aviation Supply Office. DESC's buy decision for the 141 antennas assumed continued management and future demands as though the antennas were consumable items. However, as a reparable item, antennas that become unserviceable will

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1/ Recent audit reports (see Prior Audit Coverage) recommended changes to improve procedures and controls in these logistic support processes.

generally be repaired rather than replaced with new antennas. Accordingly, the item's forecasted demands should have been offset by assets that would be returned to serviceable condition by repair. After we discussed this situation with DESC and Aviation Supply Office personnel, the DESC canceled the purchase request for the 141 antennas.

There was a variety of reasons for the excessive quantities of supplies being procured on the 10 purchase requests; however, all of the purchase requests had received supervisory review and approval. Therefore, we attributed the significant quantity of supplies being unnecessarily or prematurely purchased to the inadequacy of those supervisory reviews of item manager actions. DLA had no written procedures that specified how the review should be conducted or what should be reviewed. Furthermore, DLA had not established internal controls to ensure that supervisory reviews and approvals of purchase requests were accomplishing their primary purpose of keeping inventory investments consistent with anticipated demands.

Continuation of Purchases In-Process. Nine purchase requests valued at $1.8 million continued in the procurement process although changes, which occurred after the requests had been initiated, indicated that purchases of materiel valued at $1.5 million should have been curtailed. For example, DESC initiated a purchase request for 2,500 toggle switches (NSN 5930-00-114-5454) valued at $238,525 in March 1989. The purchase quantity was based on a forecasted demand rate of 708 switches per quarter. However, by September 1989, the forecasted demand rate had dropped to 546 switches per quarter. The SAMMS generated a due-in study, which indicated that excessive quantities of the switches were being procured, but the study did not prompt cancellation of the purchase. Instead, the item manager inappropriately increased the item's quarterly demand rate and production lead time to absorb the excess. Because of a lack of documentation, we could not determine whether the manager's decision not to cancel had been reviewed and approved.

For all nine of the purchase requests, the item managers had, or should have, received a supply study, which should have resulted in a decision to either reduce or cancel the quantities of supply on the purchase requests. However, the item managers did not initiate reduction actions. We found no verifiable evidence of supervisory review and approval of the item managers' decisions not to reduce the excessive quantities on order. Some of the studies had annotations and initials on them, but we could not determine who had approved the decision not to act, or why. We could not find procedures that prescribed supervisory review and

documentation on item manager decisions not to curtail potential excess procurements. 2/ We discussed these nine purchase requests with supply center personnel, and they curtailed orders for materiel valued at $668,344.

Other. Two purchase requests valued at $2 million contained excessive quantities of materiel valued at $885,409. The requirements for the two items appeared to be demand based. The purchase request quantities, however, were overstated because of errors that were not attributable to any of the other systemic or repetitive deficiencies that we identified. When we brought these errors to the attention of supply center personnel, they took corrective action to cancel the excessive purchases valued at $885,409. Since corrective action was initiated by the supply centers and the errors did not indicate systemic or repetitive deficiencies, we did not make any audit recommendations.

Procurement Cycle Period Requirements. For 11 purchase requests valued at $5.6 million, the Defense General Supply Center (DGSC) was purchasing quantities that were based, in part, on requirements to cover procurement cycles that were longer than minimum economic order cycles. Had DLA's economic order criteria, instead of administrative lead time, been used in computing the procurement cycle quantities, the procurement cycle requirements would have been $1.4 million instead of $3.0 million. For example, the purchase request for 11,154 drums of fog oil (NSN 9150-00-261-7895) valued at $1.1 million was based, in part, on procurement cycle period requirements valued at $546,293, equivalent to the administrative leadtime requirements (representing 5 months) for the item. The procurement cycle requirements would have been $325,114 (representing 3 months) if the economic order quantity criteria had been used.

Of the four DLA supply centers, DGSC was the only one that derived the procurement cycle quantity of an item by adopting the item's administrative leadtime requirement. The other three DLA supply centers derived an item's procurement cycle quantity by using DLA's conventional economic order quantity criteria. DGSC did not use administrative leadtime requirements as procurement cycle requirements for all of the stocked items that the center managed. For 47 of 60 items reviewed at DGSC, the procurement cycle requirements were not based on administrative lead time. Center officials advised us that administrative lead time was used to determine procurement cycle requirements for approximately 4,000 items.

2/ This report does not include a recommendation concerning review of potential overprocurement relating to purchases in-process because the General Accounting Office reported a similar condition while our audit was in-process and DLA has agreed to take appropriate corrective action.

Guidance issued by the Assistant Secretary of Defense (Production and Logistics) on June 27, 1989, "Subject: Wholesale Secondary Item Order Quantity Policy," reestablished the need to use economic order quantity (EOQ) methods in limiting the amount of materiel to be purchased for inventory. The guidance states that wholesale inventory management activities should "Limit EOQ quantities to a maximum of 36 months and a minimum equal to either the administrative lead time or one quarter's demand." Accordingly, officials at DLA headquarters and DGSC believed that an item's procurement cycle could be set at administrative lead time without any economic justification even though the application of economic order criteria would result in a lesser requirement. The cited guidance does not specifically require an economic justification to use the alternative administrative lead time. However, other provisions of the policy guidance state:

> Reestablish the use of EOQ methods outlined in DoD Instruction 4140.39 for generating order quantities for purchase requests and developing stratification and budget requirements. Override computed EOQ on a target order quantity only when specific analysis supports an alternative quantity as more cost-effective.

We noted that as of February 1990, DGSC issued instructions to limit the administrative leadtime requirements used for procurement cycle levels to a 6-month level because of budget constraints. This, however, is still nearly double the requirement that would be computed under EOQ principles.

RECOMMENDATIONS FOR CORRECTIVE ACTION

1. We recommend that the Assistant Secretary of the Army (Installations, Logistics and Environment), the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Assistant Secretary of the Air Force (Research, Development and Logistics) advise their supply and maintenance activities to discontinue the submission of informal requests for future logistic support to the Defense Logistics Agency.

2. We recommend that the Director, Defense Logistics Agency:

a. Advise the supply centers to discontinue acceptance of informal requests for future logistic support.

b. Develop specific procedures for supervisory review and approval of purchase requests and establish controls to ensure the review and approval process is accomplishing its purpose.

3. We recommend that the Assistant Secretary of Defense (Production and Logistics) amend the provisions of the June 27, 1989, guidance "Wholesale Secondary Item Order Quantity Policy," to prohibit the use of other than economic order quantity principles for procurement cycle computations unless a formal cost/benefit analysis is performed and shows that benefits exceed costs.

MANAGEMENT COMMENTS

The Army, Navy, and Air Force concurred with the finding and Recommendation 1. However, the Army believed that its current regulations prohibit the informal submission of materiel requirements to the DLA and that additional instructions to its supply and maintenance activities were not needed. The full text of the Army's response is in Appendix C, the full text of the Navy's response is in Appendix D, and the full text of the Air Force's response is in Appendix E.

The Deputy Comptroller, DLA partially concurred with the finding, stating that the inaccurate statements of needs by customers must be minimized. However, DLA took exception to our conclusion that informal requests should be eliminated. DLA stated that the audit sampling approach gave no recognition to the possibility that some informal requirements may be accurate, or that some may be rejected by item managers. The DLA nonconcurred with Recommendations 2.a. and 2.b. Regarding Recommendation 2.a., to advise its supply centers to discontinue acceptance of informal requests for future logistics support, DLA offered a substitute recommendation that the Office of the Assistant Secretary of Defense (Production and Logistics) and the DoD Components pursue alternative approaches to informal requests for supply support of nondemand based requirements from DLA inventory management activities. Regarding Recommendation 2.b., to develop specific procedures for supervisory review and approval of purchase requests and establishing controls to ensure the review and approval process was accomplishing its purpose, DLA believed its existing procedures were adequate.

DLA did not address the monetary benefits, stating that it did not concur with those portions of the finding for which monetary benefits were quantified and that the draft report did not contain enough information on the audit sampling process to determine how the conclusions were reached. DLA did not respond to the reduction of purchases, identified in Appendix B, of $10.2 million, and did not agree that there were any internal control weaknesses.

DLA also stated that the audit may not have resulted in accurate depictions of conditions and effects because it failed to consider the impact of informal requirements and procurement curtailments on customer readiness. The full text of the DLA response is in Appendix F.

The Assistant Secretary of Defense (Production and Logistics) nonconcurred with Recommendation 3., on prohibiting the use of other than economic order quantity (EOQ) principles for procurement cycle computations unless a formal cost/benefit analysis showed that benefits exceed costs. The nonconcurrence was based on a Logistics Management Institute study that recommended that the minimum procurement cycle requirement be set equal to an item's procurement administrative lead time. The full text of the Assistant Secretary's comments is in Appendix G.

AUDIT RESPONSE TO MANAGEMENT COMMENTS

The comments and proposed actions by the Navy and Air Force are generally responsive. Although the Army concurred with the finding, it did not state what action would be taken. We believe some specific corrective action is warranted. We believe that the Army should reiterate its policy on nonsubmission of informal requirements forecasts to its supply and maintenance activities, and follow up on this action to ensure conformance because Army activities were submitting informal forecasts despite the published Army guidance. We therefore request that the Army reconsider its position and provide actions to be taken and appropriate completion dates in its response to the final report.

Overall, we consider the DLA reply to the draft report as non-responsive. We found no empirical data maintained or offered by DLA to substantiate the need for an alternative approach to Recommendation 2.a., to discontinue acceptance of informal requests for logistic support. The Military Departments' concurrences with Recommendation 1. indicate that they too do not believe that informal requests or an alternative to Supply Support Requests and Special Program Requirements are necessary. We request that DLA reconsider its position and implement Recommendation 2.a.

We continue to believe that DLA should implement Recommendation 2.b., to establish specific procedures for supervisory review and approval of purchase requests and controls to ensure that the process is working. We do not agree that DLA has adequate procedures and internal controls in place or that our criticism is ". . . one of judgement, not of procedure." DLA did not have specific procedures for or controls over the purchase review and approval process. We recognize that DLA had written guidance that prescribed levels of approval of purchase requests at varying values, but this guidance did not contain or represent a set of instructions prescribing particular steps to be followed in reviewing and approving purchase quantities. In the absence of specific steps for supervisors to use, the approval process could be as little as a signature evidencing that a purchase document had been seen and, therefore, represent conformance with the DLA "procedure." As an alternative to

establishing detailed procedures, DLA could provide more specific policy guidance over the purchase approval process to ensure the adequacy of the reviews and the reasonableness of the purchase decisions.

In the absence of specific procedures, we concluded that DLA did not have adequate internal controls to safeguard against waste of resources (funds) for excessive purchases. DLA's internal management control relating to review and approval of potentially excessive purchases already in process was primarily the supply centers' accounting and reporting to DLA Headquarters on the results of their review of such purchases. However, we did not consider this to be an adequate internal control because DLA did not have a procedure specifying the nature of the review and the criteria to be considered and evaluated in deciding whether to continue with the purchase(s) in process. We also found no DLA requirement for an independent evaluation of the validity of the decisions or even the accuracy of the reports relating to the reviews.

We do not share DLA's opinions on our audit approach, sample coverage, and consideration of customer readiness. Our audit approach for review of informal requirements requests could not have proceeded from the base suggested in the DLA response. DLA does not require and the supply centers do not maintain an historical data base of informal requirements requests from which to draw a statistical sample and perform a wider review of such requests. The absence of such an historical data base was a contributing factor to our conclusion that informal requests should be discontinued.

We met with DLA representatives on November 7, 1990, to provide additional information on our sampling methodology and projections. The DLA representatives could not demonstrate any flaws or distortions in our sampling methodology and projections. We agree that our sampling plan was designed to ensure substantial audit coverage of high value purchase actions, but this was not inappropriate because those purchases represented a larger proportion of their value to the universe value than their number to the universe number.

DLA's comment on the very small percentage (.1 percent) of the total number of purchase actions that we sampled, implies poor sampling coverage; but that percentage is irrelevant, statistically. The percentage representing the number of actions sampled to the total number in a universe is not indicative of the reasonableness of sample coverage, or sample reliability, especially in stratified sampling, and has no direct correlation with the values and precision of the estimates concerning the values in the universe. Our focus in this audit was on the dollars being invested in inventory, not on the number of actions to acquire the inventory, because dollars are the principal measure of, and the driver of, cost related to DoD's inventory investment.

We did not ignore customer readiness or precipitate actions during the audit that adversely impacted readiness, as the DLA response suggested. We discussed the requirements for the sampled items with Military Department activities that submitted the requirements or would use the items and we believe those activities are very reliable sources for obtaining perspective on readiness. The concurrences of the upper levels of the Military Departments to Recommendation 1. also indicate that the discontinuance of informal requirements requests would not adversely impact readiness. The DLA implication that readiness suffered by virtue of backorders developing for four items at one supply center because of our audit and our recommended cutbacks in purchases, is not consistent with facts. The four items, including the "critical" F-15 item, were in a backorder position before our audit, not as a result of the audit or any cutback in purchases that we proposed. We were well aware of the backorders and considered them in forming opinions on purchase quantities for the sampled items. The backorders on those four items are not relevant to the condition we reported and are not supportive of any contention that elimination of informal requirements requests would significantly impair readiness.

Based on our comments, we ask that DLA reconsider its opinion on internal controls and Recommendations 2.a. and 2.b. We also request that DLA respond to our estimates of monetary benefits (Appendix H) and the reduction in purchases (Appendix B).

We do not agree with the position of the Assistant Secretary of Defense (Production and Logistics) on Recommendation 3., because there is no substantive data to show that the benefits to be gained by using administrative lead time requirements instead of one quarter's demands for procurement cycle requirements are equal to or greater than the cost and risk of acquiring larger than necessary inventories. Further, this position on procurement cycle requirements is not consistent with and supportive of DoD's policy of minimizing wholesale inventories.

We reviewed the Logistics Management Institute's study, on which the cited DoD policy and the response to Recommendation 3. were predicated. The study disclosed no quantitative data analysis to substantiate an opinion that the benefits of using administrative lead time requirements as the procurement cycle requirements were at least commensurate with the cost of acquiring and holding larger inventories than would be acquired if procurement cycle requirements were based on a shorter period, such as a quarter's demands. The Logistics Management Institute study stated that possible benefits (personnel and workload) might accrue by reducing the number of buys when using procurement cycle requirements based on administrative lead time requirements. It did not estimate any concrete savings and stated that reducing the frequency of buys might cause the use of more costly methods of procurement for larger purchases and that larger volume purchases won't necessarily result in lower unit prices. We

envision some possible advantages in procurement productivity or workload reduction by using administrative lead time for procurement cycle requirements to avoid frequent small purchases of items under $25,000. However, the cited DoD policy and DLA did not limit the use of administrative lead time for procurement cycle requirements to repetitive low value purchases. The larger the value of the purchase resulting from the use of administrative lead times that is greater than a quarter's demand, the larger the investment that DoD may make in inventory and the greater the assumed risk of excessive inventory level and cost.

We believe that the assumption of greater risk without demonstrating quantifiable offsetting benefits is not consistent with DoD's policy of minimizing investments in wholesale inventory. Accordingly, we request that the Assistant Secretary of Defense (Production and Logistics) reconsider its position in responding to this final report.

STATISTICAL SAMPLING PLAN AND RESULTS

The Defense Logistics Agency (DLA) supply centers maintain computer files that contain information on active purchase requests (PR's). To establish a data base for sampling purposes, we requested from the centers copies of their August 1989 active PR files. The audit universe contained 185,733 PR's worth approximately $1.2 billion. [1/] These PR's comprised all active PR's at the four centers as of August 1989. We used a multistage sampling plan that incorporated stratified sampling methodology. We selected a random sample consisting of 245 PR's valued at $74.3 million relating to 239 National Stock Number items. In some cases, there was more than one active PR for a particular item. For those items, we reviewed the sample PR and the associated PR's (total of 135 PR's valued at $23.6 million) to determine their validity. Therefore, our review encompassed a total of 380 PR's valued at $97.9 million.

Table A
Purchase Requests Reviewed by Activity
(Values in Millions)

Supply Center [2/]	PR's Sampled			Additional PR's [3/]		Totals	
	No.	NSN's	Value	No.	Value	No.	Value
DCSC	62	62	$17.2	54	$ 9.7	116	$26.9
DESC	60	54	19.5	40	7.6	100	27.1
DGSC	60	60	15.2	26	3.6	86	18.8
DISC	63	63	22.4	15	2.7	78	25.1
Total	245	239	$74.3	135	$23.6	380	$97.9

[1/] The original sample universe was $1.1 billion based on the values of PRs as provided by DLA. We adjusted the universe value to $1.2 billion based on changes in prices and quantities that we observed on the 245 statistically sampled PRs that we reviewed.

[2/] Defense Construction Supply Center (DCSC), Defense Electronics Supply Center (DESC), Defense General Supply Center (DGSC), Defense Industrial Supply Center (DISC).

[3/] The additional PR's reviewed consisted of 96 purchases valued at $16.2 million that were related to statistically sampled items and within the universe (issued before our August 1989 cutoff date), and 39 purchases valued at $7.4 million were either issued after the sample cutoff date or selected for review in the survey stage of the audit.

In some cases, a PR had both premature and unnecessary costs associated with it. We considered purchases for quantities exceeding the next 5-year requirement to be unnecessary, and purchases made earlier than required to satisfy the anticipated demand to be premature. We projected the results relating to the PR's in our sample to the 185,733 PR's in the universe, with a 95-percent confidence level. We estimated that 8,487 PR's valued at $321.4 million were for excessive quantities of materiel valued at $153.6 million of which $116.8 million represented premature purchases and $36.8 million represented unnecessary purchases. The values of our estimate were made at a 95-percent confidence level and have a $\pm$ .4 percent margin of error. We calculated the avoidable cost associated with the purchase of $153.6 million of excessive supplies to be $68.6 million. The $68.6 million represented $36.8 for unnecessary purchases, and $31.8 million for premature purchases, based on our application of the 17-percent holding cost developed by DLA to the time value of premature purchases.

In addition to PR's in our August 1989 universe of PR's, we reviewed 39 other PR's valued at $7.4 million. These PR's either were not related to the statistically sampled PR's or were issued after our August 1989 cutoff, and therefore we did not project the results of our review of these 39 PR's. However, we concluded that these additional PR's represented $4.4 million in unnecessary purchases and $253,660 in premature purchases. The costs incurred for these additional premature and unnecessary purchases were $4.5 million. Therefore, the total potential monetary benefits estimated as a result of the audit are $73.1 million ($68.6 million projected to the universe and $4.5 million outside of the universe).

SUMMARY OF PURCHASE ACTIONS REDUCED DURING AUDIT

National Stock Number	Document Number	Purchase Action Values [1] Total	Inappropriate Per Audit	Reduced During Audit
1680010045349	YPG89156001372	$ 512,255	$ 512,255	$ 512,255
5930001145454	YPE89100000323	238,525	238,525	238,525
5960012915593	YPE89134001228	660,288	560,847	148,499
6115000083733	MPG892330012882/	77,490	64,575	51,660
1560008066062	YPG89055001048	83,570	51,535	23,678
6150010270791	YPG892540000872/	8,107	6,486	8,107
5995011530125	YPG893000008122/	6,292	6,292	6,292
4320011986555	YPC89122002472	556,697	556,697	520,946
1615011452642	NPC87307001575	530,618	530,618	530,618
1615011452642	NPC87217000724	151,605	151,605	151,605
1615011452642	NPC88300001313	397,964	397,964	397,964
3040007617875	YPC89122002405	323,969	175,894	175,894
4220012868693	YPC89019000854	1,337,016	430,417	381,262
5835001689508	YPE893100016782/	2,438,700	2,438,700	2,438,700
1270010150771	ZPE88346001686	490,792	490,792	490,792
1270010150771	ZPE89169001371	1,548	1,548	1,548
5998010630589	YPE871810006922/	35,576	35,576	35,576
5998010630589	YPE871930045302/	56,328	56,328	56,328
5998010630589	YPE860860007512/	83,010	11,859	11,859
5963012297077	YPE88045002263	58,875	58,875	58,875
2840009051732	ZPI89002000317	915,296	915,296	915,296
3040003133306	ZPC89128003246	215,806	74,933	28,974
4940012218897	YPC89156002453	6,890	6,890	6,890
5985012052959	RE90021007643 2/	1,894,015	1,894,015	1,894,015
5925007820113	ARE89040000126	23,426	23,426	23,426
5998012629678	YPE892040016172/	46,696	41,507	46,696
1560012968003	YPG89100001825	502,265	152,001	79,305
1560002025271	YPG89058000296	2,032,930	775,465	885,308
1560001488793	YPG89044000735	8,369	8,369	8,369
1680001479024	YPG89156000723	582	499	333
1560009663515	FD20609063535 2/	243,475	63,304	63,304
5340000501558	YPI89123000236	101	101	101
		$13,939,076	$10,733,194	$10,193,000

[1] At current standard unit prices, entry rounded to nearest dollar.

[2] Purchase action reviewed in this audit, but values were not part of, or included in, the sample universe for which audit results were statistically projected.

DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS
WASHINGTON, D C. 20310-05

DALO-SMP 90006231

16 OCT 1990

MEMORANDUM ~~THRU DEPUTY CHIEF OF STAFF FOR LOGISTICS~~ Initialed 10/17

~~DIRECTOR OF THE ARMY STAFF~~ FOR JOSEPH P. DONNELLY, LTC, GS, ADAS 10/22/90

ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT) 10/23/90 FOR Thomas A. Orsini Deputy Assistant Secretary of the Army (Logistics)

FOR DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITING, DEPARTMENT OF DEFENSE

SUBJECT: Report on the Audit of Defense Logistics Agency Requirements for Currently Procured Wholesale Inventory (Report No. 9LE-0063)--INFORMATION MEMORANDUM

1. This responds to DoDIG memorandum of August 29, 1990 (Tab A).

2. The Army concurs with the findings and recommendations in subject report. Our comments are at Tab B.

James W. Ball

2 Encls

JAMES W. BALL
Major General, GS
Director of Supply
and Maintenance

CF:
SAIG-PA
Cdr, AMC, AMCIR-A/AMCSM-MS

OASA(I,L&E) - Concur, Mr. Croom/x75727 (Conference)

MAJ Gordon/X77061

DoDIG DRAFT FINDINGS, RECOMMENDATIONS AND
ARMY COMMENTS (Project No. 9LE-0063)

FINDING: The Defense Logistics Agency's (DLA) supply centers prematurely or unnecessarily initiated purchase requests to acquire inventory and did not promptly curtail purchases in-process in response to indicated reductions in future requirements. These conditions occurred because of overstated, informal forecasts of future requirements, inadequate oversight of item manager decisions to buy or to continue to buy materiel, and economically unjustified use of lengthy procurement cycles in the calculation of requirements. As a result, of $1.2 billion of materiel being procured (contracts not yet awarded) in August 1989, the supply centers were buying excessive quantities of materiel valued at $152.6 million. Purchases of materiel valued at $36.8 million were unnecessary. We estimated that those premature and unnecessary purchases represented about $68.6 million in avoidable costs to DoD.

ADDITIONAL FACTS: The Army presently has instructions to subordinate commands under AR710-1, Centralized Inventory Management of the Army Supply System, 1 February 1988, for the development, control, modification and cancellation of requirements to DLA, via supply support requests (SSR) and special program requests (SPR). Present Army regulations prohibit informal submission of materiel requirements to DLA or other secondary item control centers.

RECOMMENDATION No. 1: We recommend that the Assistant Secretary of the Army (Installations, Logistics and Environment), the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Assistant Secretary of the Air Force (Research, Development and Logistics) advise their supply and maintenance activities to discontinue the submission of informal requests for future logistic support to the DLA.

ACTION TAKEN: Concur. See Additional Facts above.

RECOMMENDATION No. 2: We recommend that the Director, Defense Logistics Agency:

a. Advise the supply centers to discontinue acceptance of informal requests for future logistic support.

b. Develop specific procedures for supervisory review and approval of purchase requests and establish control to ensure the review and approval process was accomplishing its purpose.

ACTION TAKEN: Concur.

RECOMMENDATION No. 3: We recommend that the Assistant Secretary of Defense (Production and Logistics) amend the provisions of the June 27, 1989, guidance "Wholesale Secondary Item Order Quantity Policy," to prohibit the use of other than economic order quantity principles for procurement cycle computation unless a formal cost/benefit analysis is performed and shows that benefits exceed costs.

ACTION TAKEN: Concur. The Army presently uses economic order quantity (EOQ) principles for procurement computations.

THE ASSISTANT SECRETARY OF THE NAVY
(Research, Development and Acquisition)
WASHINGTON, D.C. 20350-1000

NOV 16 1990

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR GENERAL FOR AUDITING

Subj: DRAFT REPORT ON THE AUDIT OF DEFENSE LOGISTICS AGENCY REQUIREMENTS FOR CURRENTLY PROCURED WHOLESALE INVENTORIES (PROJECT NO. 9LE-0063)

In reply to your memorandum of August 29, 1990, we have reviewed the subject report. We concur with the recommendation to discontinue the submission of informal requests for logistics support to the Defense Logistics Agency. Navy's supply and maintenance activities will be notified by 15 November 1990.

Gerald A. Cann

Copy to:
NAVINSGEN
NAVCOMPT (NCB-53)

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

29 OCT 1990

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

SUBJECT: DoD(IG) Draft Report on the Audit of Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No 9LE-0063) - INFORMATION MEMORANDUM

This is in reply to your memorandum for the Assistant Secretary of the Air Force (Financial Management and Comptroller) requesting comments on the findings and recommendations made in subject report.

The Air Force concurs with the findings of subject report and will advise their supply and maintenance activities to discontinue the submission of informal requests for future logistics support to the Defense Logistics Agency. The anticipated completion date is no later than 30 Nov 90.

cc: SAF/AGA

KELLY A. BARRETT
Brigadier General, USAF
Director, Logistics
Plans and Policy

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

IN REPLY
REFER TO DLA-CI

6 OCT 90

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING,
DEPARTMENT OF DEFENSE

SUBJECT: Report on the Audit of Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063)

This is in response to your 29 August 90 memorandum requesting our comments pertaining to the audit of Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063). The attached positions have been approved by Ms. Helen T. McCoy, Deputy Comptroller, Defense Logistics Agency.

4 Encl

Stephen G. Sawada, Jr.
for REATHEA E. HOLMES
Chief, Internal Review Division
Office of Comptroller

TYPE OF REPORT: AUDIT DATE OF POSITION: 26 Oct 90

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Audit Report on the Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063)

FINDING: The Defense Logistics Agency's (DLA) supply centers prematurely or unnecessarily initiated purchase requests to acquire inventory and did not promptly curtail purchases in-process in response to indicated reductions in future requirements. These conditions occurred because of overstated, informal forecasts of future requirements, inadequate oversight of item manager decisions to buy or to continue to buy materiel, and economically unjustified use of lengthy procurement cycles in the calculation of requirements. As a result, of $1.2 billion of materiel being procured (contracts not yet awarded) in August 1989, the supply centers were buying excessive quantities of materiel valued at $153.6 million. Purchases of materiel valued at $116.8 million were premature, and purchases of materiel valued at $36.8 million were unnecessary. We estimated that those premature and unnecessary purchases represented about $68.8 million in avoidable costs to DoD.

DLA COMMENTS: Partially concur. In the comments which follow, we will address the conditions cited in this Finding separately.

a. The Draft report states that "Supply Centers prematurely or unnecessarily initiated purchase requests and...did not promptly curtail purchases in process..." partially because of "overstated, informal forecasts of future requirements."

The IG has correctly observed that forecasting can be an imprecise art, and that when future requirements prove to be overstated, initial judgements may need to be revisited. We concur that these instances of inaccurate statements of need by customers must be minimized. Our recommendation for corrective action addresses this point. We take exception, however, to the method by which this conclusion was reached. Specifically, the audit gives no recognition to the possibility that some informal requirements may be accurate, or that some may be rejected by item managers. The sampling and data selection process, first looked at purchase requests, identified those that appeared to be either unnecessary or premature and then tracked back to informal requirements that appeared, at the time of the audit, to have been overstated. That process overlooked any informal requirements that may have been accurate or that may have been rejected or reduced by the item managers. Since the process only looked at overstated requirements, the conclusions can apply only to that narrow universe. In order to pass judgement on informal requirements in general, the audit should have started with the requirements themselves and compared them to later demand to determine their accuracy.

As a matter of information, of the six NSNs managed by DCSC which the audit stated were prematurely or unnecessarily initiated, and for which the IG asked that decrease or cancellation action be taken, four of the six NSNs now have

backorders. On one of the items, DLA currently has 106 each on backorder in Issue Priority Group I.

b. Further, the report states that the conditions cited in the Finding occurred because of "inadequate oversight of item manager decisions to buy or to continue to buy materiel."

In 1983 standard rules for recommended buy approval levels were established by the Headquarters for use by all Supply Centers (enclosure 1); local procedures implementing these rules remain in effect. These same approval levels are levied in decisions regarding potential overprocurement. Furthermore, the review of items potentially overprocured is already monitored through the Internal Management Control process. In citing specific examples for this part of the Finding, the criticism appears to be one of judgement, not of procedure. The report states that at one Supply Center,..."all of the purchase requests had received supervisory review and approval." This statement indicates that procedures are being followed correctly. The implication is that despite these reviews, purchase request quantities were not accurate. In this case, it appears to be the judgement of the Item Manager and/or his supervisor which the report criticizes, not the adequacy of controls.

c. Lastly, the report cites "economically unjustified use of lengthy procurement cycles" as contributing to the Finding.

DoDI 4140.59 specifies that the minimum Economic Order Quantity (EOQ) should be either 3 months demand or the Administrative Lead Time (ALT) demand. It requires no cost benefit analysis to choose between the two. Both of these constraints (3 month and ALT) violate classical EOQ principles. Neither of them requires any more economic justification than the other. The audit report quotes the policy guidance as requiring economic justification for EOQ overrides, but that section of the Instruction is not referring to the ALT minimum. In that case the recommendation should be that DoD issue clarifying guidance. In fact, DGSC's use of ALT-based minimum procurement cycles is not in violation of DoD guidance.

d. The report contains an appendix which addresses sampling procedures from which extrapolated conclusions are drawn.

The report provides general information about the sampling process, but not enough information to determine how the conclusions were reached. In general, stratified random sampling is more efficient than unrestricted sampling. However, if not done properly, it can lead to skewed results. The fact that the sample of only one-tenth of one percent of the PRs accounted for 6.8 percent of the dollars suggests that the sample was skewed, deliberately or not, toward the high dollar strata. It is also unclear how the sample results were projected to the universe. More information on the statistical process must be provided before any judgements can be made, but based on the limited information provided, it appears that the process was flawed. We will not comment on monetary benefits until this issue is resolved.

MONETARY BENEFITS:
DLA COMMENTS: Since we do not concur with those portions of the Findings for which monetary benefits can be quantified, we will not address same.
ESTIMATED REALIZATION DATE:
AMOUNT REALIZED:
DATE BENEFITS REALIZED:

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

ACTION OFFICER: Nancy Rohr, DLA-OSF, x47975

DLA APPROVAL: Helen T. McCoy

TYPE OF REPORT: AUDIT DATE OF POSITION: 26 Oct 90

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Audit Report on the Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063)

RECOMMENDATION 1: We recommend that the Assistant Secretary of the Army (Installations, Logistics and Environment), the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Assistant Secretary of the Air Force (Research, Development and Logistics) advise their supply and maintenance activities to discontinue the submission of informal requests for future logistic support to the Defense Logistics Agency.

DLA COMMENTS: Nonconcur. As an alternative, we recommend that the Office of the Assistant Secretary of Defense (Production and Logistics) in conjunction with DoD Components, pursue alternative approaches to ensuring the transfer of effective and timely information relative to nondemand based requirements.

The primary emphasis of this audit should be on the accuracy of the forecasts received from the Services. It should not be assumed that simply because a Service uses a "formal" method of forecast request, such as the SPR or SSR, that the forecast is any more accurate than an "informal" message. In many cases, the informal forecasts referred to were provided in written form at formal conferences, primarily because neither formal program applied to the particular requirements being stated. Our two formal programs (SPRs/SSRs) are not always the appropriate vehicle for transmitting information. The critical path is not the vehicle, but the accuracy of the data.

The report also fails to recognize the potential impact of the proposed Recommendation on readiness. As we have noted, two-thirds of the items at one of our Centers found by the audit team to have been overprocured are now in a backorder position, including one item critical to the F-15. We cannot implement recommendations without some assessment of the impact on customer support. That assessment should have been part of this audit.

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 reflected in the DLA Comments and documentation must be maintained with your copy of the response.)
( ) Concur; however, weakness is not considered material. (Rationale must be reflected in the DLA Comments and documentation must be maintained with your copy of the response.)
( ) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

ACTION OFFICER: Nancy Rohr, DLA-OSF, x47975

DLA APPROVAL: Helen T. McCoy

TYPE OF REPORT: AUDIT DATE OF POSITION: 26 Oct 90

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Audit Report on the Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063)

RECOMMENDATION 2.a.: We recommend that the Director, Defense Logistics Agency advise the Supply Centers to discontinue acceptance of informal requests for future logistic support.

DLA COMMENTS: Nonconcur. For the reasons stated under Recommendation 1, we do not see this to be a responsible course of action. Should our alternative recommendation be approved, we will work with ASD(P&L) and our DoD counterparts to make additive requirements projections more effective.

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 reflected in the DLA Comments and documentation must be maintained with your copy of the response.)
( ) Concur; however, weakness is not considered material. (Rationale must be reflected in the DLA Comments and documentation must be maintained with your copy of the response.)
( ) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

ACTION OFFICER: Nancy Rohr, DLA-OSF, x47975

DLA APPROVAL: Helen T. McCoy

TYPE OF REPORT: AUDIT DATE OF POSITION: 26 Oct 90

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO.: Audit Report on the Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063)

RECOMMENDATION 2.b.: We recommend that the Director, Defense Logistics Agency develop specific procedures for supervisory review and approval of purchase requests and establish controls to ensure the review and approval process was accomplishing its purpose.

DLA COMMENTS: Nonconcur. As previously noted, DLA has already established the recommended procedures.

DISPOSITION:
( ) Action is ongoing; Final Estimated Completion Date:
(X) Actions 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 reflected in the DLA Comments and documentation must be maintained with your copy of the response.)
( ) Concur; however, weakness is not considered material. (Rationale must be reflected in the DLA Comments and documentation must be maintained with your copy of the response.)
( ) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

ACTION OFFICER: Nancy Rohr, DLA-OSF, x47975

DLA APPROVAL: Helen T. McCoy

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D C 20301-8000

PRODUCTION AND
LOGISTICS

November 13, 1990

(L/SD)

MEMORANDUM FOR DOD INSPECTOR GENERAL

SUBJECT: Draft Report on the Audit of Defense Logistics Agency Requirements for Currently Procured Wholesale Inventories (Project No. 9LE-0063)

This memorandum responds to your memorandum dated August 29, 1990, requesting comments on Recommendation 3 of the draft report. A detailed response is provided in the attachment. If you require any additional information, please contact Mr. Walter Atchley, x70345.

David J. Berteau
Principal Deputy

Attachment

RESPONSE TO RECOMMENDATION 3
DRAFT AUDIT REPORT PROJECT NO. 9LE-0063

RECOMMENDATION 3: We recommend that the Assistant Secretary of Defense (Production and Logistics) amend provisions of the June 27, 1989, guidance "Wholesale Secondary Item Order Quantity Policy," to prohibit the use of other than economic order quantity principles for procurement cycle computations unless a formal cost/benefit analysis is performed and shows that benefits exceed costs.

DoD Response: Nonconcur. Current DoD policy requires that economic order quantities (EOQs) be computed and procured unless "...specific analysis supports an alternative quantity as more cost-effective." In view of the Defense Management Review mandate to streamline acquisition policy, we do not agree that more restrictive language is appropriate. Your draft report does not indicate that the policy is being misinterpreted by either the Defense Logistics Agency or the Services.

The basis for Recommendation 3 appears to be a misunderstanding of the policy's intent regarding the minimum EOQ limits. As the draft report accurately states, the DoD policy is that the minimum EOQs will be limited to "... a minimum quantity equal to either the administrative lead time or one quarter's demand." The intent of this guidance was to permit DoD activities the flexibility to select either minimum without a cost/benefit analysis.

Prior to June 1989, DoD policy established only one minimum EOQ limit equal to one quarter's demand; however, that policy was revised in June 1989, based on a Logistics Management Institute study* which recommended that the minimum limit be set equal to a procurement administrative lead time. The change was recommended to preclude simultaneous processing of multiple stock replenishment actions and to accommodate workload considerations in the EOQ computation. During the staffing of the recommended proposed policy change, DLA requested that the one quarter limit be retained as an option to allow more frequent buys for inexpensive consumable items. The Department consented, and, consequently, the current policy permits the use of either minimum EOQ limit without further justification.

* Logistics Management Institute Study, "Dynamic Order Quantity - an Alternative to Economic Order Quantity (Report AL614R2), dated August 1988."

SUMMARY OF POTENTIAL MONETARY AND OTHER BENEFITS RESULTING FROM AUDIT

Recommendation Reference	Description of Benefits	Amount and/or Type of Benefit
Recommendations 1. through 4.	Economy and Efficiency Avoid unnecessary or premature purchases of wholesale inventory by four Defense Logistics Agency (DLA) supply centers.	Funds Put to Better Use A recurring cost avoidance of $68.6 million by avoiding unnecessary and premature purchases in wholesale inventory stocks relating to purchases in our sample universe. The $68.6 million consists of $36.8 million for materiel that would not be needed for more than 5 years after the maximum order period (unnecessary buys) and $31.8 million in carrying cost relating to the premature purchase of $116.8 million of materiel by the DLA stock fund. A one-time cost avoidance of $4.5 million for excessive buys by the DLA stock fund which related to purchase requests we reviewed that were outside of our sample universe and for which results are not reflected in our cost savings estimate above.

ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Assistant Secretary of Defense (Production and Logistics), Supply Management Policy, Washington, DC

Department of the Army

National Guard Bureau, Washington, DC
Headquarters, Army Materiel Command, Alexandria, VA
U.S. Army Aviation Systems Command, St. Louis, MO
U.S Army Armament, Munitions and Chemical Command, Rock Island, IL
U.S. General Materiel and Petroleum Activity, Harrisburg, PA
U.S. Property and Finance Office, Kansas City, KS
Anniston Army Depot, Anniston, AL
Letterkenny Army Depot, Chambersburg, PA
New Cumberland Army Depot, Harrisburg, PA
Tooele Army Depot, Tooele, UT
Corpus Christi Army Depot, Corpus Christi, TX
XVIII Airborne Corps, Fort Bragg, Fayetteville, NC

Department of the Navy

Headquarters, Naval Supply Systems Command, Washington, DC
Headquarters, Naval Air Systems Command, Washington, DC
Headquarters, Naval Sea Systems Command, Washington, DC
Ships Parts Control Center, Mechanicsburg, PA
Naval Aviation Supply Office, Philadelphia, PA
Naval Coastal Systems Command, Panama City, FL
Naval Air Development Command, Warminster, PA
Naval Aviation Depot, Alameda, CA
Naval Aviation Depot, Cherry Point, NC
Naval Aviation Depot, Jacksonville, FL
Naval Aviation Depot, North Island, CA
Naval Supply Center, Oakland, CA
Naval Supply Center, San Diego, CA
Naval Air Station, North Island, CA
Naval Ship Yard, Long Beach, CA
Assault Craft Unit 4, Little Creek, VA
Assault Craft Unit 5, Camp Pendleton, CA

Department of the Air Force

Headquarters, Air Force Logistics Command, Wright-Patterson Air Force Base, OH
Headquarters, Space Division, Los Angeles Air Force Station, Los Angeles, CA
Ogden Air Logistics Center, Hill Air Force Base, UT
Oklahoma City Air Logistics Center, Tinker Air Force Base, OK
San Antonio Air Logistics Center, Kelly Air Force Base, TX

ACTIVITIES VISITED OR CONTACTED (continued)

Department of the Air Force (continued)

Warner Robins Air Logistics Center, Robins Air Force Base, GA
Aerospace Guidance and Metrology Center, Newark Air Force Base, OH

Defense Logistics Agency

Headquarters, Defense Logistics Agency, Washington, DC
Defense Logistics Agency Systems Automation Center, Columbus, OH
Defense Logistics Agency Operations Research and Economic Analysis Management Support Office, Richmond, VA
Defense Fuel Supply Center, 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

Other

Ford Aerospace, San Jose, CA
Unisys, Great Neck, NY
Logistics Management Institute, Bethesda, MD

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House Committee on Armed Services
House Committee on Governmental Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations