

Audit

Report



OFFICE OF THE INSPECTOR GENERAL

**CONTRACT TERMINATIONS AT DOD WHOLESALE
INVENTORY CONTROL ACTIVITIES**

Report No. 93-146

June 30, 1993

20000420 102

Department of Defense

DTIC QUALITY INSPECTED 3

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

AQI00-07-1793

The following acronyms are used in this report.

ACO.....	Administrative Contracting Officer
ASO.....	Aviation Supply Office
CECOM.....	U.S. Army Communications- Electronics Command
DCSC.....	Defense Construction Supply Center
DESC.....	Defense Electronics Supply Center
DLA.....	Defense Logistics Agency
DPSC.....	Defense Personnel Support Center
FYDP.....	Future Year Defense Program
GAO.....	General Accounting Office
ICP.....	Inventory Control Point
MICOM.....	U.S. Army Missile Command
OSD.....	Office of the Secretary of Defense
SPCC.....	Ships Parts Control Center
TACOM.....	U.S. Army Tank-Automotive Command



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

June 30, 1993

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (PRODUCTION
AND LOGISTICS)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL
MANAGEMENT)
DIRECTOR, DEFENSE LOGISTICS AGENCY
INSPECTOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Contract Terminations at
DoD Wholesale Inventory Control Activities
(Report No. 93-146)

We are providing this final report for your information and use. This report addresses the curtailment of procurements and whether the termination decisions and the termination models used in the decision process were reasonable. Management comments on a draft of this report from the Principal Deputy Assistant Secretary of Defense (Production and Logistics); the Department of the Army, Office of the Deputy Chief of Staff for Logistics; and the Office of the Comptroller, Defense Logistics Agency were considered in preparing this final report. Comments on the draft report were not received from the Navy.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, we request final comments on the recommendations, monetary benefits, and internal control weaknesses by August 30, 1993. See the "Response Requirements per Recommendation" section at the end of the finding for the unresolved issues and the specific requirements for your comments.

If you nonconcur with the estimated monetary benefits or any part thereof, you must state the amount you nonconcur with and the basis for your nonconcurrency. Recommendations and potential monetary benefits are subject to mediation in the event of nonconcurrency or failure to comment.

The courtesies extended to the staff during the audit are appreciated. If you have any questions concerning this audit, please contact Mr. James Helfrich, Program Director,

or Mr. John Issel, Project Manager, in our Columbus Office at (614) 337-8009. The planned distribution of this report is identified in Appendix F.

A handwritten signature in dark ink, appearing to read "E. Jones", is positioned above the printed name.

Edward R. Jones
Deputy Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Audit Report No. 93-146
(Project No. 1LE-0067)

June 30, 1993

**CONTRACT TERMINATIONS AT DOD WHOLESALE INVENTORY CONTROL
ACTIVITIES**

EXECUTIVE SUMMARY

Introduction. An integral part of the DoD Inventory Reduction Plan is to reduce purchases, including quantities on contract, that exceed forecasted requirements. The Army, Navy, and Defense Logistics Agency (DLA) inventory control points (ICPs) provided records from September 1991 to March 1992, showing that 14,461 purchases in process, valued at about \$1.3 billion were for materiel that exceeded their requirements. We did not review the Air Force's ICPs because the General Accounting Office was providing similar audit coverage of the Air Force.

Objectives. The audit objectives were to evaluate whether contracts for procurement of excessive quantities of materiel were curtailed in response to reduced requirements, and whether the termination decisions and the termination models used in the decision process were reasonable.

Audit Results. The ICPs did not pursue potential terminations of contracts for significant quantities of materiel that exceeded future requirements. Of the estimated \$771.2 million of materiel on contract that we reviewed, an estimated \$224.3 million was not appropriately processed to determine or realize the potential for contract terminations. During the audit, purchases for excessive quantities of materiel valued at \$57.2 million were canceled.

Internal Controls. Internal controls were not established to ensure that appropriate and prompt actions were taken to reduce the quantity of materiel on contract that were not needed. See the Finding for details on the material weaknesses and Part I for a description of the controls assessed.

Potential Benefits of Audit. We identified potential monetary benefits of \$103.42 million for the 6-year Future Year Defense Program (FY 1994 through FY 1999). The potential benefits are based on the results of our review of statistically sampled items and the average turnover of excessive quantities of materiel due-in on contract.

Additionally, monetary benefits of \$51.0 million were achieved during the audit through the curtailment and termination of purchases of unneeded materiel (see Appendices A and D).

Summary of Recommendations. We recommended the establishment of specific criteria on determining the benefits of terminating unneeded materiel on contract and a corresponding revision in existing termination models. We also recommended the development of controls over and a system to track the timeliness of termination actions.

Management Comments. The Principal Deputy Assistant Secretary of Defense (Production and Logistics) concurred with the intent of the recommendation on specific criteria for the termination models and as an alternative, proposed to concentrate on the implementation of the new guidance on contract terminations contained in the recently issued DoD Materiel Management Regulation. The Principal Deputy also stated that the issue of appropriate contract termination models was being addressed by a mathematical models working group. The Army and DLA concurred with the recommendation on developing controls and tracking timeliness of termination actions. The Army stated that it had already completed the recommended action, while DLA offered an alternative course of action. DLA also requested additional information before commenting on the potential monetary benefits identified in the report. The Navy did not provide comments to the draft report. The complete text of managements' comments is in Part IV of the report.

Audit Response. The Assistant Secretary of Defense (Production and Logistics) is requested to provide estimated completion dates for the review by the mathematical models working group and the adoption of a uniform model or publication of guidance on specific cost factors that should be used to determine the economics of termination. We consider the Army's comments as nonresponsive because the Army's indicated action did not implement the corrective action we recommended. The actions taken and proposed by DLA tentatively meet the intent of our recommendation. We will provide additional information to DLA on the monetary benefits and request a copy of the guidance it issues on the timeliness of termination actions. The full discussion of the responsiveness of management comments is in Part II of the report. Additional comments on the unresolved issues are requested by August 30, 1993.

11

TABLE OF CONTENTS

	<u>Page</u>
TRANSMITTAL MEMORANDUM	1
EXECUTIVE SUMMARY	i
PART I - INTRODUCTION	1
Background	1
Objectives	1
Scope	1
Internal Controls	2
Related Audits and Other Reviews	3
Other Matters of Interest	3
PART II - FINDING AND RECOMMENDATIONS	5
Contract Termination Process	5
PART III - ADDITIONAL INFORMATION	19
APPENDIX A - Statistical Sampling Plan and Results	21
APPENDIX B - Summary of Purchases Reduced During Audit	27
APPENDIX C - Prior Audit Coverage	31
APPENDIX D - Summary of Potential Benefits Resulting From Audit	35
APPENDIX E - Organizations Visited or Contacted	37
APPENDIX F - Report Distribution	39
PART IV - MANAGEMENT COMMENTS	41
Assistant Secretary of Defense (Production and Logistics	43
Department of the Army	45
Defense Logistics Agency	55

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 Secondary Reports Distribution Unit, Audit Planning and Technical Support Directorate at (703) 614-6303 (DSN 224-6303).

PART I - INTRODUCTION

Background

Within the DoD supply system, there are 18 wholesale inventory control points (ICPs) that manage spare and repair parts and other consumable items. These ICPs are under the Military Departments or the Defense Logistics Agency (DLA) and procure supply items based on records of reported inventory on hand and due-in, historical use, repair rates, and approved force-level requirements. The ICPs award contracts for materiel that, because of changing conditions, may become excess to forecasted requirements. Such excesses occur because requirements change. For example, when changes occur in mission, authorizations, or quantities of weapon systems being supported, the need for on-hand and on order spare and repair parts may change for those systems. Additionally, changes in demand, attrition, repair, and other factors that justified procurement of the items can cause ICPs to have unneeded materiel on order from contractors.

In May 1990, DoD introduced an inventory reduction plan to resize its inventory of secondary items. An integral part of the plan was to reduce purchases, including quantities on contract, that exceeded forecasted requirements. To realize economic benefits and avoid unnecessary inventory buildups, changes to forecasted requirements, especially diminishing requirements, must be recognized and acted upon promptly.

Objectives

The objectives of our audit were to evaluate whether procurements were curtailed in response to reduced requirements, and whether the termination decisions and the termination models used in the decision process were reasonable.

Scope

The Army, Navy, and DLA ICPs provided us data from September 1991 to March 1992 showing 14,461 purchases in process (on-order assets) valued at about \$1.3 billion for materiel that exceeded their requirements. Air Force ICPs were not included in our review because the General Accounting Office (GAO) was providing similar audit coverage under its Assignment No. 392639. Based on the universe of 14,461 items, we selected samples of purchases (see Appendix A) at eight ICPs (three Army, two Navy, and three DLA). The multistage statistical samples consisted of 487 purchases with \$342.2 million of excessive quantities of due-in materiel.

For the sample items, we evaluated termination decisions made on the unneeded materiel after the item manager reviewed the on-order asset position and agreed that an excessive quantity of materiel was due-in. We did not review the validity of or

support for item manager requirements computations of the excessive quantities because requirements have received substantial recent audit coverage. Generally, we reviewed records, documents, and actions relating to contract termination decisions between September 1991 and October 1992. We compared the elements of the Army, Navy, and DLA (the Components) contract termination models; reviewed the input to and recommendations of the models on the economics of termination; and evaluated the actions taken by the item managers on the potential terminations. We also reviewed actions of contracting officers on potential terminations referred to them by the item managers. For selected items, we requested that contracting officers obtain data relative to potential terminations. We obtained cost data from contractors, contract payment officers, and contract administrative officials to use in our evaluation of the contract termination models and their output. Organizations visited or contacted during the audit are shown in Appendix E.

This economy and efficiency audit was made from August 1991 through October 1992 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. The Quantitative Methods Division of our Audit Planning and Technical Support Directorate provided assistance in the selection of our sample and statistical projections of the results of our review.

Internal Controls

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. We reviewed ICP policy, procedures, and controls over the contract termination process. Controls had not been established to ensure that appropriate and prompt actions were taken to reduce the quantity of materiel on contract that were not needed. Recommendations 1. and 2. in this report, if implemented, will correct the weaknesses. Monetary benefits associated with these recommendations could not be separately identified. Monetary benefits of \$51.0 million obtained during the audit, and potential monetary benefits of \$103.42 million achievable in future years relating to all recommendations are identified in Appendix D. A copy of the final report will be provided to the senior official responsible for internal controls within the Army, Navy, and DLA.

Related Audits and Other Reviews

During this audit, we issued two quick-reaction reports on contract termination decisions, one to the Army and one to DLA. In Report No. 93-008, "Quick-Reaction Report on Termination of Procurement of Tank Engines and Modules for the M-1 Tank," October 19, 1992, we reported that the Tank-Automotive Command's (TACOM) plan to terminate excessive quantities of M-1 tank engine modules at a cost of \$25.6 million was not the best alternative

available for use of unneeded modules. We recommended that the Commander, TACOM, pursue the use of excessive quantities of M-1 tank engines and modules (valued at about \$120 million) to satisfy foreign military sales requirements and that the decision to terminate procurement of the modules be reversed. We are in the process of mediating this report with the Army.

In Report No. 93-007, "Quick-Reaction Report on Termination of Procurement of Coveralls," October 19, 1992, we reported that the decisions made by the Defense Personnel Support Center (DPSC) not to terminate excessive quantities of toxicological agent protective coveralls valued at about \$2.8 million were not justified. We recommended that the Commander, DPSC, take immediate action to determine the economic feasibility of terminating the excessive quantities of coveralls and terminate the appropriate quantities. DPSC eventually terminated 2,000 pairs, on order, for a savings of about \$520,000.

During the last 5 years, the IG, DoD; the GAO; and the Army Audit Agency completed several audits related to termination of excessive quantities of materiel on order. The audits identified lack of criteria and models for making decisions about the cost-effectiveness of terminations and lack of procedures and controls to bring about timely terminations. The audits focused considerable attention on the subject and some progress has been made in curtailing purchases in response to diminishing requirements. However, the procedures implemented and models developed were not fully effective. The principal audits are summarized in Appendix C.

Other Matters of Interest

During the audit, we discussed our conclusions on excessive purchases with item managers and officials at the ICPs. As a result of our discussions, the ICPs curtailed purchases, valued at approximately \$57.2 million, at a savings of \$51 million. Appendix B identifies the specific purchases, on purchase request and on contract, of excessive quantities of materiel valued at \$42.2 million that were curtailed in response to our observations relating to the audit's primary objectives. Additionally, at the Communications-Electronics Command (CECOM), \$15 million in purchases were curtailed as a result of our recommended adjustments to requirements forecasts, by excluding Operation Desert Shield/Storm demands, to allow inventories to deflate to levels that will provide logistics support for peacetime operating forces.

This page was left out of original document

PART II - FINDING AND RECOMMENDATIONS

CONTRACT TERMINATION PROCESS

The Army, Navy, and DLA ICPs did not identify and pursue potential terminations of contracts for significant quantities of materiel that exceeded future requirements. The condition occurred primarily because the ICPs used inappropriate factors or incorrect data in models to determine whether contract termination might be economical to pursue. Additionally, ICPs did not have adequate procedures and controls to ensure the prompt processing of contract termination requests. Of \$771.2 million of unneeded materiel reported as due-in on contract, we estimated that about \$224.3 million was not appropriately reviewed and promptly processed to determine or realize the potential for contract termination. The consequence of untimely action is the acquisition of unneeded inventory.

DISCUSSION OF DETAILS

Background

DoD policy on contract terminations is contained in a December 13, 1989, memorandum, "Contract Terminations of Secondary Items No Longer Needed," issued by the Assistant Secretary of Defense (Production and Logistics). The memorandum specifies:

It is DoD policy to reduce or cancel orders (purchase requests) prior to contract award and to consider reducing or terminating contracts after award when changes in mission, consumption factors, etc., make all or a part of the materiel ordered unneeded. The ICPs should establish procedures to manage, monitor, and audit termination actions within the activity. The procedures should provide for appropriate records to ensure accountability of termination decisions and the coordination of termination actions across functions. Termination decisions should be reached and implemented in a timely manner.

The Components established policies for continuing oversight of quantities being procured by the ICPs to avoid unnecessary purchases when requirements decrease. The Components' automated requirements determination systems were programmed to generate a notice to the item manager recommending the reduction of on-order (that is, on purchase request or contract) quantities when requirements decreased and the quantities on hand and due-in exceeded the quantity authorized for stockage. Item managers were required to verify data used in the requirements computation

to ensure that the automated system's identification of candidates for procurement reduction or total termination of an excessive quantity on order was appropriate. If assets due-in after data validation are excessive, the item manager is to reduce or cancel any excessive quantity that is on a purchase request in process, and if materiel is on contract, the ICP is to determine whether termination of the excessive due-in assets would be economical.

To determine the economics of terminating a contract, each of the Components developed its own contract termination model. If application of the model indicated that termination action would be economical, item managers were required to request the contracting officers to consider terminating the excessive quantity of materiel on contract. The Components' procedures required contracting officers to obtain estimates of contractor termination costs and to make decisions on potential terminations for the excessive due-in assets referred by item managers. Section 49.101 of the Federal Acquisition Regulation requires that contracting officers terminate unneeded materiel from contracts when it is in the Government's best interest. The contract termination models were designed to assist in that determination.

Evaluations of Termination Actions

Our review of \$771.2 million of excessive materiel on order indicated that \$284.2 million or about 37 percent of the value shown as due-in beyond the requirements objective was not excessive based on item manager data validations and changes. Item managers revalidated, as not excessive, 180 of 487 sample line items. We did not review the validity of the changes made by item managers during their data validations because numerous audits have previously addressed this issue. However, of the \$487.0 million of potentially excessive quantities due-in on contract after item manager validation and changes, we estimated that \$224.3 million was not appropriately processed to determine whether the potentially excessive materiel due-in should have been terminated. The estimate is based on our evaluation of 307 sample line items that item managers agreed had unneeded materiel valued at \$175.9 million on contract. Our evaluation consisted of analyzing the elements and the data input into the Component's contract termination models to determine the reasonableness of the recommendations of the models, and assessing the actions of the inventory management activities in terminating potentially excessive materiel. Details on the statistical sampling plan and projection of results are described in Appendix A.

The ICPs appropriately processed 151 of 307 termination candidates. For the remaining 156 candidates, the ICPs did not promptly determine the economic feasibility of terminating purchases of excessive materiel valued at \$79.9 million and terminate the purchases when appropriate. Because of the elapsed

time between the automated requirements determination system identification of the excessive quantities on contract and the time of our review, and the lack of information on contract termination costs at the ICPs, we could not quantify the savings that could have been achieved, if any, by economically terminating contracts for \$58.3 million of the \$79.9 million of excessive materiel. However, when we brought excessive purchases of sample items to management's attention during our audit, the ICPs economically terminated 35 purchases valued at \$21.6 million. As discussed in Appendix D, other items not in our sample were also terminated during the audit. We attributed the ICPs' inadequate or untimely processing of the potential terminations to deficiencies in contract termination model data and a lack of procedures and controls to ensure prompt and aggressive action to terminate excessive materiel on contract.

Contract termination models. The termination models of the Army and Navy provided unsubstantiated and unwarranted decisions on whether terminating unneeded materiel might be economical. As a result, of 156 purchases reviewed, the Army ICPs and the Navy's Ships Parts Control Center (SPCC) did not appropriately process for termination at least 39 purchases for unneeded materiel valued at about \$21.3 million. The following paragraphs discuss historical and recent termination statistics, lack of specific DoD guidance, and termination factors that contributed to the inappropriate and unsubstantiated recommendations of the termination models.

Termination statistics. Historically, statistics reported by the ICPs indicated that the ICPs terminated a small portion (from 2.4 percent to 8.6 percent) of the materiel on contract that their automated systems identified as exceeding forecasted requirements. In response to prior audits, and as part of the DoD Inventory Reduction Program, the Components developed contract termination models for ICP item managers' use in increasing terminations of unneeded materiel. However, the use of contract termination models did not lead to a significant increase in terminations of unneeded materiel. For example, in October 1991, the Army ICPs' monthly status report showed that 2.3 percent of the \$446.3 million of excessive materiel on contract was terminated. In January 1992, DLA's monthly report showed that 3.9 percent of the \$494 million of excessive materiel on order (includes purchase requests for which contracts were not yet awarded) was terminated. Data were not readily available in the Navy to determine the percentage of excessive materiel terminated after the termination model was implemented in December 1990. Based on our sample items, the SPCC, which used a termination model, terminated 1 percent of the \$25.2 million of excessive materiel on order in September 1991 while the Aviation Supply Office (ASO), which did not use the model, terminated 57 percent of the \$32.8 million of excessive materiel on order. We attributed the relatively small and imperceptibly changing percentages to the inappropriate model outputs and untimely actions by the ICPs in response to the outputs.

Termination model recommendations. Overall, the models did not achieve the intent of promoting the economic termination of unneeded materiel because of the lack of specific DoD criteria on how to determine the benefits of termination. The Assistant Secretary of Defense (Production and Logistics) December 13, 1989, memorandum stated that in deciding whether or not to terminate unneeded items, consider the cost to complete the contract, including ownership costs such as interest and storage, versus termination costs plus procurement costs, if appropriate; and the potential need for the items on other contracts. With this guidance, the Components developed distinctly different models, which resulted in inappropriate and inconsistent recommendations on the benefits of terminating contracts for unneeded materiel. The DLA model was reasonable, but the Army and Navy's models were not reasonable because they were biased towards producing termination recommendations that were not economical. The primary factors that caused the models to incorrectly conclude that termination would not be an economical course of action were the use of unreasonable and unsupported estimates of contractor termination costs in the Army and Navy models, inappropriate use of a back order cost estimate in the Army model, and a lack of control over data input into the Army model.

Contractor Termination Cost. Contractors are generally entitled to payment for materials purchased, work performed, and an equitable profit on contracts awarded but later terminated by the Government. In determining the economic feasibility of terminating contracts for unneeded items, contractor termination costs are a major factor in the decision process and the economic models used by the ICPs in that process. Estimates of high termination cost can cause the economic models to indicate that termination would be uneconomical when compared to the cost of acquiring and holding unneeded materiel. ICPs did not have a consistent or reliable approach to obtaining this essential data and used unsubstantiated estimates to reach inappropriate termination decisions. Each Component had differing policies and procedures for estimating or obtaining contractor termination cost.

Army. The Army's contract termination model was designed to estimate contractor termination cost based on elapsed production lead time (that is the time elapsed from contract award to delivery) after the item manager input an estimated fixed or sunk cost factor. An Army official described the fixed or sunk cost as initial liability of the Government to pay the contractor for costs such as materiel, tooling, labor, and overhead that are incurred almost immediately after a contract award and are applicable to all units produced under the contract. Each of the three Army ICPs that we reviewed had a different policy on item manager input of the fixed cost factor.

At CECOM, item managers had no specific guidance on the fixed cost factor input and were allowed to enter any factor the item manager desired. The inputs for our sampled items ranged from 5 to 80 percent; that is, from 5 to 80 percent of the contract value was identified in the model as a fixed cost. The item managers could not provide us with an explanation or justification for the figure used. During the audit, CECOM established a policy to require initial use of a 20-percent fixed cost factor and to obtain actual cost estimates from the contractor for potential terminations exceeding \$100,000. At the Missile Command (MICOM), item managers were instructed to ignore the fixed cost factor and input an estimated contractor cost incurred based on elapsed time from contract award. At TACOM, the item managers were directed to use a 20-percent fixed cost factor. However, since TACOM recognized the unreliability of this factor, it also directed item managers to obtain estimated costs from the contractor for all potential terminations exceeding \$50,000.

Neither the Army Materiel Command nor the three Army ICPs had empirical data to substantiate their fixed cost or elapsed production lead time factors used in computing termination costs. These factors caused high termination cost estimates and resulted in the Army ICPs not pursuing potential terminations. For example, in November 1991, an item manager at MICOM did not pursue the termination of 36 excessive oscillators (national stock number [NSN] 5955-01-092-4077) valued at \$332,280. The 36 unneeded oscillators on contract DAAH0190G0015 included 12 oscillators awarded on April 5, 1991, and 24 awarded on April 30, 1991. The item manager did not pursue termination of the unneeded quantity because the Army's termination model had computed an estimated contractor termination cost of \$166,140 (50 percent of the excessive value) based on elapsed production lead time.

Based on cost data obtained from the administrative contracting officer (ACO), we estimated that the contractor's termination cost would have been about \$11,200 or 14 percent of the excessive value for 12 of the oscillators and \$16,000 or 6 percent for the remaining 24 oscillators. The termination cost was based on contractor obligations and work completed as of November 29, 1991, and a 15-percent profit margin. When we substituted the estimated termination cost data obtained from the ACO in the model, the model showed that terminating 24 oscillators, valued at \$253,656, would be economical and should have been pursued. Substitution of ACO termination cost in the model would also have indicated that the remaining 12 oscillators were economical to terminate but a problem with assumed backorder cost in the Army, discussed later, precluded a termination recommendation.

Navy. The Navy's contract termination model, used by SPCC but not ASO, was designed to estimate contractor termination cost based on elapsed production lead time. The model determined the elapsed production lead time, calculated the

percentage that the elapsed time represented in relation to the total production lead time of the open contract, computed the square root of that percentage, and applied the square root percentage to the contract cost to establish an estimated contractor termination cost. Taking the square root of the percentage of time elapsed often resulted in a significant increase in the estimate. For example, if 10 percent of the lead time had elapsed, the model would calculate a 32-percent estimated cost to terminate based on the square root of 10 percent.

The Navy did not have empirical data to substantiate the reasonableness of the square root method. Actual experience indicates that an across-the-board approach to estimating termination costs is not reasonable. To illustrate, ASO was able to terminate \$10 million in unneeded materiel on order for 11 of our sample items. The termination cost submitted by the contractors for the 11 items was \$633,593 or 6 percent of the contract price. Had ASO utilized the Navy's model, the model would have shown that none of the terminations were economical due to estimated termination costs of \$5.6 million or about 56 percent of the excessive value. ASO also terminated the purchase of four unneeded combustion castings (NSN 2840-01-162-2956), valued at \$528,615, at no cost. Based on elapsed production lead time and the square root method, the Navy's model would have shown that the termination was uneconomical based on an estimated cost to terminate of \$364,745 or 69 percent of the value of unneeded materiel.

DLA. DLA's model differed from the Army and Navy's models especially for estimated termination cost. DLA policy required that estimated termination cost be obtained from the contractor. DLA officials said that they did not attempt to estimate termination cost in their contract termination model because they recognized the unreliability of any estimate derived by elapsed production lead time formulas.

Back Order Cost Estimates. Another factor that contributed to potential termination decisions that were not economical was the inappropriate use of estimated back order costs in the Army's termination model. According to DoD Instruction 4140.39, "Procurement Cycles and Safety Levels of Supply for Secondary Items," July 17, 1970, back order cost is an implied shortage cost that could result from nonavailability of materiel to satisfy a requisition. The Instruction recognizes that the true cost of a shortage is unknown, but authorizes the use of implied costs in the calculation of safety levels within the requirements determination system.

The Army's use of a back order cost factor in determining the benefits of terminating unneeded materiel was not appropriate because the factor was already being used by the requirements determination system to derive the maximum quantity that should be on hand and on order. Use of this factor caused the Army's

model to be weighted unreasonably towards not recommending the termination of unneeded materiel. For example, the Army's model specified that termination of 12 of the 36 unneeded oscillators, discussed previously, would be uneconomical primarily because of an estimated back order cost of \$30,057. The \$30,057 back order cost equated to 38 percent of the excessive quantity value (\$78,624). Had the back order cost not been included in the cost comparison, the model would have shown the termination to be warranted because the estimated contractor termination cost of \$11,196 would have been less than the \$16,116 of holding costs that would be saved by not procuring the excessive quantity.

After we discussed some questionable calculations of back order cost with Army Materiel Command personnel, they changed the termination model to reduce the amount of back order cost calculated. However, our simulation of the Army's revised model disclosed that back order cost, though less than calculated by the previous model, still resulted in inappropriate recommendations not to terminate. For example, we ran the Army's revised model to determine the benefits of terminating 335 excessive on order circuit card assemblies (NSN 5998-01-329-8871) valued at \$136,010. The revised model indicated that it would not be economical to terminate the 335 excessive assemblies even if there were no contractor termination costs because the model calculated \$780,337 in potential back order costs.

Controls Over Model Input. Ineffective oversight of the input of data into the contract termination model also contributed to incorrect model conclusions. Item managers input inappropriate and unsubstantiated data into the models. In Audit Report No. 92-210, "Un definitized Contract Actions," June 5, 1992, the Army Audit Agency reported that item managers at CECOM used inaccurate data, such as increased stockage requirements and administrative or production lead times in the contract termination model (Appendix D). Our review showed similar occurrences at CECOM and the other Army ICPs. For example, an item manager at TACOM incorrectly input 409 units of stockage requirements from an outdated forecast into the termination model when determining whether or how many of 262 excessive axle assemblies (NSN 2520-01-117-3014) might be economically terminated. The incorrect input resulted in the model specifying that the termination of 262 unneeded assemblies valued at \$1.1 million would not be economical. Rerunning the model using the correct requirements of 305 assemblies showed that termination of 221 unneeded assemblies valued at \$937,836 would have been economical.

In another example, an item manager at MICOM did not pursue termination of 10 unneeded circuit card assemblies (NSN 1430-01-106-8719) valued at \$44,300 because the termination model specified it would be uneconomical. The item manager had input into the model excessive and unsubstantiated estimated contractor termination cost of over 252 percent of the value of the unneeded

items. The input errors occurred because the Army ICPs did not have procedures and controls to monitor and evaluate the quality of data that item managers input into the model.

Prompt and aggressive action on terminations. For 109 of the 156 items with excessive quantities of materiel on contract, the ICPs should have but did not take prompt action either to obtain data required to determine the economic benefits of terminations or to terminate the purchases when the models specified that termination would be beneficial. The IG, DoD; GAO; and other audit agencies have repeatedly reported on the need for the ICPs to take prompt and aggressive action to terminate or cut back unneeded procurements. However, our review showed that many of the same problems are continuing.

The automated requirements determination system at each ICP is the principal tool for identifying potentially excessive procurements. However, the systems incorporated no procedures and controls to ensure that prompt and effective actions were taken to curtail procurements of unneeded materiel. Prompt action is critical because contractors continue production and incur additional cost, for which the Government will be liable, until notified to stop work on the contract. DoD guidance on the prompt processing of termination actions is contained in draft DoD Regulation 4140.1-R, "Materiel Management." The regulation requires that termination cost be obtained within 21 days of a request for termination action and that termination decisions should generally be reached within 30 days of notification of unneeded materiel due-in. The DoD regulation was ultimately published on January 25, 1993.

Our sample indicated that the Components' processing of termination candidates is much slower than 21 or 30 days. Over 30 days were needed to process the 109 items, with 69 items taking over 120 days to process (see the schedule on page 14). As part of the DoD Inventory Reduction Program, management's emphasis on termination of unneeded materiel has increased; however, no ICP that we visited had developed a system to control or track the timeliness of actions taken on termination notices. For example, even at ASO, which had the most aggressive termination program, as evidenced by its termination of 57 percent of the sample reviewed, actions were not always taken in a timely manner. To illustrate, in October 1991, an item manager at ASO received a notice recommending the termination of 11 radomes (NSN 1560-01-016-2101) valued at \$1.04 million. The item manager processed a request for termination to the procurement office the same month. The procurement office returned the request on December 30, 1991, because the request did not have the required signature level. The item manager reprocessed the request on April 28, 1992. The second request was also returned because of an error on the request. Finally, after 8 months had elapsed and at our insistence, ASO economically terminated 10 of the 11 unneeded radomes at a savings of \$742,970.

DLA was the only one of the three Components we reviewed that had specific criteria relating to the timeliness of actions on termination notices. DLA criteria requires item managers to process monthly reports of excessive due-in quantities within 15 days of notification. However, DLA did not have a system to ensure that item managers adhered to this time frame. Additionally, the criteria for timely processing did not extend to the procurement personnel who were responsible for determining termination costs and implementing termination actions.

In the absence of effective procedures and controls at the ICPs, a significant number of termination decisions were not reached within DoD proposed time frames.

Untimely Processing of Sample Items

Range *	Army		Navy		DLA		Total	
	No.	Value	No.	Value	No.	Value	No.	Value
(days)								
30-60	0	\$ 0	-	\$ -	16	\$ 3,102,465	16	\$ 3,102,465
61-90	3	670,773	-	-	10	664,132	13	1,334,905
91-120	2	1,673,164	-	-	9	732,492	11	2,405,646
121-150	1	75,340	-	-	7	930,768	8	1,006,108
150-180	11	10,021,381	-	-	2	124,385	13	10,145,766
180-210	10	5,169,592	1	2,185,216	1	50,312	12	7,405,120
Over 210	19	24,178,162	10	2,116,957	7	6,350,610	36	32,645,729
Total	46	\$41,788,412	11	\$4,302,173	52	\$11,955,154	109	\$58,045,739

* Elapsed time from date of system notification of excessive on order quantity of an item for which contract termination might be appropriate to date that ICP acted to terminate or decided not to terminate based on item manager and procurement evaluation.

The lack of timely action was observed on the part of item managers and procurement personnel. Some examples follow.

- On January 3, 1992, the requirements determination system at DPSC identified an excessive quantity of size 9B flyer's boots (NSN 8430-00-819-9312) on contract valued at \$62,275. The item manager did not attempt to terminate or reallocate the excessive quantities on order to another size boot until April 28, 1992. Because of the untimely action, procurement personnel were able to reduce the excessive due-in quantity by only \$14,553, and receipt of the excessive boots increased stock levels of the item to over 37 years of supply.

- On December 14, 1991, an item manager at DPSC promptly notified the procurement organization of a need to terminate a contract for 639 unneeded instrument trays (NSN 6530-00-914-0238) valued at \$12,524. Termination was requested because receipt of

the trays would have increased stockage of the item to about 8 years of supply. The procurement organization, however, did not take timely action. The contractor was not contacted until March 1, 1992. Because of the delay, the contract could not be economically terminated as production of the trays was nearly completed.

Other. For the remaining 8 of 156 purchases with excessive materiel on order valued at \$389,495, contracting officers at the Defense Construction Supply Center (DCSC) and the Defense Electronics Supply Center (DESC) did not follow DLA's prescribed procedures for contract termination. DLA procedures require that contracting officers obtain and provide item managers the estimated contractor termination costs whenever a no cost termination cannot be accomplished. The item manager makes the final decision on whether or not to terminate the contract by comparing the estimated contractor termination cost to the termination model calculated savings. However, contracting officers did not always advise item managers of estimated costs, but decided themselves, based on personal judgement, whether a contract should be terminated. For example, an item manager requested that the contracting officer terminate the purchase of three unneeded angle valves, valued at \$97,917, because the item had no current demands and was changed to a nonstocked status. The contracting officer obtained estimated contractor termination costs of \$36,971 (38 percent of the excessive value) and decided it would be uneconomical to terminate the contract. The contracting officer's decision was inappropriate. Had the contracting officer provided the estimated cost to the item manager, the item manager could have compared the estimated termination cost to the model's calculated holding cost savings of \$113,011 and notified the contracting officer to terminate the excessive materiel.

Summary

Significant quantities of materiel on contract that exceeded forecasted requirements were not terminated. While higher level DoD managers have established policies and placed additional emphasis on terminating excessive quantities of materiel on order, systems and controls have not been established at the ICP level to accurately determine the economic benefits of termination, ensure prompt action on termination notices, and apprise management at the ICP and higher levels of the effectiveness of the program to terminate contracts in response to reduced requirements. Until adequate systems and controls are implemented at the ICPs, item managers will continue to avoid aggressive pursuit of the termination of contracts for excessive materiel. During the audit, we discussed our conclusions on excessive purchases with item managers and officials at the ICPs. As a result of our discussions, the ICPs curtailed purchases, valued at approximately \$57.2 million, at a savings of \$51 million. Monetary benefits of \$51.0 million obtained during

the audit, and projected potential monetary benefits of \$103.42 million achievable in future years relating to all recommendations are identified in Appendix D.

RECOMMENDATIONS, MANAGEMENT COMMENTS, AND AUDIT RESPONSE

1. We recommend that the Assistant Secretary of Defense (Production and Logistics) establish specific criteria for determining the benefits of terminating unneeded materiel on contract. The criteria should address estimates of contractor termination cost and the specific cost factors to be used in determining the economics of termination. Furthermore, the DoD Components should be directed to revise their contract termination models to conform with the new guidance and submit the models to the Assistant Secretary of Defense (Production and Logistics) for verification of compliance and approval.

Assistant Secretary of Defense (Production and Logistics) comments. The Principal Deputy Assistant Secretary of Defense (Production and Logistics) concurred with the intent of the recommendation and offered an alternative action. The Principal Deputy proposed to concentrate on the implementation of the new guidance on contract terminations contained in DoD 4140.1-R, "DoD Materiel Management Regulation," January 25, 1993. The Principal Deputy also stated that the issue of appropriate models for determining the cost-effectiveness of termination decisions was being addressed by a mathematical models working group with cross-Component representation.

Audit response. We consider the Principal Deputy's comments and alternative action to be generally responsive to Recommendation 1. However, the comments did not provide an estimated completion date for the mathematical models working group. Until the working group either develops an appropriate contract termination model for use by all the Components or establishes the specific cost factors to be used in determining the economics of termination, the contract termination models currently being used will continue to provide inconsistent and uneconomical recommendations on the benefits of terminating contracts for unneeded supplies. We request that the Assistant Secretary of Defense (Production and Logistics) provide estimated dates for completion of the review by the mathematical models working group and the adoption of a uniform model or publication of guidance on specific cost factors that should be used in determining whether termination is economical.

2. We recommend that the Commanding General, Army Materiel Command; the Commander, Naval Supply Systems Command; and the Director, Defense Logistics Agency, develop controls over the evaluation of termination candidates and a system to ensure the timeliness of termination actions. The controls should include specific termination action processing requirements for both item manager and procurement office personnel, and require justification whenever established time frames are not met.

Army comments. The Acting Director for Supply and Maintenance, Office of the Deputy Chief of Staff for Logistics, concurred with Recommendation 2., stating that the Army had initiated action to comply with the recommendation as specified in the July 17, 1992, message released by the Army Materiel Command. Further, the Acting Director expressed concern about the perception presented by the report on the Army's practices regarding contract terminations. He stated that the report was extremely dated since the audit reviewed records from September 1991 to March 1992 and the report was received too late (March 1993) to modify specific contractual deficiencies. Additionally, the Acting Director stated that significant changes in the management of contract terminations had been made since March 1992.

Audit response. We consider the Army's comments to Recommendation 2. to be nonresponsive. Our review of the Army Materiel Command message disclosed that while it did include specific termination action processing requirements, it did not address the establishment of controls over the evaluation of termination actions or a system to ensure the timeliness of termination actions. Regarding the concern about perception, we agree that the Army made changes in the management of contract terminations during the course of the audit. Nonetheless, additional improvements, as discussed in the audit report, were needed. The Army is correct in that the universe of contracts for materiel that exceeded requirements came from records dating back to September 1991 through March 1992; however, our review of the actions taken to terminate the unneeded materiel covered the period through October 1992. During the audit, as we identified instances where termination could be economical, we provided the information to Army officials for potential cancellation action. We request that the Army reconsider its comments to the draft report and provide comments to the final report. We also request estimated completion dates for corrective actions.

Navy comments. The Navy did not provide written comments to the draft report.

Audit response. We request comments from the Navy to the final report.

Defense Logistics Agency comments. The Chief, Internal Review Division, Office of the Comptroller, concurred with Recommendation 2., stating agreement with the need to improve timeliness of termination actions. However, she believed that the reorganization of inventory managers, contracting specialists, and technical personnel into teams would minimize the problem of untimely action identified by the audit. She further stated that strong procedural guidance addressing the problem will be issued to inventory managers and contract officers by June 30, 1993. DLA requested additional information before commenting on the potential monetary benefits.

Audit Response. The actions taken and proposed by DLA may meet the intent of the recommendation. We request DLA provide a copy of the guidance it issues to ensure timely action on termination candidates. We will provide additional information to DLA on the monetary benefits. We request comments to the final report on the monetary benefits.

RESPONSE REQUIREMENTS PER RECOMMENDATIONS

<u>Number</u>	<u>Addressee</u>	<u>Response To Final Report Should Cover:</u>				<u>Related</u> <u>Issues</u> ^{1/}
		<u>Concur/</u> <u>Nonconcur</u>	<u>Proposed</u> <u>Action</u>	<u>Completion</u> <u>Date</u>		
1.	ASD (P&L) ^{2/}			X		
2.	Army		X	X		IC, M
	Navy	X	X	X		IC, M
	DLA					M

^{1/} IC - material internal control weakness, M - monetary benefits.

^{2/} Assistant Secretary of Defense (Production and Logistics)

This page was left out of original document

PART III - ADDITIONAL INFORMATION

APPENDIX A - Statistical Sampling Plan and Results

APPENDIX B - Summary of Purchases Reduced
During Audit

APPENDIX C - Prior Audit Coverage

APPENDIX D - Summary of Potential Benefits
Resulting From Audit

APPENDIX E - Organizations Visited or Contacted

APPENDIX F - Report Distribution

This page was left out of original document

APPENDIX A. STATISTICAL SAMPLING PLAN AND RESULTS

The 13 Army, Navy, and DLA wholesale ICPs provided requirements determination systems data identifying all contracts that had assets due-in beyond the requirements objectives. Air Force ICPs were excluded from our audit because of GAO's ongoing audit coverage of contract terminations. The ICP data showed that excessive quantities of materiel, valued at \$1.3 billion, were due-in on 14,641 purchases for both consumable and repairable stock items.

We limited our review to a sampled universe of 5,152 purchases of unneeded materiel, valued at \$853 million, at the 13 ICPs (see Table A). Our analysis of the procurements indicated that the 5,152 purchases represented 35 percent of the number of purchases of unneeded materiel, but accounted for approximately 65 percent of the value of the procurements.

Using a multistage sampling plan that incorporated stratified sampling methodologies, we selected an audit sample of 487 purchases, valued at \$342.2 million, or 40 percent of the sampled universe value of \$853 million, at the 13 ICPs.

Our audit sample was designed so that we could make projections for the Army, Navy, and DLA. Because of the different information contained in the ICP data bases provided to us, we made adjustments in the data base universes, except TACOM's, and to our sampling plans. The results of our adjustments and audit results are displayed in Table B of this appendix.

Army ICPs. We randomly selected three Army ICPs for review: CECOM, MICOM, and TACOM. These ICPs reported \$356.6 million (53 percent) of the total \$669.9 million of unneeded materiel on contract at the six Army ICPs. We limited our review at CECOM and MICOM to contracts that were awarded after September 30, 1990, and valued at \$20,000 or more. At TACOM, we did not limit our review to only those contracts awarded after September 30, 1990, because only 87 contracts were provided in its data base. This resulted in an adjusted sampled universe of 799 purchases, valued at \$266.8 million, at the three sampled ICPs. From the adjusted universe, we selected 3 stratified random samples which resulted in 173 purchases, valued at \$175.4 million, for audit.

Navy ICPs. We selected both Navy ICPs, ASO and SPCC, for review. By limiting our review of potential terminations to those valued at \$20,000 and over, the sampled universe was \$146.1 million or 93 percent of the total reported value (\$157 million) of unneeded materiel on contract. From the sampled universe, we selected 2 stratified samples consisting of 120 purchases, valued at \$58 million, for review.

APPENDIX A: STATISTICAL SAMPLING PLAN AND RESULTS (cont'd)

DLA ICPs. We randomly selected for review two of the four DLA hardware centers, DCSC and DESC, and judgmentally selected DPSC. Data bases provided by the DLA ICPs showed that these three centers had \$443.5 million (90 percent) of DLA's total system-identified unneeded materiel on order. Since the DLA files contained data on unneeded materiel that related to purchase requests and contracts, we deleted all items from the universe that did not have unneeded materiel due-in on contract (\$37.9 million). We also eliminated from the universe all purchases that the DLA termination model indicated would be uneconomical to terminate solely because of administrative procurement costs without consideration of potential contractor termination costs (\$50.8 million), all purchases not referred to procurement for potential termination by item managers (\$132.2 million), and all purchases valued at less than \$5,000 (\$1.2 million). From the revised universe of \$221.4 million, we performed 3 stratified selections totaling 194 purchases of unneeded materiel valued at \$108.8 million.

Using DPSC as representative of itself only, we projected the results relating to the purchases of unneeded materiel in our sample to the 5,152 purchases for excessive quantities of materiel, valued at \$853 million, with a 90-percent confidence level. After our review of the 487 purchases, we adjusted the sampled universe value from \$853 million to \$771.2 million to recognize differences between reported standard prices and actual contract prices and changes in the quantities for the sampled items. We estimated that \$284.2 million of the sampled universe of \$771.2 million represented nonexcessive quantities of materiel on contract. Of the remaining \$487.0 million in purchases of unneeded materiel, we estimated that \$224.3 million was inappropriately processed; and a prompt determination was not made on whether the purchases could be economically terminated.

The sampled universe and statistical projections of purchases of excessive materials are summarized below for each DoD Component reviewed.

APPENDIX A. STATISTICAL SAMPLING PLAN AND RESULTS (cont'd)

Audit Universe and Projections of Audit Results
(\$ million)

<u>Component</u>	<u>Sampled Universe Value</u>	<u>Value Not Excessive</u>	<u>Statistical Projections</u>		<u>Relative[*] Sampling Precision Percentage</u>
			<u>Potentially Excessive Value</u>	<u>Processed Inappropriately</u>	
Army	\$427.6	\$129.3	\$298.3	\$162.5	+/- 23.4
Navy	146.1	24.2	121.9	29.1	+/- 18.7
DLA	<u>197.5</u>	<u>130.7</u>	<u>66.8</u>	<u>32.7</u>	+/- 19.3
Total	<u>\$771.2</u>	<u>\$284.2</u>	<u>\$487.0</u>	<u>\$224.3</u>	

* A 90-percent confidence level.

We could not estimate how much of the \$224.3 million of termination candidates could have been economically terminated and the savings that might have resulted from terminations. The estimates could not be made because of the nonavailability of contractor potential termination costs at the ICPs and the elapsed time between system identification of the excessive quantities due-in and the time of our review.

APPENDIX A. STATISTICAL SAMPLING PLAN AND RESULTS (cont'd)

Table A. Purchases of Unneeded Materiel

	<u>As of</u>	<u>Reported Purchase</u>		<u>Sample Universe</u>	
<u>ICP</u>	<u>Date</u>	<u>Number</u>	<u>Value</u> ^{1/}	<u>Number</u>	<u>Value</u> ^{1/}
<u>Army</u>					
Aviation Systems					
Command ^{2/}	November 1991	1,207	\$243.5	438	\$159.3
Armament, Munitions and					
Chemical Command	February 1992	91	27.0	91	27.0
Communications-Electronics					
Command ^{3/}	November 1991	845	225.8	373	137.6
Missile Command	January 1992	682	61.9	339	60.3
Tank-Automotive					
Command	March 1992	87	68.9	87	68.9
Troop Support					
Command ^{2/}	March 1992	<u>273</u>	<u>42.8</u>	<u>57</u>	<u>26.6</u>
Army Total		<u>3,185</u>	<u>\$669.9</u>	<u>1,385</u>	<u>\$479.7</u>
<u>Navy</u>					
Aviation Supply					
Office	September 1991	1,001	\$102.7	762	\$ 99.4
Ships Parts Control					
Center	September 1991	<u>1,474</u>	<u>54.3</u>	<u>428</u>	<u>46.7</u>
Navy Total		<u>2,475</u>	<u>\$157.0</u>	<u>\$1,190</u>	<u>\$146.1</u>
<u>DLA</u>					
Defense Construction					
Supply Center	December 1991	3,606	\$170.7	847	\$ 33.7
Defense Electronics					
Supply Center	December 1991	1,010	42.5	413	17.2
Defense General					
Supply Center	December 1991	1,339	38.5	203	4.3
Defense Industrial					
Supply Center	December 1991	1,321	12.1	72	1.5
Defense Personnel					
Supply Center	December 1991	<u>1,705</u>	<u>230.3</u>	<u>1,042</u>	<u>170.5</u>
DLA Total		<u>8,981</u>	<u>\$494.1</u>	<u>2,577</u>	<u>\$227.2</u>
Total		<u>14,641</u>	<u>\$1,321.0</u>	<u>5,152</u>	<u>\$853.0</u>

^{1/} All values are in millions. The Army and DLA values are at standard price and the Navy values are at contract price.

^{2/} The Aviation Systems Command and Troop Support Command were consolidated and renamed the Army Aviation and Troop Command during FY 1992.

^{3/} Our sample from the 373 was limited to 86 items valued at more than \$250,000 each. The 86 items accounted for \$114.6 million of the \$137.6 million in excessive purchases.

APPENDIX A. STATISTICAL SAMPLING PLAN AND RESULTS (cont'd)

Table B. Summary of Sample Universes and Purchases Reviewed by ICP

ICP	Sample Universe		Purchases Reviewed		Not Excessive		Excessive Purchases		Inappropriately Processed	
	Number	Value ^{1/}	Number	Value ^{2/}	Number	Value ^{2/}	Number	Value ^{2/}	Number	Value ^{2/}
<u>Army</u>										
Communications-Electronics Command ^{3/}	373	\$137.6	60	\$ 75.0	19	\$ 36.7	41	\$ 38.3	26	\$ 33.7
Missile Command	339	60.3	73	39.5	24	13.4	49	26.1	32	13.0
Tank-Automotive Command	87	68.9	40	60.9	17	29.3	23	31.6	10	2.4
Army Total	799	\$266.8	173	\$175.4	60	\$ 79.4	113	\$ 96.0	68	\$ 49.1
<u>Navy</u>										
Aviation Supply Office	762	\$ 99.4	53	\$ 32.8	4	\$ 2.1	49	\$ 30.7	4	\$ 4.0
Ships Parts Control Center	428	46.7	67	25.2	27	6.5	40	18.7	24	14.5
Navy Total	1,190	\$146.1	120	\$ 58.0	31	\$ 8.6	89	\$ 49.4	28	\$ 18.5
<u>DLA</u>										
Defense Construction Supply Center	847	\$ 33.7	53	\$ 7.1	10	\$ 2.3	43	\$ 4.8	24	\$ 1.1
Defense Electronics Supply Center	413	17.2	40	5.2	9	1.0	31	4.2	14	1.7
Defense Personnel Supply Center	1,042	170.5	101	96.5	70	75.0	31	21.5	22	9.5
DLA Total	2,302	\$221.4	194	\$108.8	89	\$ 78.3	105	\$ 30.5	60	\$ 12.3
Total	4,291	\$634.3	487	\$342.2	180	\$166.3	307	\$175.9	156	\$ 79.9

1/ All values are in millions and at standard price except the Navy ICPs, which are at contract price.

2/ Revised from reported standard prices to actual contract prices, in millions.

3/ Our sample from the 373 was limited to 86 items valued at more than \$250,000 each. The 86 items accounted for \$114.6 million of the \$137.6 million in excessive purchases.

This page was left out of original document

APPENDIX B. SUMMARY OF PURCHASES REDUCED DURING AUDIT

<u>ICP</u>	<u>National Stock Number</u>	<u>Contract Number</u>	<u>Purchase Action Values</u> ^{1/}			
			<u>Inappropriate Per Audit</u>	<u>Reduced During Audit</u>		
<u>Army</u>						
CECOM						
	5855003272060	DAAB0792CM208	<u>2/</u> \$ 17,809	\$ 17,809		
	6650013318502	DAAB0792CM211	<u>2/</u> 2,403,337	1,181,369		
	5820011839462	DAAB0791CD308	<u>2/</u> 10,625	10,625		
	5995000567525	DAAB0791CH329	<u>2/</u> 26,832	20,543		
	5825010616982	DAAB0791CH091	<u>2/</u> 27,900	27,900		
	5825010616986	DAAB0791CH091	<u>2/</u> 61,005	61,005		
	5805010927775	DAAB0791CH318	<u>2/</u> 48,336	48,336		
	6110011757312	DAAB0791CD340	<u>2/</u> 76,216	81,660		
	5895011486570	DAAB0782CJ114	<u>2/</u> 37,668	37,668		
	6615004535670	DAAB0790CH031	<u>2/</u> 1,071,836	1,071,836		
	5865010631601	DAAB0791CM066	<u>2/</u> 97,800	97,800		
	5805012525443	C91C4702C9CA	<u>3/</u> 1,725,420	1,725,420		
	5835011255767	C91C4659C9CA	<u>3/</u> 866,679	866,679		
	5999011519934	C91C4657C9CA	<u>3/</u> 1,173,092	1,173,092		
	5930010166930	C9919310C9CA	<u>3/</u> 44,110	44,110		
	5895010830638	DAAB0782CJ114	467,233	467,233		
	5855011494101	DAAB0791CM169	127,092	82,796		
	5840010720422	DAAB0791CM307	577,125	577,125		
	5985011250297	DAAB0791CM492	490,027	490,027		
	5855011494104	C91E0707C9C9	<u>3/</u> 2,628,864	2,628,864 <u>4/</u>		
	5820008535918	DAAB0789CU523	883,200	883,200 <u>4/</u>		
	5895008535916	DAAB0789CU523	792,000	792,000 <u>4/</u>		
	5955008978195	DAAB0789CU524	1,560,300	1,560,300 <u>4/</u>		
	5820008325591	DAAB0789CU524	<u>2/</u> 6,900	6,900 <u>4/</u>		
	5955008535915	DAAB0789CU524	3,005,100	3,005,100 <u>4/</u>		
	6625008535959	DAAB0789CU523	<u>2/</u> 213,600	213,600 <u>4/</u>		
	5820008535884	DAAB0789CU523	<u>2/</u> 84,000	84,000 <u>4/</u>		
	5820010928097	DAAB0789CU523	2,660,400	2,660,400 <u>4/</u>		
	5998001296727	DAAB0789CU524	<u>2/</u> 1,419,300	1,419,300 <u>4/</u>		
	5820008842461	DAAB0789CU523	<u>2/</u> 258,300	258,300 <u>4/</u>		
	5820008842479	DAAB0789CU524	<u>2/</u> 932,700	932,700 <u>4/</u>		
	5820008535917	DAAB0789CU523	775,000	775,000 <u>4/</u>		
	5820008586476	DAAB0789CU523	487,000	487,000 <u>4/</u>		
	5820010928024	DAAB0789CU523	1,505,900	1,505,900 <u>4/</u>		
	5820008842481	DAAB0789CU524	687,600	687,600 <u>4/</u>		
	5895004570571	DAAB0789CU523	960,400	960,400 <u>4/</u>		

See footnotes at end of appendix.

APPENDIX B. SUMMARY OF PURCHASES REDUCED DURING AUDIT
(cont'd)

<u>ICP</u>	<u>National Stock Number</u>	<u>Contract Number</u>	<u>Purchase Action Values</u> ^{1/}	
			<u>Inappropriate Per Audit</u>	<u>Reduced During Audit</u>
<u>Army (cont'd)</u>				
CECOM				
5820008842492	DAAB0789CU524		\$ 982,500	\$ 982,500 ^{4/}
5820008535970	DAAB0789CU523	<u>2/</u>	249,100	249,100 ^{4/}
5895010931925	DAAB0789CU524	<u>2/</u>	512,000	512,000 ^{4/}
5820009373813	C91C1385C9C9	<u>3/</u>	65,601	65,601
5820009733601	C91C1386C9C9	<u>3/</u>	77,392	77,392
5895009303735	C91C1387C9C9	<u>3/</u>	238,388	238,388
5895009303736	C91C1388C9C9	<u>3/</u>	154,812	154,812
5895009303740	C91C1390C9C9	<u>3/</u>	189,262	189,262
5955009303730	C91C1391C9C9	<u>3/</u>	169,319	169,319
5963009303731	C91C1392C9C9	<u>3/</u>	36,133	36,133
5963009733604	C91C1395C9C9	<u>3/</u>	47,002	47,002
5895009303729	C91C1380C9C9	<u>3/</u>	839,260	839,260
5895009733580	C92C1434C9C9	<u>3/</u>	4,007	4,007
5955008130263	C92C1436C9C9	<u>3/</u>	1,085	1,085
5963004199634	C92C1437C9C9	<u>3/</u>	7,212	7,212
5998007598159	C92C1438C9C9	<u>3/</u>	11,553	11,553
5820008326227	C91C1384C9C9	<u>3/</u>	38,455	38,455
5895009733600	C91C1394C9C9	<u>3/</u>	76,059	76,059
5998009734335	C92C1426C9C9	<u>3/</u>	24,840	24,840
5820000079540	C92C1429C9C9	<u>3/</u>	51,065	51,065
5820009733602	C92C1432C9C9	<u>3/</u>	64,963	64,963
5820009733812	C92C1441C9C9	<u>3/</u>	<u>4,571</u>	<u>4,571</u>
MICOM				
1430010905157	DAAH0191C0704		\$ 2,999,959	\$ 2,999,959
1440011677514	D11T5098D1D2	<u>3/</u>	<u>1,720,785</u>	<u>1,720,785</u>
TACOM				
2530012044421	DAAE0791C0502	<u>2/</u>	<u>\$ 3,037,322</u>	<u>\$ 3,037,322</u>
Army Total			<u>\$39,813,351</u>	<u>\$38,546,285</u>

See footnotes at end of appendix.

APPENDIX B. SUMMARY OF PURCHASES REDUCED DURING AUDIT
(cont'd)

<u>ICP</u>	<u>National Stock Number</u>	<u>Contract Number</u>	<u>Purchase Action Values</u> ^{1/} <u>Inappropriate Per</u> <u>Audit</u>	<u>Reduced</u> <u>During</u> <u>Audit</u>
<u>Navy</u>				
ASO				
	1560010162101	N0038388GM100	\$1,037,267	\$ 942,970
SPCC				
	4320012315974	N0010490CE222	\$ 42,000	\$ 42,000
	Navy Total		\$1,079,267	\$ 984,970
<u>DLA</u>				
DCSC				
	3040006158442	DLA75091M7479	\$ 18,142	\$ 18,142
	3040012775464	DLA70091C1884	139,594	139,594
	4200020000538	YPC91269000904	3/ 884,080	884,080
	4820011306609	DLA76092C1782	2/ 57,637	57,637
	4710012439596	N0038388GB401	3/ 103,831	65,818
DESC				
	5965011483396	DLA90089D0144	\$1,154,932	\$ 993,114
	7025011294175	DLA90091D0224	115,373	75,262
	5998011161588	DLA90091D0438	55,902	55,902
	5960010564167	DLA90090D0464	28,470	28,470
	5998010241144	DLA90092C1126	81,791	69,844
	5990007299624	DLA90092MA648	6,750	6,750
	5950009674616	DLA92092M0491	5,552	5,489
	5945007601309	DLA90091MC599	7,002	7,002
	6625004865980	DLA90091MQH82	21,411	21,411
	1440004671221	DLA90091MNL92	7,771	7,771

See footnotes at end of appendix.

APPENDIX B. SUMMARY OF PURCHASES REDUCED DURING AUDIT
(cont'd)

<u>ICP</u>	<u>National Stock Number</u>	<u>Contract Number</u>	<u>Purchase Action Values</u> ^{1/}	
			<u>Inappropriate Per Audit</u>	<u>Reduced During Audit</u>
<u>DLA (cont'd)</u>				
DPSC				
	8405012624538	DLA10092FCA04	\$ 93,480	\$ 93,480
	8405012624542	DLA10092FCA04	31,237	31,237
	8410012770636	DLA10092C0446 ^{2/}	8,379	8,379
	8410012770641	DLA10092C0446 ^{2/}	8,015	8,015
	8410012773619	DLA10092FEB06	102,885	18,970
	8410012773623	DLA10092FEB06	<u>274,959</u>	<u>44,928</u>
	DLA Total		3,207,193	2,641,295
	Total ICPS		<u>\$44,099,811</u>	<u>\$42,172,507</u>

^{1/} At contract price for items on contract and at standard price for items on purchase request, entry rounded to nearest dollar.

^{2/} Contracts are for unneeded materiel reviewed during the audit, for which values were not part of, or included in the sample for which audit results were statistically projected.

^{3/} Purchase requests.

^{4/} CECOM agreed to reduce the unneeded quantities against either contract number DAAB0789CU523 or DAAB7089CU524 or a combination of both. We arbitrarily assigned the contract number to each item.

APPENDIX C. PRIOR AUDIT COVERAGE

The prior audit coverages shown below (from the most recent to the oldest) specified that the Military Departments did not have an effective process for acting on potential terminations. Generally, the focus of the recommendations were on improving the process. The Military Departments generally agreed to the recommendations; however, corrective actions were not effective.

GAO Report No. NSIAD-92-262 (OSD Case No. 9109), "Need to Improve Management Transfers of On-Order Items That Can Be Terminated," August 28, 1992. The report specified that the Air Force was missing opportunities to terminate unneeded purchases because it was transferring management of items to DLA without ensuring that analyses of recommended terminations were complete. GAO also found that during the transfer the Air Force did not provide DLA with the most current information concerning the items. GAO recommended that the Secretary of the Air Force revise procedures to ensure that controls over potential terminations are maintained during the transfer and that complete and accurate requirements information is provided to DLA.

Army Audit Agency Report No. NR 92-210, "Undefinitized Contract Actions at U.S. Army Communications-Electronics Command," June 5, 1992. The report specified that CECOM could improve the contract termination process by requiring its data base advisory group, supervisors, and item managers to monitor, evaluate, document, and justify supply adjustments made to the Army's requirements determination system generated cutback studies.

GAO Report No. NSIAD-90-100 (OSD Case No. 8114), "Growth in Air Force and Navy Unrequired Aircraft Parts," March 6, 1990. One of the principal findings of this report stated that Air Force guidance tended to discourage terminations. The lack of an effective process to identify and act on potential terminations at one of the Navy's ICPs also impeded terminations. GAO recommended that the Secretaries of the Air Force and Navy review their policies on termination orders for unrequired items at all levels to ensure that they clearly support termination whenever practical.

GAO Report No. NSIAD-90-105 (OSD Case No. 8171), "Defense Logistics Agency's Excess Materiel On-Order," March 6, 1990. The report stated that for most excess on-order items, item managers were not making termination recommendations to contracting offices. Item managers were also incorrectly recomputing requirements or arbitrarily increasing requirements to avoid recommending termination. GAO found that because of lax or nonexistent supervision, questionable

APPENDIX C. PRIOR AUDIT COVERAGE (cont'd)

decisions not to recommend terminations were not reversed. Furthermore, even when items were recommended for termination, contracts were not terminated if doing so would result in expense to the U.S. Government. In these cases, item managers were making decisions to accept unneeded items without performing a required cost benefit analysis. GAO recommended that DLA require the development and implementation of a cost comparison methodology or model to assist supply center personnel in making cost-effective termination decisions, require contracting officers to determine termination cost so item managers can make cost benefit analyses, require that supervisors review item manager decisions concerning contract terminations; and continue to stress the importance of timely and accurate processing of potential excess on-order reports.

GAO Report No. NSIAD-90-68 (OSD Case No. 8219), Army Inventory: "Growth in Inventories that Exceed Requirements," March 22, 1990. The report stated that over a 5-year period ending September 30, 1988, the Army's wholesale level inventory increased from \$6.1 billion to \$12 billion. The growth resulted from inflation, price increases, and weapon system modernization. The report stated that as of September 30, 1988, inapplicable inventory represented \$2.6 billion of the Army's total inventory. The largest growth, of inapplicable inventory occurred at the Aviation Systems Command. The increases occurred primarily because inventories were retained to support end items that were being phased out of the Army's system, forecasted demands did not materialize, and the Army's requirements determination data base contained erroneous information. The report determined that more prompt and aggressive actions by item managers could have reduced the procurement of unneeded items. The Army had not developed a systematic approach to determining when unneeded procurements should be canceled, reduced, or allowed to proceed. GAO recommended that the Secretary of the Army reduce the growth in inapplicable inventory by disposing of items that are not needed to support end items being phased out of the Army's inventory and establish a systematic approach to aggressively canceling or reducing excessive procurements.

IG, DoD, Report No. 90-010, "Summary Report on the Audit of Contract Terminations," November 21, 1989. This report summarizes the results of three audits of contract terminations. The report summarized IG, DoD, audits of contract termination actions in the Army and Navy and the GAO report on Air Force contract terminations. The report concluded that the primary reason for uneconomical decisions not to terminate excess on order assets at the five Army,

APPENDIX C. PRIOR AUDIT COVERAGE (cont'd)

Navy, and Air Force ICPs was a lack of analysis and comparisons of costs relative to terminating and not terminating excess on order materiel on contracts.

IG, DoD, Report No. 89-063, "Contract Terminations at Army Inventory Control Points," March 29, 1989. This report stated that the Army did not have an effective process for making economical contract termination decisions. The quality of documentation supporting termination decisions, as well as internal controls over termination decisionmaking process needed improvement. The report stated that the Army would not be able to establish an effective and efficient termination decisionmaking process until it accurately quantified the value of excess on order materiel. To improve the termination decisionmaking process, we recommended that the Army establish procedures specifying how to make cost-effective termination decisions, how to use training programs to implement the procedures, and what performance indicators to use to assess compliance. To improve the accuracy of excess on order materiel values, we recommended that the Army establish additional controls over item managers' validations of excess on order asset positions. To reduce unnecessary cost, we recommended that the Army transfer to production contracts as Government-furnished materiel, excess on order materiel that were uneconomical to terminate. We also recommended that the Army establish policy and procedures for such transfers in the future.

IG, DoD, Report No. 88-153, "Contract Terminations at the Navy Aviation Supply Office," May 23, 1988. This report addressed various problems found in the ASO's termination decisionmaking process. We recommended establishment of additional procedures for evaluating excess on order assets, training programs for item managers and their supervisors on validation procedures, a critical element in item managers and their supervisors' performance plans covering validation of excess on order materiel, procedures for making termination decisions, procedures for using indicators to measure the effectiveness of termination decisions, and procedures requiring termination considerations on all items valued at \$20,000 or more. Furthermore, to minimize the cost effect of past decisions not to terminate and to avoid future termination costs, we recommended that the Navy use existing excess on order and on-hand materiel as Government-furnished materiel on production contracts and that the Navy establish procedures for such use on any materiel that become excess in the future.

This page was left out of original document

APPENDIX D. SUMMARY OF POTENTIAL BENEFITS RESULTING FROM AUDIT

<u>Recommendation Reference</u>	<u>Description of Benefits</u>	<u>Amount and/or Type of Benefit</u>
1. and 2.	<u>Internal Control and Economy and Efficiency</u> Promote the economic terminations of unneeded materiel on contract. Thereby, reclaiming funds for more efficient use.	<u>Funds Put to Better Use*</u> We estimated savings of about \$103.42 million for the 6-year FYDP (FY 1994 through FY 1999) could be obtained through the economic termina- tions of unneeded materiel. A one-time savings of \$51.0 million was realized by the ICPs through the reduction or cancellation or termination of unnecessary purchases we reviewed during the audit. These funds were made available for more efficient inventory invest- ments. Benefits would accrue to the Army, Navy, and DLA stock funds.

* The potential monetary benefits were based on the savings (that is, value of excessive quantities being procured less estimated contractor termination costs) achievable during the 6-year FYDP (FY 1994 through FY 1999) and the savings obtained through terminations of unneeded purchases during the audit. Details on the calculation of the monetary benefits amount is shown on the next page. There may be some additional offsetting costs for contractor terminations, but these costs were not readily determinable and cannot be quantified until the contracts being terminated are closed out.

**APPENDIX D. SUMMARY OF POTENTIAL BENEFITS RESULTING FROM
AUDIT (cont'd)**

Calculation of Monetary Benefits

During the audit, we identified and discussed with the ICPs the potential of terminating \$21.6 million of unneeded materiel at a savings of \$17.7 million (that is, less estimated cost of termination). By using only the actual terminations obtained during the audit, we estimated that implementation of the recommendations should result in economical terminations of unneeded materiel at a savings of \$103.42 million during the 6-year Future Year Defense Program (FYDP).

Our calculation is based on the average turnover of the unneeded materiel on contract during the FYDP period (that is, average elapsed time between identification of excessive quantities of materiel due-in and actual receipt divided into the 6-year FYDP) and is shown in the following schedule.

Forecasted Savings During the Future Year Defense Program
(\$ millions)

<u>Component</u>	<u>Value Terminated</u> (a)	<u>Termination Cost</u> (b)	<u>Savings</u> (c)	<u>Average Contract Turnover</u> (d)	<u>Total FYDP Savings</u> (c x d)	<u>Yearly Average</u>
Army	\$19.00	\$3.00	\$16.00	5.5	\$ 88.00	\$14.67
Navy	.94	.20	.74	7.2	5.33	.89
DLA	1.68	.64	1.04	9.7	<u>10.09</u>	<u>1.68</u>
Total					<u>\$103.42</u>	<u>\$17.24</u>

In addition to the terminations on our sample purchases, as a result of the audit, the ICPs economically terminated 49 other purchases for excessive quantities of supply valued at \$20.6 million. The terminations included purchases of unneeded materiel on contract (\$9.4 million) and on purchase requests (\$11.2 million) for which contracts had not yet been awarded at the time of our review. The savings (value of unneeded materiel less contractor termination costs) as a result of the terminations was \$18.3 million. Because the additional purchases were not related to our statistically sampled contracts, but generally reviewed as part of our audit survey, we did not project the results of the terminations to the FYDP. CECOM canceled another \$15 million in purchases as a result of our recommended adjustments to its requirements forecasts, excluding Operation Desert Shield/Storm demands.

APPENDIX E. ORGANIZATIONS VISITED OR CONTACTED

Office of the Secretary of Defense

Assistant Secretary of Defense (Production and Logistics),
Washington, DC
Defense Finance and Accounting Service, Columbus, OH

Department of the Army

Office of the Army Deputy Chief of Staff (Logistics),
Washington, DC
Army Security Affairs Command, Washington, DC
Headquarters, Army Materiel Command, Alexandria, VA
U.S. Army Armament, Munitions and Chemical Command,
Rock Island, IL
U.S. Army Aviation and Troop Support Command, St. Louis, MO
U.S. Army Communications-Electronics Command,
Fort Monmouth, NJ
U.S. Army Missile Command, Redstone Arsenal, AL
U.S. Army Tank and Automotive Command, Warren, MI
U.S. Army Audit Agency, Fort Monmouth, NJ

Department of the Navy

Office of the Deputy Chief of Naval Operations (Logistics)
Washington, DC
Office of the Deputy Chief of Staff for Installations and
Logistics, Headquarters, U.S. Marine Corps, Arlington, VA
Navy Fleet Materiel Support Office, Mechanicsburg, PA
Naval Supply Systems Command, Arlington, VA
Naval Aviation Supply Office, Philadelphia, PA
Navy Ships Parts Control Center, Mechanicsburg, PA

Department of the Air Force

Headquarters, Deputy Chief of Staff (Logistics and
Engineering), Washington, DC
Headquarters, Air Force Materiel Command, Dayton, OH
Oklahoma City Air Logistics Center,
Tinker Air Force Base, OK
Air Force Audit Agency, Dayton, OH

Defense Logistics Agency

Defense Contract Management Command, Alexandria, VA
Headquarters, Defense Logistics Agency, Alexandria, 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 Personnel Support Center, Philadelphia, PA

APPENDIX E. ORGANIZATIONS VISITED OR CONTACTED (cont'd)

Defense Contract Management Area Operations Office

Atlanta, GA
Bridgeport, CT
Cedar Rapids, IA
Chicago, IL
Cleveland, OH
Dallas, TX
Dayton, OH
Denver, CO
Detroit, MI
El Segundo, CA
Garden City, NY
New York, NY
Orlando, FL
Ottawa, Ontario, Canada
Philadelphia, PA
Phoenix, AZ
Pittsburgh, PA
Rockford, CT
San Diego, CA
San Francisco, CA
Springfield, NJ
Van Nuys, CA

Defense Plant Representative Offices

Allied Signal, Teterboro, NJ
Boeing Helicopters, Philadelphia, PA
General Electric Aerospace, Cherry Hill, NJ
General Electric Aircraft Engines, Burlington, MA
General Motors Corporation, Allison, IN
Hamilton Standard, Windsor Locks, CT
Loral, Akron, OH
McDonnell Douglas, St. Louis, MO
Pratt and Whitney, Hartford, CT
Raytheon Corporation, Burlington, MA
Rockwell International, International Business Machines,
Manassas, VA

General Accounting Office

Headquarters, General Accounting Office, Washington, DC
Oklahoma General Accounting Office, Oklahoma City, OK

APPENDIX F. REPORT DISTRIBUTION

Office of the Secretary of Defense

Assistant Secretary of Defense (Production and Logistics)
Assistant Secretary of Defense (Public Affairs)
Comptroller of the Department of Defense

Department of the Army

Secretary of the Army
Inspector General
Deputy Chief of Staff (Logistics)
Commander, Army Materiel Command
Commander, U.S. Army Communications-Electronics Command
Commander, U.S. Army Missile Command
Commander, U.S. Army Tank-Automotive Command

Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)
Comptroller of the Navy
Auditor General, Naval Audit Service
Commander, Headquarters, Naval Supply Systems Command
Commander, Aviation Supply Office
Commander, Ships Parts Control Center

Department of the Air Force

Air Force Audit Agency

Defense Agency

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, Defense Logistics Studies Information Exchange
Inspector General, Defense Intelligence Agency
Inspector General, National Security Agency
Commander, Defense Construction Supply Center
Commander, Defense Electronics Supply Center
Commander, Defense Personnel Support Center

Non-Defense Organizations

Office of Management and Budget
Office of Federal Procurement Policy
U.S. General Accounting Office
National Security and International Affairs Division,
Technical Information Center

APPENDIX F. REPORT DISTRIBUTION (cont'd)

Non-Defense Organizations (cont'd)

National Security and International Affairs Division,
Defense and National Aeronautics and Space
Administration Management Issues
National Security and International Affairs Division,
Military Operations and Capabilities Issues

**Chairman and Ranking Minority Member of Each of the
Following Congressional Committees and Subcommittees:**

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on
Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, 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

Assistant Secretary of Defense (Production and Logistics)
Department of the Army
Defense Logistics Agency

This page was left out of original document

ASSISTANT SECRETARY OF DEFENSE (PRODUCTION AND LOGISTICS)
COMMENTS



PRODUCTION AND
LOGISTICS

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301-9000

JUN 09 1993

(L/MRM)

MEMORANDUM FOR DOD INSPECTOR GENERAL

ATTN: AUDIT FOLLOWUP

THRU: CHIEF, CAIR, PI *Plw 4 June 93*

SUBJECT: Draft Audit Report on Contract Terminations at DoD
Wholesale Inventory Control Activities (Project No.
1LE-0067)

This responds to your memorandum of March 31, 1993, on the subject Draft Report. There is one recommendation for this office:

"1. We recommend that the Assistant Secretary of Defense (Production and Logistics) establish specific criteria for determining the benefits of terminating unneeded materiel on contract. The criteria should address estimates of contractor termination cost and the specific cost factors to be used in determining the economics of termination. Furthermore, the DoD Components should be directed to revise their contract termination models to conform with the new guidance and submit the models to the Assistant Secretary of Defense (Production and Logistics) for verification of compliance and approval."

This office concurs with the intent of this recommendation, which is to increase the validity of termination decisions. An alternative method of achieving this goal appears appropriate in view of two key considerations. First, the DoD Materiel Management Regulation (issued in January 1993) provides detailed guidance to the DoD Components on the contract termination process. Second, the issue of appropriate models for determining the cost-effectiveness of termination decisions is being addressed by a mathematical models working group with cross-Component representation.

As an alternative to the recommendation in the Draft Report, this office proposes to concentrate on implementation of the new guidance on contract terminations. The DoD Components will be reminded of the importance of this guidance, which is implemented in the DoD Directives System for the first time through inclusion in the

ASSISTANT SECRETARY OF DEFENSE (PRODUCTION AND LOGISTICS)
COMMENTS (cont'd)

2

DoD Materiel Management Regulation. The establishment of additional initiatives in the contract terminations area should, in our view, be deferred until the new guidance can be completely implemented and the mathematical models working group can complete its work. If further information is required, Tom Carter of my staff may be reached at (703) 697-5216.


David J. Berteau

Principal Deputy Assistant Secretary of
Defense (Production and Logistics)

DEPARTMENT OF THE ARMY COMMENTS



DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS
WASHINGTON DC 20310-0500



DALO-SMP 92500256

2 JUN 1993

MEMORANDUM THRU

~~DEPUTY CHIEF OF STAFF FOR LOGISTICS~~

ECM
75 JUN 93

~~DIRECTOR OF THE ARMY STAFF~~ MICHAEL L. RAMIREZ LTC GS ADAS

ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT)

FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE (AUDITING)

File A - Origin
DEPUTY ASSISTANT SECRETARY OF THE ARMY
CASA FILED

SUBJECT: Draft Audit Report on Contract Terminations at DOD Wholesale Inventory Control Activities (Project No. 1LE-0067)--
INFORMATION MEMORANDUM

1. In response to HQDA IG request of 5 Apr 93 (Tab A) which responds to your memorandum of 31 Mar 93 (Enclosure to Tab A), the Army has reviewed the subject draft audit. Comments are provided below for inclusion in the final report.
2. Overall, the Army is concerned about the perception presented by the report on the Army's practices regarding contract termination. Very simply put, the report is extremely dated. The audit reviewed records from Sep 91 to Mar 92; however, the results were not released until Mar 93. It is too late to modify the specific contractual deficiencies identified in the report with so much time having passed.
3. The DODIG summary stated that "systems and controls have not been established at the ICP level to accurately determine the economic benefits of termination, ensure prompt action on termination notices, and apprise management at the ICP and higher levels of the effectiveness of the program to terminate contracts in response to reduced requirements." The Army has made significant changes in the management of contract terminations during the past year. As of 17 July 1992, AMC took action to correct all of these identified deficiencies. The message which initiated the corrective actions is provided at Tab B.

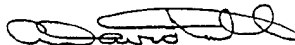
DEPARTMENT OF THE ARMY COMMENTS (cont'd)

DALO-SMP

SUBJECT: Draft Audit Report on Contract Terminations at DOD
Wholesale Inventory Control Activities (Project No. 1LE-0067)--
INFORMATION MEMORANDUM

4. Responses to the specific DODIG recommendations are provided
at Tab C.

3 Encls



A. DAVID MILLS
Acting Director for Supply
and Maintenance

CF:
CDR AMC, ATTN: AMCIR-A/AMCLG-M
SAIG-PA
DALO-RMM
VCSA

AMC (AMCIR-A), Concur, Bob Kurzar/274-9025 (memorandum)
AMC (AMCLG-M), Concur, COL Bryant/274-9802 (datafax)
SAILE (LOG), Concur, Bill Croom/697-5727 (conference)

Ms. Finnicum/52209

DEPARTMENT OF THE ARMY COMMENTS (cont'd)

UNCLASSIFIED

01 06 171840Z JUL 92 RR UUUU

CGAMC ALEXANDRIA VA //AMCLG//
CGAMCCOM ROCK ISL IL //AMSMC-CG//
CGAVSCOM ST LOUIS MO //AMSAV-CG//
CGCECOM FT MONMOUTH NJ //AMSEL-CG//
CGMICOM REDSTONE ARS AL //AMSMI-CG//
CGTACOM WARREN MI //AMSTA-CG//
CGTRCSCOM ST LOUIS MO //AMSTR-CG//

UNCLAS

SGD MG PIGATY

SUBJ: SUPPLY MANAGEMENT ARMY (SMA) CONTRACT CUTBACK/TERMINATIONS

1. THE CONGRESS AND THE GENERAL ACCOUNTING OFFICE (GAO) REMAIN HIGHLY CRITICAL OF THE ARMY'S LACK OF PROGRESS IN IMPLEMENTING INVENTORY REDUCTION PLAN (IRP) INITIATIVES. MOST SPECIFICALLY THESE CRITICISMS REST IN NOT RECOVERING FIELD EXCESSES TO OFFSET NEW PROCUREMENTS AND/OR TO AGGRESSIVELY IMPLEMENT REDUCTIONS OR TERMINATIONS OF ON-GOING CONTRACTS FUNDED WITHIN THE SMA (FORMERLY ARMY STOCK FUND) PORTION OF THE DEFENSE BUSINESS OPERATING FUND (DBOF).
2. TO THAT END CURRENT CONGRESSIONAL LANGUAGE FOR THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FY93 PROPOSES TO REDUCE THE ARMY'S O&MA

92 JUL 17 PM 2:45

MR. MILLS, ADCS, AMCLG, 48007

LEO J. PIGATY, MG, USA, SPEC ASSIST, DCGMR/49699

Leo Pigaty

UNCLASSIFIED

K:\DATA\GAOMSG.DBF-- ID#

DEPARTMENT OF THE ARMY COMMENTS (cont'd)

UNCLASSIFIED

02. 06

JUL 92 RR

UUUU

"BUYING POWER" FUNDING BY \$509M IN ORDER TO ENSURE THAT THE ARMY BUYS "ONLY ITEMS NEEDED TO MEET CURRENT NEEDS." BARRING AN UNLIKELY RESTORATION OF THIS REDUCTION THE RESULT COULD BE UP TO A SEVEN (7) PERCENT REDUCTION IN OUR GROSS FY93 SALES.

3. RIGHT OR WRONG THE DA AND OSD BENCHMARK DEFINES OUR "CURRENT NEEDS" AS OUR CURRENT REQUIREMENTS OBJECTIVE (RO). WE NOW HAVE OVER \$740M IN SMA FUNDED PROCUREMENTS ON CONTRACT AND DUE-IN BEYOND THAT LEVEL. THIS IS OVER 19 PERCENT OF OUR TOTAL SMA CONTRACT DUE-IN LEVEL. WHERE "CURRENT NEEDS" ARE DEFINED AS OUR RO PLUS THOSE CONTRACT OBLIGATIONS THAT ARE SUPPORTED BY SMALLER ARMY REQUIREMENTS FORECASTED THROUGH SEP 93, OUR OBLIGATIONS BEYOND THAT LEVEL STILL EXCEED \$399M OR 11 PERCENT OF OUR TOTAL SMA CONTRACTS.

4. CLEARLY CONTRACT CUTBACKS AND TERMINATIONS ARE NOT FREE OR QUICKLY EXECUTED. HOWEVER, THE EXTENT OF OUR OBLIGATED PROCUREMENTS WHICH EXCEED OUR RO (THE BAROMETER USED BY BOTH DA AND OSD) IS SUCH THAT NEITHER DA OR OSD WILL SUPPORT OUR FULL SMA UNIT COST GOAL (UCG) NEEDS FOR FY 92 OR FY93. THEY WILL ALSO CONTINUE THE INCREMENTAL RELEASE OF OUR UCG AUTHORITY THROUGH SEP 93.

5. WE NEED TO OVERCOME THIS OBSTACLE AND, MORE IMPORTANTLY, ACT TO ASSURE THAT THE O&MA FUNDING LEVELS FOR THE FIELD UNITS ARE NOT

re

UNCLASSIFIED

K:\DATA\GAOMSG.DBF-- ID# 1

DEPARTMENT OF THE ARMY COMMENTS (cont'd)

UNCLASSIFIED

03 06

JUL 92 RR

UUUU

FURTHER REDUCED. ACCORDINGLY, WE NEED YOUR MAXIMUM EFFORT AS WELL AS THAT OF YOUR SMA PRODUCT LINE MANAGERS AND ACQUISITION CENTERS TO CUTBACK OR TERMINATE OBLIGATED SMA PROCUREMENT THAT EXCEED YOUR RO NEEDS.

6. WE NEED TO ACT TO ASSURE THAT ALL SMA OBLIGATIONS BEYOND THE RO ARE REVIEWED AND THAT DECISIONS TO CUTBACK OR TERMINATE ARE DOCUMENTED VIA THE AMC ECONOMIC CONTRACT CUTBACK MODEL (ECCM) NLT 30 SEP 92. THIS PROCESS THEN NEEDS TO CONTINUE FOR EACH MONTHLY SUPPLY CONTROL STUDY (SCS) CYCLE WITH ECCM DECISIONS AND DOCUMENTATION ACCOMPLISHED WITHIN 30 WORKING DAYS OF THE SCS CYCLE CUT-OFF.

7. TO ASSURE THAT THE ECCM IS EMPLOYED IN A MANNER THAT WILL MAXIMIZE OUR CUTBACK/TERMINATION ACTIONS THE FOLLOWING PROCESS IS TO BE APPLIED:

A. CUTBACKS/TERMINATIONS OF COMMITMENTS THAT ARE NOT YET OBLIGATED ARE TO BE INITIATED VIA COPS FLASHER IMMEDIATELY UPON VALIDATION OF THE SCS CUTBACK/TERMINATE RECOMMENDATION. ECCM DOCUMENTATION IS NOT REQUIRED AND CUTBACKS/TERMINATIONS ARE TO BE EFFECTED UP TO AND INCLUDING JUST PRIOR TO POINT OF AWARD. BIDDER CLAIMS TO RECOVER BID PREPARATION COSTS FOR REVISED SOLICITATIONS OR TERMINATED PROCUREMENT ACTION ARE TO BE DOCUMENTED BY THE ACQUISITION CENTER AND ABSORBED

 UNCLASSIFIED

K:\DATA\GAOMSG.DBF-- ID# 1

DEPARTMENT OF THE ARMY COMMENTS (cont'd)

UNCLASSIFIED

04 06 JUL 92 RR UUUU

WITHIN YOUR OVERALL SMA UCG LEVELS.

B. WITHIN 21 DAYS OF THE SCS CUTBACK/TERMINATE RECOMMENDATION FOR OBLIGATED SMA PROCUREMENTS, OBTAIN CONTRACT CUTBACK OR TERMINATION COSTS FROM THE CONTRACTOR AS AUTHORIZED VIA FAR 49.101 (2) (A). LOAD COST, IF ANY, AS A PERCENT OF THE CONTRACT VALUE INTO YOUR ECCM SIMULATION. INITIATE COPS FLASHER TO EFFECT CUTBACK OR TERMINATION WHERE marginally cost effective or better within 30 WORKING DAYS OF SCS CYCLE CUT OFF.

C. WHERE AUDITABLE CUTBACK/TERMINATION COSTS CANNOT BE OBTAINED FROM THE CONTRACTOR WITHIN 21 DAYS LOAD THE FOLLOWING COST TO CUTBACK/TERMINATE DEFAULT VALUES INTO YOUR ECCM AND PROCEED WITH COPS FLASHER PROCESS AS REQUIRED ABOVE.

(1) FIRST ARTICLE TEST (FAT) REQUIRED BUT NOT YET PASSED, ENTER 5 PERCENT COST DEFAULT VALUE.

(2) WHERE CONTRACTOR IS NOT MEETING MONTHLY DELIVERY SCHEDULE OR OTHER BASES FOR SHOW CAUSE OR CURE NOTICE EXISTS, ENTER 10 PERCENT COST DEFAULT VALUE AND ALSO MANUALLY ADJUST PRODUCTION LEADTIME IN ECCM SIMULATION TO RECOGNIZE THE DYNAMICS OF ACTUAL DELIVERY PROBABILITY.

(3) WHERE CONTRACT SPECIFICALLY AUTHORIZES THE EARLY PROCUREMENT

R

UNCLASSIFIED

K:\DATA\GAOMSG.DBF-- ID#

DEPARTMENT OF THE ARMY COMMENTS (cont'd)

UNCLASSIFIED

05 06 JUL 92 RR UUUU

OF LONG LEADTIME PRODUCTION PARTS ENTER 20 PERCENT. USE INDIVIDUAL DOCUMENTS DEFAULT VALUE ESTIMATE IF FULLY DOCUMENTED BY YOUR ACQUISITION CENTER AND PRODUCTION PARTS HAVE NO SIGNIFICANT UTILITY AS SEPARATELY AUTHORIZED DBOF ITEMS OF SUPPLY FOR AMC ON DLA.

(4) ALL OTHERS ENTER 10 PERCENT COST DEFAULT VALUE.

(5) IN NO INSTANCE WILL DEFAULT VALUES IN EXCESS OF THOSE CITED ABOVE BE APPLIED FOR ECCM SIMULATIONS. REQUESTS FOR WAIVERS TO THIS RESTRICTION ALONG WITH SUPPORTING ANALYSIS, DATA AND RATIONALE SHOULD BE FORWARDED TO THE HQ AMC ODCSLOG, ATTN: AMCLG-MR, FOR APPROVAL.

8. REST ASSURED THAT WE HAVE HEARD THE ARGUMENTS FAVORING A VERY SMA CONTRACT CUTBACK/CONSERVATIVE APPROACH TO, IF NOT INACTION ON, TERMINATION RECOMMENDATIONS. IT IS TRUE THAT IN MANY CASES FUNDS WILL NOT BE RECOVERED VIA DEOBLIGATIONS WITHIN SUFFICIENT TIME TO OFFSET A CURRENT YEAR UCG FUNDING SHORTFALL. RIGHT NOW ABOUT 45 PERCENT OF OUR CUTBACK/TERMINATIONS WOULD CALL FOR REBUY PRIOR TO 30 SEP 93 AND 80 PERCENT BY 30 SEP 94 DEPENDING ON THE LEVEL OF CONFIDENCE WE HAVE IN A HIGHLY FLUID REQUIREMENTS FORECAST.

9. HOWEVER, THE HARD FACTS ARE THAT OUR FIELD UNITS HAVE LOST \$509M IN FY93, ABOUT 14 PERCENT OF OUR UCG WILL REMAIN UNRESOURCED THROUGH SEP 93, AND WHAT UCG WE DO RECEIVE WILL CONTINUE TO BE INCREMENTALLY

12

UNCLASSIFIED

K:\DATA\GAOMSG.DBF-- 10# 1

DEPARTMENT OF THE ARMY COMMENTS (cont'd)

UNCLASSIFIED

06 06 JUL 92 RR UUUU

RELEASED UNTIL SUCH TIME AS WE DEMONSTRATE AN APPROACH TO OUR
CUTBACK/TERMINATION CHALLENGE THAT MATCHES IF NOT EXCEEDS OUR
AGGRESSIVENESS IN OBLIGATING SMA DOLLARS.

10. WE NEED YOUR ALL OUT EFFORT THROUGH THE BALANCE OF THIS FISCAL
YEAR AND INTO FY93 TO DEMONSTRATE THIS AGGRESSIVENESS CONSISTENT WITH
A CONTINUING TREND IN IRP RO REDUCTIONS. YOUR SPECIFIC
SUGGESTIONS/RECOMMENDATIONS ON HOW TO BETTER MEET THIS CHALLENGE WILL
CERTAINLY BE MOST APPRECIATED.

11. POC HQ AMC IS MS T. TUCK, DSN 284-9808, (ALT: MR P. ELLIS, DSA
284-9805).

UNCLASSIFIED

K:\DATA\GAOMSS.DBF-- ID# *

DEPARTMENT OF THE ARMY COMMENTS (cont'd)

ARMY REPLY
DOD AUDIT OF CONTRACT TERMINATIONS AT
DOD WHOLESALE INVENTORY CONTROL ACTIVITIES
PROJECT NO. 1LE-0067

RECOMMENDATION 1. We recommend that the Assistant Secretary of Defense (Production and Logistics) establish specific criteria for determining the benefits of terminating unneeded materiel on contract. The criteria should address estimates of contractor termination cost and the specific cost factors to be used in determining the economics of termination. Furthermore, the DOD Components should be directed to revise their contract termination to conform with the new guidance and submit the models to the Assistant Secretary of Defense (Production and Logistics) for verification of compliance and approval.

ARMY RESPONSE. Concur. If ASD(P&L) issues criteria for determining the benefits of terminating unneeded materiel on contract, the Army will implement that guidance in the Economic Cutback Model. The Army has provided detailed information to ASD(P&L) on our Economic Cutback Model.

RECOMMENDATION 2. We recommend that the Commander, Army Materiel Command; the Commander, Naval Supply Systems Command; and the Director, Defense Logistics Agency, develop controls over the evaluation of termination candidates and a system to ensure the timeliness of termination actions. The controls should include specific termination action processing requirements for both item manager and procurement office personnel, and require justification whenever established time frames are not met.

ARMY RESPONSE. Concur. The Army has initiated action to comply with the DODIG recommendation. The message was released by AMC on 17 Jul 92. It is provided at Tab B.

This page was left out of original document

DEFENSE LOGISTICS AGENCY COMMENTS



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



IN REPLY
REFER TO DLA-CI

01 JUN 1993

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING,
DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on Contract Terminations at DoD Wholesale
Inventory Control Activities (Project No. 1LE-0067)

This is in response to your 31 March 1993 request.

2 Encl

Jacqueline G. Bryant
JACQUELINE G. BRYANT
Chief, Internal Review Division
Office of Comptroller

DEFENSE LOGISTICS AGENCY COMMENTS (cont'd)

TYPE OF REPORT: AUDIT

DATE OF POSITION: 28 May 93

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO: Draft Report on Contract Terminations at DoD
Wholesale Inventory Control Activities (Project No.
1LE-0067)

FINDING: The Army, Navy, and DLA ICPs did not identify and pursue potential terminations of contracts for significant quantities of materiel that exceeded future requirements. This occurred primarily because the ICPs used inappropriate factors or incorrect data in models to determine whether contract termination might be economical to pursue. Additionally, ICPs did not have adequate procedures and controls to ensure the prompt processing of contract termination requests. Of \$771.2 million of unneeded materiel reported as due-in on contract, we estimated that about \$224.3 million was not appropriately reviewed and processed promptly to determine or realize the potential for contract termination. The consequence of untimely action is the acquisition of unneeded inventory. We identified potential monetary benefits of \$103.42 million for the 6-year Future Year Defense Program (FY 1994 through FY 1999).

DLA COMMENTS: Partially concur. As cited in the audit, DLA's termination model uses appropriate factors and data to determine the economics of termination. We do agree that procedural enhancements are advisable to ensure prompt processing. We would like to correct one statement on the audit with regard to Flyers' Boats (NSN 8430-00-819-9312).

The draft audit states that an excessive quantity on contract was identified 3 Jan 92 and that corrective action was not taken until 28 Apr 92. In fact, DLA's contracting officer contacted the involved contractor in writing on 4 Feb 92 regarding required contract adjustments. Copies of applicable correspondence are available through the Defense Personnel Support Center.

INTERNAL MANAGEMENT CONTROL WEAKNESSES:

- () 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.)
- (X) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

MONETARY BENEFITS:

DLA COMMENTS: DLA would require more information in order to concur with the monetary benefits included in this draft. One-time savings are not explained. Additionally, the derivation of FYDP 6 - year savings through "turnover" is not clear.

ACTION OFFICER: Nancy Rohr/MMSB
Amy Sajda/AQP

PSE REVIEW/APPROVAL: J.J. Grady, Acting Executive Director, Supply
Management, MMS

DLA APPROVAL: Helen T. McCoy, Deputy Comptroller

DEFENSE LOGISTICS AGENCY COMMENTS (cont'd)

TYPE OF REPORT: AUDIT

DATE OF POSITION: 28 May 93

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO: Draft Report on Contract Terminations at DoD
Wholesale Inventory Control Activities (Project No.
1LE-0067)

RECOMMENDATION 2: We recommend that the Director, Defense Logistics Agency, develop controls over the evaluation of termination candidates and a system to ensure the timeliness of termination actions. The controls should include specific termination action processing requirements for both item manager and procurement office personnel, and require justification whenever established time frames are not met.

DLA COMMENTS: DLA concurs with the need to improve timeliness of some termination actions. However, since the time of this audit, DLA has started to reorganize the ICPs. The ICPs have begun to consolidate their inventory managers, contracting specialists and technical personnel into teams. These teams will be responsible for a range of items usually associated with a weapon system or commodity grouping. Since teams are collocated and accountable to a single team leader with a single mission, the problems identified in the audit will be minimized. Instead of having to bring the problem to the attention of several directorates, the team will work out the priorities and expedite the termination as required. The problems of miscommunication and termination decisions being pursued will be worked by the team members. We will issue strong procedural guidance which will enhance this process.

DISPOSITION:

(X) Action is ongoing. Estimated Completion Date:
Issuance of guidance to inventory managers
and contract officers 30 Jun 93

() Action is considered complete.

INTERNAL MANAGEMENT CONTROL WEAKNESSES:

- () 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.)
- (X) Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

MONETARY BENEFITS:

DLA COMMENTS: See Finding Comments

ACTION OFFICER: Nancy Rohr/MMSB

Amy Sajda/AQP

PSE REVIEW/APPROVAL: James J. Grady, Acting Executive Director, Supply
Management, MMS

DLA APPROVAL: Helen T. McCoy, Deputy Comptroller

AUDIT TEAM MEMBERS

Shelton R. Young	Director, Logistics Support
James Helfrich	Program Director
John Issel	Project Manager
Curt Malthouse	Team Leader
Timothy Soltis	Team Leader
Ronald Meade	Auditor
Brian Henry	Auditor
Eric Thacker	Auditor
Steven Strosnider	Auditor
Melissa Sikora	Auditor

INTERNET DOCUMENT INFORMATION FORM

A . Report Title: Contract Terminations at DOD Wholesale Inventory Control Activities

B. DATE Report Downloaded From the Internet: 04/19/99

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): OAIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-2884

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA, Initials: __VM__ Preparation Date 04/19/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.