

**Audit**



**Report**

OFFICE OF THE INSPECTOR GENERAL

VALIDATION OF TECHNICAL DATA RIGHTS  
RESTRICTIONS FOR SPARE PARTS AT  
MILITARY DEPARTMENT PROGRAM OFFICES  
AND INVENTORY CONTROL POINTS

Report No. 95-312

September 27, 1995

**Department of Defense**

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### **Acronyms**

AFB  
DFARS

Air Force Base  
Defense Federal Acquisition Regulation Supplement



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September 27, 1995

MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY (FINANCIAL  
MANAGEMENT AND COMPTROLLER)  
ASSISTANT SECRETARY OF THE AIR FORCE  
(FINANCIAL MANAGEMENT AND COMPTROLLER)  
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Validation of Technical Data Rights Restrictions for Spare  
Parts at Military Department Program Offices and Inventory Control  
Points (Report No. 95-312)

We are providing this audit report for review and comment. This report is the  
second of two reports on technical data with limited rights assertions. The first report,  
Report No. 94-106, "Validation of Technical Data Rights Restrictions for Spare Parts  
at the Defense Logistics Agency."

A draft report was issued to management on July 18, 1995. No comments were  
received. All addressees are required to provide comments on this audit report that  
conform to the requirements of DoD Directive 7650.3. We request that management  
provide the comments by November 27, 1995.

We appreciate the courtesies extended to the audit staff. Questions on  
the report should be directed to Mr. Wayne K. Million, Audit Program Director, at  
(703) 604-9312 (DSN 664-9312) or Mr. Michael Perkins, Audit Project Manager, at  
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## Office of the Inspector General, DoD

Report No. 95-312  
Project No. 3CD-0022.01

September 27, 1995

### Validation of Technical Data Rights Restrictions for Spare Parts at Military Department Program Offices and Inventory Control Points

#### Executive Summary

**Introduction.** This report is the second of two reports on technical data with limited rights assertions. A complete technical data package with unlimited rights is needed to fully compete spare parts procurements. A contractor's limited rights assertion on technical data prevents the Government from using the technical data to competitively procure spare parts.

**Audit Objectives.** The primary audit objective was to evaluate the adequacy of reviews by DoD contracting activities of technical data packages with limited rights assertions. We also evaluated management controls related to the review and challenge of limited rights assertions. This report discusses the results of the audit at the Military Department program offices and inventory control points. The results of the audit at the Defense Logistics Agency, which had the same primary audit objective, were reported in Report No. 94-106, "Validation of Technical Data Rights Restrictions for Spare Parts at the Defense Logistics Agency."

**Audit Results.** The program offices and inventory control points for the Army AH-64 Apache helicopter, Navy F/A-18 Hornet aircraft, and Air Force F-15 Eagle aircraft did not adequately validate limited rights assertions on technical data for 132 spare parts purchased on contracts totaling \$66.5 million. Further, the program offices did not buy complete technical data packages. As a result, spare parts were purchased without full and open competition, without challenges to limited rights assertions, and without breakout screening. If technical data rights are obtained, competitive contracting can reduce costs by about 25 percent over sole-source contracting.

The management control program needs improvement because we identified material weaknesses related to not procuring complete technical data packages, not validating limited rights assertions on technical data packages, and not screening spare parts with limited rights assertions for competitive procurement. See the discussion in Part I and Appendix A in Part II for details on the review of management controls.

Improved management control procedures should permit increased competitive contracting, which in turn should result in reduced contract prices. The Government can potentially avoid about \$4.4 million in future contract costs on forecasted buys of \$17.5 million for spare parts for the three weapon systems we reviewed. We are not claiming a specific amount of monetary benefits, however, because of the uncertainty associated both with obtaining unlimited rights and with other elements needed for competitive procurements of individual spare parts. Appendix D summarizes the potential benefits resulting from the audit.

**Summary of Recommendations.** We recommend that program executive officers require their subordinate program offices to identify, evaluate, and challenge limited rights assertions by contractors during the early weapon systems acquisition process. We recommend that the inventory control points perform full breakout screening reviews on spare parts meeting the dollar criteria for breakout review and issue informal requests, prechallenges, and formal challenges on limited data rights assertions. We recommend that the Military Department program executive officers direct their subordinate program offices to perform cost benefit analyses to determine the benefits of buying different levels of technical data and also to include inventory control points during the early weapon acquisition process. We also recommend the program executive officers and inventory control points establish performance goals to measure the use and benefits of challenging data rights restrictions.

**Management Comments.** The Army, the Navy, and the Air Force did not respond to a draft of this report in time for comments to be incorporated into the final report. We request that the Army, the Navy, and the Air Force comment on this final report by November 27, 1995.

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## **Part I - Audit Results**

### Audit Background

**Technical Data.** Technical data are recorded information, regardless of the form or method of recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and management information. The data can be used to define an engineering or manufacturing process or to design, procure, produce, support, maintain, operate, repair, or overhaul material. Examples of technical data include research and engineering data; engineering drawings and associated lists, specifications, standards, process sheets, manuals, and catalog-item identifications; and computer software documentation.

**Complete Technical Data Package.** A complete technical data package includes all the technical data necessary for an independent contractor to build the spare part. A complete technical data package would include level three engineering drawings.

**Levels of Engineering Drawings.** Three levels of engineering drawings evolve during the acquisition phase of a weapon system.

- Level 1 drawings are preliminary drawings developed during the conceptual phase of the weapon system.
- Level 2 drawings are prototype drawings developed during the demonstration and validation phase of the weapon system.
- Level 3 drawings are full production drawings developed before or during the production phase of the weapon system.

**Technical Data Rights.** All contracts that require technical data to be produced, furnished, acquired, or specifically used in meeting contract performance requirements must contain terms that delineate the respective rights and obligations of the Government and the contractor regarding the use, duplication, and disclosure of technical data. Three basic types of technical data rights follow.

- Unlimited rights allow the Government to use, duplicate, release, or disclose technical data in any manner and for any purpose and to permit others to do so.
- Limited rights allow the Government to use, duplicate, or disclose technical data by or for the Government, but not outside the Government.
- Government-purpose license rights allow the Government to use, duplicate, or disclose technical data in any manner for Government purposes only, including competitive procurements, but not for commercial purposes.

The Defense Federal Acquisition Regulation Supplement (DFARS) 252.227-7013(j), "Notice of Limitations on Government Rights," requires that contractors identify data that will have limited rights and, upon request, provide justification to the DoD contracting officer for the assertion of limited rights.

**Breakout Screening Procedures.** Breakout screening procedures include consideration and recording of the relevant facts pertaining to breakout decisions. The objective of breakout screening is to improve the acquisition status by performing a technical review to determine the potential for competition or purchase from a manufacturer. Consideration of any reasonable approach to establishing competition should be an integral part of the breakout process. The DFARS Appendix E, "DoD Spare Parts Breakout Program," establishes limited and full breakout screening procedures for spare parts identified and selected for screening.

The full breakout screening procedures are divided into the following phases:

- data collection,
- data evaluation,
- data completion,
- technical evaluation,
- economic evaluation, and
- supply feedback.

The data evaluation phase is the most crucial stage of the review process because it involves the determination of the adequacy of the technical data package and the Government's rights to use the technical data for acquisition purposes.

The data evaluation phase includes but is not limited to:

- a brief, but intensive analysis of available data and documents regarding both technical matters and data rights leading to a decision whether to proceed with screening and
- work necessary to produce an adequate technical data package, including research of contract provisions, engineering work on technical data and drawings, and requests to contractors for additional data.

DoD technical personnel should continue to screen through the life cycle of a spare part for breakout potential or until such time as the spare part can be competitively procured. Acquisition Method Suffix Codes "A" and "P" indicate that the Government may not be able to procure the spare parts competitively. "A" designates technical data with limited rights assertions. "P" indicates the Government can not use the technical data to purchase the spare part from other than the current source.

## Audit Results

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As disclosed in our Report No. 94-106, "Validation of Technical Data Rights Restrictions for Spare Parts at the Defense Logistics Agency," May 19, 1994, personnel from Defense Logistic Agency supply centers or inventory control points stated that if two spare parts were otherwise equal, the spare part with unlimited rights would likely be selected for breakout over the part with limited rights. Those spare parts with unlimited rights would be selected for breakout because challenging would not be required. DoD activities should not exclude an item from breakout consideration because of limited rights assertions without first making an effort either to have the assertions removed or to obtain substantiation for the assertion from the contractor.

**Challenging Limited Rights Assertions.** To use full and open competition in the procurement of spare parts, the Government must have a complete and adequate technical data package and must have unlimited rights to the technical data in the package.

The DFARS Appendix E recognizes the need for unlimited rights to the technical data when considering spare parts for the breakout screening program. Appendix E requires the Government to challenge all contractors' limited rights that cannot be substantiated. Prechallenges and formal challenges to the limited rights assertions shall be performed in accordance with DFARS 252.227-7037, "Validation of Restrictive Markings on Technical Data." The Government contracting officer may issue an informal request, a prechallenge review, or a formal challenge letter to a contractor.

**Informal Request.** An informal request is an optional procedure that asks the contractor to voluntarily remove a limited rights assertion. The request is sometimes called the "postage stamp persuasion" program. The informal request is not part of the prechallenge and formal challenge procedures and would precede the prechallenge and formal challenge procedures.

**Prechallenge Review.** A prechallenge review is a systematic evaluation of the propriety of a limited rights assertion. The review considers all information available to the Government and includes issuing a request to the contractor to support its limited rights claim.

**Formal Challenge.** A formal challenge is a written notification to a contractor that contests the use of a limited rights assertion on a specific document. The basis for the challenge is that the data are not developed at private expense.

**Inventory Control Points Management Role.** Inventory control points manage weapon system spare parts. Inventory control points are responsible for purchasing spare parts at the best value for the Government. Obtaining spare parts at the best value can be done by using complete technical data packages and competitive acquisition procedures.

## **Audit Objectives**

The primary audit objective was to evaluate the adequacy of reviews by DoD contracting activities of technical data packages with limited rights assertions. We also evaluated the management control program as it relates to the review and challenge of limited rights assertions. This report discusses the results of the audit at the Military Department program offices and inventory control points. Audit Report No. 94-106 discusses the audit results at the Defense Logistics Agency. See the finding in Part I for a discussion of the material management control weakness we identified and Appendix A in Part II for the audit scope and methodology and details of our review of the management control program. See Appendix B for a summary of prior coverage related to the audit objectives

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## Reviews of Limited Rights Assertions on Technical Data and Acquisition of Complete Data Packages

The program offices and the inventory control points for the Army AH-64 Apache helicopter, Navy F/A-18 Hornet aircraft, and Air Force F-15 Eagle aircraft did not adequately validate limited rights assertions on technical data for spare parts, and the program offices did not buy complete technical data packages. Validation was not performed and complete packages were not purchased because:

- the program offices and the inventory control points did not make maximum use of informal requests, prechallenges, and formal challenges and
- the program offices used funding to purchase weapon systems rather than to purchase complete technical data packages early in the acquisition process.

As a result, from FYs 1987 through 1994, 132 spare parts, valued at \$66.5 million, were purchased on contracts awarded without full and open competition, without challenges, or without full breakout screening. If challenges and breakout screening are performed, limited rights assertions are removed, and the spare parts are purchased on competitive contracts, the Government can potentially avoid about \$4.4 million in future contract costs on forecasted buys of \$17.5 million for 35 spare parts for the three weapon systems we reviewed.

### Criteria for Restrictive Markings on Technical Data

**Validating Limited Rights Assertions.** The DFARS 227.403-73, "Validation of Restrictive Markings on Technical Data," states the Government should review the validity of any limited rights assertions on technical data delivered under a contract. Also, DFARS Appendix E requires the Government to challenge all contractors' limited rights assertions that cannot be substantiated.

**Identification of Limited Right Assertions.** The DFARS 227.402.70(d), "Identification of Technical Data Rights," states that all contractor and subcontractor assertions of rights should be identified in the contract as early in the acquisition process as possible.

**Notification of Limited Rights Assertions.** The DFARS 227.403-70(a), "Data Rights - Notification Requirements," states that contractors are required to notify the Government of any asserted restrictions on the Government's right to use or disclose technical data.

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**Justifying the Validity of Limited Rights Assertions.** The DFARS 252.227-7037, "Validation of Restrictive Markings on Technical Data," states that contractors at any tier are responsible for maintaining records sufficient to justify the validity of their markings that impose restrictions on the Government's right to use, duplicate, or disclose technical data delivered or required to be delivered under a contract. Contractors shall be prepared to furnish to the DoD contracting officer a written justification for such restrictive markings.

**Promoting Competition.** Public Law 98-369, "Competition in Contracting Act of 1984," requires Government agencies to promote the use of full and open competition in procurement. In addition, Federal Acquisition Regulation 34.005-1, "Competition," states the program manager shall, throughout the acquisition process, promote full and open competition.

The program offices for the Army AH-64 Apache helicopter, Navy F/A-18 Hornet aircraft, and Air Force F-15 Eagle aircraft and the inventory control points at the Army Aviation and Troop Command and the Warner Robins Air Logistics Center did not comply with the Government regulations to adequately validate limited rights assertions on technical data for spare parts. Also, the program offices did not comply with the Competition in Contracting Act because they did not buy complete technical data packages. Specifically, the inventory control points were limited in the number of spare parts they could compete because of the lack of complete technical data packages.

### Substantiation of Limited Rights Assertions

Neither the program offices nor the inventory control points issued informal requests, prechallenges, and formal challenges on contractors' limited rights assertions.

**Program Office Use of Informal Requests.** The program offices for the Army AH-64 Apache helicopter, Navy F/A-18 Hornet aircraft, and Air Force F-15 Eagle aircraft did not issue informal requests. The program offices considered logistics support and specifically, engineering data, as a low priority item in a program acquisition strategy and, therefore, did not use the inexpensive, but effective, "postage stamp persuasion" program to ask the contractor to voluntarily remove limited rights assertions. Our Report No. 94-106 substantiated that the use of informal requests was successful in reducing the amount of technical data with limited rights assertions.

**Program Office Use of Prechallenges and Formal Challenges.** Only the program office for the Army AH-64 Apache helicopter issued a challenge on limited rights assertions.

**Army Program Office.** Legal personnel from the Apache program office stated that they made two formal challenges of limited rights assertions for the Apache helicopter. However, the legal office could provide written documentation to support only one challenge. The challenge was unsuccessful because the contractor could justify the limited rights assertion. The program

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office for the Apache Longbow helicopter, the next generation of Apache helicopter, was able to identify some limited rights assertions by subcontractors early in the acquisition process. However, the Longbow program office has not evaluated and challenged subcontractors' limited rights assertions despite the admission by the legal personnel that the program office had many technical data rights problems with subcontractors. The legal personnel stated that to challenge subcontractors' limited rights assertions was very time-consuming because challenges could take up to 2 years to complete.

**Navy Program Office.** The Navy program office never issued prechallenges or formal challenges on contractors' limited rights assertions. The program office provided us no explanation why challenges were not performed.

**Air Force Program Office.** Instead of issuing prechallenges, the Air Force program office relied on the prime contractor to issue prechallenges to the subcontractors. On October 11, 1990, the Air Force program office asked the prime contractor to issue prechallenge letters to 17 subcontractors who were claiming limited rights on technical data the Air Force wanted to buy. As of January 1995, the F-15 program office had received no responses from the prime contractor or the subcontractors to the prechallenges.

The Air Force program office placed the responsibility of identifying, evaluating, and challenging limited rights assertions on the inventory control point. The program offices did not consider acquiring the necessary technical data and the technical data rights for spare parts because of cost and scheduling concerns. The Air Force program office preferred to use available funding to buy additional weapon systems instead of buying the necessary technical data packages and to meet scheduling dates instead of resolving the rights to use technical data for use in competing spare parts.

**Identifying and Evaluating Limited Rights Assertions Early.** The program executive officers of the Military Department program executive offices should direct the subordinate program offices to identify and evaluate limited rights assertions by contractors as early in the weapon systems acquisition as possible as required by DFARS 227.402-70(d). The program executive officers should also direct the subordinate program offices to issue informal requests, prechallenges, and formal challenges when limited rights assertions cannot be substantiated.

**Inventory Control Points Use of Informal Requests.** The Army inventory control point stopped issuing informal requests. The Navy and Air Force inventory control points do issue informal requests.

**Army Inventory Control Point.** The Army inventory control point stopped using the postage stamp persuasion program in FY 1988 due to limited personnel resources. As of September 30, 1987, the inventory control point issued 541 informal requests on technical data with limited rights assertions. Of the 541 informal requests issued, 138 (26 percent) resulted in the removal of limited rights assertions, avoiding \$1.3 million in contract costs. The Army inventory control point did not document why the limited rights assertions were

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removed. The contractor could have agreed to remove the assertions because the technical data had been incorrectly marked or because the contractor was no longer interested in controlling the release of the technical data, rather than because of the informal requests. In any case, the Government will be able to consider the spare parts for competitive procurement.

**Navy and Air Force Inventory Control Points.** Navy and Air Force inventory control points issued informal requests on spare parts that had technical data with limited rights assertions. However, because the inventory control points did not issue monthly, quarterly, or annual reports on the success rate of the informal requests, we were unable to determine whether issuing informal requests was successful in obtaining the removal of assertions.

**Inventory Control Points Use of Prechallenges and Formal Challenges.** The Army and Air Force inventory control points did not issue prechallenges or formal challenges. The Navy inventory control point issued prechallenges and formal challenges. However, the Navy prechallenge letter needed improvement.

**Army.** The Army inventory control point did not issue prechallenges or formal challenges from FYs 1987 through 1994. The Army inventory control point stated that they did not have to issue any challenges because they had purchased the technical data with unlimited rights. However, the technical data that the Army inventory control point had purchased were level one and level two drawings. Those drawings were not suitable for competition.

**Navy.** The Navy inventory control point issued prechallenges and formal challenges. The Navy prechallenge was part of its informal request letter. If the contractor declined to voluntarily remove the limited rights assertion, the informal request letter asked the contractor to explain the basis of the limited rights assertion. However, the informal request did not identify a specific time frame in which the contractor was to respond. For example, the prechallenge letter should state the number of days the contractor has to respond to the prechallenge letter. The DFARS 227.403-73(b)(3) states that the contracting officer should include a reasonable due date for a contractor response in the prechallenge letter. The "User's Guide for the Management of Technical Data and Computer Software" suggests 30 days as a reasonable period of time for a contractor response to a prechallenge. Appendix B provides a list of sample questions the Government can ask in determining the validity of limited rights assertions.

**Air Force.** The Air Force inventory control point did not issue prechallenges or formal challenges from FYs 1987 through 1994. The inventory control point did not issue prechallenges of limited rights assertions because personnel at the inventory control point mistakenly believed only the program office could issue a prechallenge or formal challenge.

**Implementing Needed Management Controls.** The Army, Navy, and Air Force inventory control points should set up management controls that require program offices to issue informal requests, prechallenges, and formal challenges when limited rights assertions can not be substantiated. Prechallenge letters

## Reviews of Limited Rights Assertions on Technical Data and Acquisition of Complete Data Packages

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should include a reasonable due date for a contractor response and a request for specific information for each limited rights assertion. In addition, the commands need to establish performance goals to measure the success of challenging limited rights assertions.

### Breakout Screening Review

**Breakout Screening.** The ultimate objective of a breakout screening review is to reduce costs through the use of competitive procurement methods or the purchase of parts directly from the actual manufacturer rather than the prime contractor, while maintaining the integrity of the systems and equipment in which the parts are to be used.

**Sample Selection at the Inventory Control Points.** We reviewed 132 weapon system spare parts with technical data coded A or P and with a contract value greater than the dollar criteria for breakout screening review by the military inventory control points. The spare parts contracts were for FYs 1987 through 1994 and totaled about \$66.5 million.

**Army.** We reviewed 20 Apache spare parts with technical data coded A or P and with a contract value greater than the dollar criteria for breakout review (\$25,000). The inventory control point did not perform breakout screening and did not issue informal requests, prechallenges, and formal challenges for those 20 spare parts. The Army inventory control point spent \$3 million for the spare parts in FYs 1987 through 1994.

**Navy.** We reviewed 53 weapon system spare parts with technical data coded A or P and with a contract value greater than the dollar criteria for breakout review (\$55,000). The Navy inventory control point spent \$46.3 million for the spare parts in FYs 1987 through 1994.

In 1986, the Navy inventory control point contracted with a company to review limited rights assertions by contractors. The contract required the company to analyze limited rights assertions claimed by contractors and to make a recommendation on whether to challenge or honor limited rights assertions claimed by contractors.

The company reviewed the limited rights assertions for 14 spare parts. The company recommended honoring six and challenging eight limited rights assertions. For the eight spare parts the company recommended challenging, the inventory control point:

- removed the limited rights assertion for two spare parts,
- determined four spare parts would require extensive qualification requirements for full and open competition and were considered uneconomical to compete, and
- could not provide an explanation as to why the remaining two spare parts were not challenged.

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For the remaining 39 spare parts not reviewed by the company, the inventory control point performed full breakout screening reviews for 23 spare parts. Of the 23 spare parts, the inventory control point issued informal requests and prechallenges for 13 spare parts. Four of the informal requests and prechallenges were successful. For the other 16 spare parts, the inventory control point did not perform full breakout screening reviews. However, the inventory control point issued informal requests and prechallenges for 7 of those 16 spare parts. None of the informal requests and prechallenges were successful.

**Air Force.** We reviewed 59 weapon system spare parts with technical data coded A or P and with contract value greater than the dollar criteria for breakout review (\$10,000). The spare parts contracts were for FYs 1987 through 1994. The Air Force inventory control point spent \$17.1 million for the spare parts.

The inventory control point performed breakout screening on all 59 spare parts. However, the inventory control point issued only 17 informal requests and issued no prechallenges or formal challenges. For the remaining 42 spare parts, we determined the following.

- Five spare parts were commercial items that were developed with contractor funds.

- Thirty-four spare parts were supplied by two contractors that the inventory control point requested the program office to challenge, even though any cognizant Government contracting officer can issue a prechallenge or formal challenge letter. Also, one of the two contractors was one of the 17 subcontractors that the program office asked the prime contractor to challenge.

- The inventory control point could give no explanation on why informal requests were not issued for three spare parts.

**Identifying and Evaluating Limited Rights Assertions Early.** The Army inventory control point did not perform breakout screening, and the Navy inventory control point did so for only a few spare parts. The Air Force inventory control point; however, did consistently screen spare parts for breakout. None of the inventory control points consistently issued informal requests or challenges. The inventory control points should issue informal requests, prechallenges, and formal challenges when limited rights assertions cannot be substantiated. The inventory control points should also perform full breakout screening reviews on spare parts meeting the dollar criteria for breakout review.

## Acquisition of Complete Technical Data Packages

The Army and Air Force program offices did not buy complete technical data packages for the Army AH-64 Apache helicopter and the Air Force F-15 Eagle aircraft. The program office for the Navy F/A-18 Hornet aircraft, E and

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F versions, did not adequately coordinate with the inventory control point to buy complete technical data packages. The program offices for those weapon systems were primarily concerned with the cost and schedule of obtaining weapon systems rather than with buying complete technical data packages.

**Cost of Technical Data Packages.** The program managers for the Army AH-64 Apache Helicopter and the Air Force F-15 Eagle aircraft stated they did not have the funding to buy complete technical data packages because they used the funding to buy the weapon systems.

**Army.** The Apache helicopter program office purchased only level 2 drawings because the program manager used funding to buy weapon systems instead of complete technical data packages (level 3 drawings).

**Cost Consideration for the AH-64 Apache Helicopter.** Program office personnel stated that the cost of level 3 drawings was expensive. For example, if the program office bought complete technical data packages in 1981, it could afford to buy only 6 helicopters instead of 11 that year. The program manager also pointed out that once the Army bought technical data packages, the Army needed to buy change drawings to keep the packages complete and current. The program office personnel stated that updating drawings was expensive; however, the program manager was unable to provide documentation supporting the cost of acquiring complete technical data packages.

**Limited Funding for the Apache Longbow Helicopter.** The Army program office decided not to buy complete technical data packages during the provisioning phase of the Apache Longbow helicopter because of limited funding. Production for the Apache Longbow helicopter is scheduled to start in 1995. In addition to limited funding, the short production run for the Longbow program affected the Army decision to not buy complete technical data packages.

**Navy.** We were unable to determine whether the Navy program office purchased complete technical data packages for the F/A-18 Hornet aircraft, A through D versions. The program officers provided us no information.

**Air Force.** The Air Force program office for the F-15 Eagle aircraft deferred the requisitioning of complete technical data packages from the prime contractor and did not attempt to purchase complete technical data packages from subcontractors because of limited funding.

**Prime Contractor.** Deferred requisitioning of engineering data is a procedure in which a contract specifies the range and kinds of engineering data the contractor is obligated to deliver to the Government. This procedure permits the prime contractor to retain the master engineering data temporarily, in the prescribed format, until the prime contractor is required to deliver the copies directly to the user at the time copies are specifically requisitioned under prescribed ordering conditions and pricing terms.

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The Air Force initiated the deferred requisitioning in 1985. The F-15 program office purchased dimensioned drawings from the prime contractor. However, the contract did not specify undimensioned drawings, spares configuration sheets, or the special manufacturing instructions. Without that data, the Air Force did not have a complete technical data package.

The Warner Robins Air Logistics Center established delivery-type contracts to obtain technical data on an as-needed basis. However, the Warner Robins Air Logistics Center did not receive the technical data in a timely manner. Late deliveries made the technical data packages incomplete and the technical data unavailable for use in the competition of spare parts.

It was not until 1993 that the F-15 program office issued a contract to obtain the undimensioned drawings, spares configuration sheets, and the special manufacturing instructions.

**Subcontractors.** In 1985, the F-15 program office issued a data call to all the Air Logistics Centers to identify to subcontractors the complete technical data packages needed for spare parts. However, as of September 19, 1994, because of limited funding, the program office had not purchased any complete technical data packages from subcontractors.

To enable program offices to buy complete technical data packages at the earliest stage of the weapon systems acquisition process, the program executive officers should direct the subordinate program managers to perform cost-benefit studies to determine the benefits of buying different levels of technical data and include inventory control points early in the weapon acquisition process.

**Coordinating the Acquisition of Technical Data.** The program offices did not coordinate the purchase of complete technical data packages with the inventory control points. The program managers preferred to use monies to obtain more weapon systems rather than to procure technical data. We were told by inventory control point personnel that when a new program was initiated, program officials eliminated the requirement to purchase data in order to ensure enough funding for the weapon system.

**Army.** The program office was unable to provide us with the acquisition plan. The program office told us that the acquisition plan had probably been misplaced, because the Apache program had been started more than 10 years earlier. No evidence existed to show that the Apache program office coordinated with the inventory control point to procure complete technical data packages.

**Navy.** In June 1991, the Navy inventory control point requested that the program office purchase complete technical data packages for the F/A-18 Hornet aircraft, E and F version. However, when the Aviation Supply Office submitted its list of spare parts for which complete technical data packages were needed, the program office told the Aviation Supply Office that the contract for the F/A-18 Hornet aircraft, E and F version, had already been negotiated.

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**Air Force.** In 1985, the F-15 program office issued a data call to all the Air Logistics Centers to identify technical data needed to competitively reprocur spare parts. However, as of September 1994, the program office had not purchased any complete technical data packages and data rights from subcontractors. The technical data that the program office purchased in 1994 could only be used only in-house and could not be used by subcontractors to manufacture spare parts.

**Determining Cost Benefits and Obtaining Input from the Inventory Control Points.** We believe that the program offices should perform cost benefit studies to determine the type of technical data packages to procure at the earliest stage of the weapon system acquisition process or when changes to the technical data requirement are made. Program offices should also include representatives from the inventory control points in order to assist in the process of identifying technical data needs and scheduling acquisition of of complete technical data packages. In addition, program offices should notify the inventory control point of any changes to the technical data requirements, funding, and acquisition schedule, and obtain its opinion before changes are made.

## Potential Monetary Benefits

We could not determine the potential monetary benefits of challenging contractor assertions of limited technical data rights. Screening for breakout and removing limited rights assertions will not guarantee that the spare parts will be competitively procured. Other factors must be considered to determine whether a part can be competed. However, if breakout screening is not performed and the limited rights assertions are not removed, competition can not be considered, even if all the other factors for competition are present. Although we could not confirm that competition was possible or that it would always produce a lower price, the potential for reduced prices exists.

**Competition for Army Spare Parts.** If the 20 Apache spare parts procurements reviewed at the inventory point were competed, we estimate that the Government could avoid about \$375,060 in future contract costs. That estimate is based on a 25-percent savings factor\* applied to the \$1.5 million in projected future buys for 4 of the 20 spare parts in FYs 1995 and 1996. The remaining 16 spare parts did not have projected future buys in FYs 1995 and 1996. However, those spare parts may have future buys after FY 1996.

**Competition for Navy Spare Parts.** If the 53 F/A-18 aircraft spare parts procurements reviewed at the inventory control point were competed, we estimate that the Government could avoid about \$3.4 million in future contract costs. The estimate is based on a 25-percent savings factor applied to the \$13.5 million in projected future buys for 17 of the 53 spare parts.

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\*The DFARS Appendix E states that a savings factor of 25 percent will be used to estimate breakout savings if another factor based on local conditions and experience is not available.

## Reviews of Limited Rights Assertions on Technical Data and Acquisition of Complete Data Packages

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**Competition for Air Force Spare Parts.** If the 59 F-15 aircraft spare parts procurements reviewed were competed, we estimate that the Government could avoid about \$630,563 in future contract costs. That calculation is based on a 25-percent savings factor applied to the \$2.5 million in projected future buys for 14 of the 59 spare parts. The remaining 45 spare parts did not have projected future buys in FYs 1995 and 1996. However, those spare parts may have future buys after FY 1996.

### Repeat Findings from Prior Audit Reports

We identified one Inspector General, DoD; two Army Audit Agency; and two Air Force Audit Agency reports issued during the last 5 years that identified problems similar to those discussed in this report. Details on the five reports are in Appendix B. Findings comparable to those in this report are described here.

Inspector General, DoD, Report No 92-072, "Quick-Reaction Report on Acquiring Competitive Technical Data Packages for Engine Parts Used on the UH-60 Black Hawk Helicopter," April 6, 1992, states that the U.S. Army Aviation Systems Command (the Command) had not taken advantage of a contractual provision that enabled the Command to obtain, at no additional cost, competitive technical data packages for 54 items that were classified as "high consumption dollar spare parts." As a result, the Command might have paid as much as \$1.9 million more for procurement of spare parts due to the loss of the opportunity to compete spare parts on 27 of the 54 engine parts.

Army Report No. SR 92-207, "Technical Data Packages," August 10, 1992, indicates that materiel developers (program managers) did not have adequate plans and procedures for acquiring technical data packages needed for competition. As a result, the Army bought and received technical data that did not satisfy its intended purpose. The Army Materiel Command was forced to support requirements on a sole-source basis.

Army Report No. EC 91-205, "Technical Data Packages: U.S. Army Tank-Automotive Command, Warren, Michigan," August 12, 1991, stated that materiel developers often did not adequately consider plans to buy technical data or did not include required information in acquisition plans to justify the type of technical data the Army was buying. Without adequate plans that fully considered all factors affecting technical data, materiel developers could not be sure they obtained the data needed to satisfy intended purposes. Also, without adequate technical data, the Tank-Automotive Command could not make competitive buys and was forced to support future requirements on a sole-source basis.

The Air Force report on Project No. 0046412, "Air Force Management of Rights in Technical Data," September 20, 1990, indicates that Air Force data managers and contracting officers were not formally challenging and resolving the validity of limited rights assertions by contractors and subcontractors. Air Force management concurred with the finding and revised Air Force Regulation 800-34 to help correct the problem. However, we believe the

## Reviews of Limited Rights Assertions on Technical Data and Acquisition of Complete Data Packages

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Air Force has not corrected the problem because the Air Force program office and inventory control point have not performed prechallenges and formal challenges from FYs 1987 through 1994 as determined by our audit.

The Air Force report on Project No. 92064007, "Engineering Data Acquisition and Management," February 28, 1994, indicates that the Air Force Materiel Command did not complete adequate engineering data planning or adequately define engineering data requirements for the five weapon systems reviewed. As a result, program managers did not have a detailed planning document to show how they would plan for and acquire engineering data, place essential engineering data on contracts, or have complete historical information to maintain continuity in the data management program.

### Conclusion

Military Departments need technical data packages with sufficient rights to allow the Government to compete spare parts procurements and obtain the best price possible. Spare parts cannot be acquired through competitive procedures unless procurement personnel at the Military Department program offices and inventory control points verify that limited rights assertions are adequately supported as early in the acquisition process as possible.

### Recommendations for Corrective Action

1. We recommend that the Program Executive Officer, Aviation Program Executive Office, Army Aviation and Troop Command; the Program Executive Officer, Tactical Aircraft Programs, Naval Air Systems Command; and the Program Executive Officer for the Tactical and Airlift Programs, require their subordinate program offices to:

a. Identify and evaluate limited rights assertions by contractors as early in the weapon systems acquisition as possible, as required by Defense Federal Acquisition Regulation Supplement 227.402-70(d), "Rights In Data And Copyrights," 1991 edition.

b. Issue informal requests, prechallenges, and formal challenges when limited rights assertions cannot be substantiated.

2. We recommend that the Director, Aviation Research, Development and Engineering Center, Army Aviation and Troop Command, and the Director, Planning and Data Systems Directorate, Naval Aviation Supply Office:

a. Issue informal requests, prechallenges, and formal challenges when limited rights assertions cannot be substantiated and

b. Require that full breakout screening reviews be performed on spare parts meeting the dollar criteria for breakout review.

## **Reviews of Limited Rights Assertions on Technical Data and Acquisition of Complete Data Packages**

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3. We recommend that the Director, Planning and Data Systems Directorate, Naval Aviation Supply Office, include in a prechallenge letter a reasonable due date for a contractor response and a request for specific information for each limited rights assertion.

4. We recommend that the Program Executive Officer, Aviation Program Executive Office, Army Aviation and Troop Command; the Program Executive Officer, Tactical Aircraft Programs, Naval Air Systems Command; and the Program Officer for the Tactical and Airlift Programs direct each of their subordinate program managers to:

a. Perform cost benefit studies to determine the type of technical data packages to procure at the earliest stage of the weapon system acquisition process or when changes to the technical data requirements are made.

b. Include representatives from the inventory control point to assist in the process of identifying technical data needs and scheduling acquisition of complete technical data packages.

c. Notify the inventory control point of any changes to the technical data requirements, funding, and acquisition schedule and obtain its opinion before changes are made.

5. We recommend that the Director, Aviation Research, Development and Engineering Center, Army Aviation and Troop Command; the Director, Planning and Data Systems Directorate, Naval Aviation Supply Office; and the Director, Technology and Industrial Support Directorate, Warner Robins Air Logistics Center, to establish performance goals that measure use and benefits of informal requests, prechallenges, and formal challenges for limited rights assertions.

### **Management Comments Required**

The Military Departments did not respond to a draft of this report in time for comments to be incorporated into the final report. Therefore, we request the Military Departments provide comments to the final report.

## **Part II - Additional Information**

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## Appendix A. Scope and Methodology

### Scope

**Weapon Systems Selection.** We selected a weapon system from each Military Department and based the system selection on the production status and the estimated funding for the weapon system spare parts. We judgmentally selected three weapon systems: the Army AH-64 Apache helicopter, the Navy F/A-18 Hornet aircraft, and the Air Force F-15 Eagle aircraft. We selected those weapon systems from the 128 major acquisition programs that were part of the selected acquisition reporting process.

**Time Period Selection.** We selected the three weapon systems to ensure that data for the audit would encompass FYs 1987 through 1993. We selected that period to have at least 3 years of contract data with which to determine any effect the 3-year validation rule\* would have on the results of the audit. However, the 3-year validation rule did not affect the results of the audit.

**Audit Period and Standards.** We performed this economy and efficiency audit from February 1993 through January 1995. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. We included a review of management controls considered necessary.

**Audit Locations Visited.** We conducted the audit at Military Department program offices, Defense plant representative offices, and inventory control points. See Appendix E for a complete list of organizations visited or contacted during the audit.

**Army.** We conducted the audit of the Army AH-64 Apache helicopter at the program office and the inventory control point at the Army Aviation and Troop Command, St. Louis, Missouri, and the Defense Plant Representative Office, McDonnell Douglas Helicopter Company, Mesa, Arizona.

**Navy.** We conducted the audit of the Navy F/A-18 Hornet aircraft at the program office at the Naval Air Systems Command, Washington, D.C.; the Naval Aviation Supply Office, Philadelphia, Pennsylvania; and the Defense Plant Representative Office, McDonnell Douglas Aircraft Company, St. Louis, Missouri.

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\*The DFARS states that reviews of the validity of any restriction on technical data asserted by the contractor should be done within 3 years of final payment on a contract or within 3 years of delivery of the technical data to the Government, whichever is later.

**Air Force.** We conducted the audit of the Air Force F-15 Eagle aircraft at the program office located at the Aeronautical Systems Center, Wright-Patterson Air Force Base (AFB), Ohio; the Warner Robins Air Logistic Center, Warner Robins AFB, Georgia; and the Defense Plant Representative Office, McDonnell Douglas Aircraft Company, St. Louis, Missouri.

### Methodology

We evaluated the challenge procedures used by DoD contracting officers to determine the validity of the limited rights asserted by contractors and the efforts taken by the Military Department inventory control points to obtain technical data with unlimited rights.

**Data Codes.** To select spare parts to be included in the review, we used the acquisition method suffix codes used by DoD to identify technical data. The code is a single-digit alphabetic cipher assigned by a DoD organization that provides the DoD contracting officer and other Government personnel with engineering, manufacturing, and technical information about the data. We selected spare parts with codes that would include data with limited rights assertions.

**Data Selected.** For the three weapon systems we reviewed, we selected spare parts with technical data coded A or P and with a contract value greater than the dollar criteria for the applicable inventory control point's breakout review. The spare parts contracts were for FYs 1987 through 1994. The Military Department inventory control points spent \$66.5 million for 132 spare parts purchased on the contracts for FYs 1987 through 1994. We determined whether the Military Department inventory control points challenged the limited rights assertions and performed breakout screening for the spare parts.

**Use of Computer-Processed Data.** We obtained the data on the 132 weapon system spare parts from three computer systems, one maintained by each Military Department inventory control point. We relied on the three different computer systems to provide lists of data for review. Nothing came to our attention as a result of audit procedures that caused us to doubt the reliability of the computer-processed data. However, we did not verify the reliability of the computer-processed data.

### Management Control Program

DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

## Appendix A. Scope and Methodology

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**Scope of Review of Management Control Program.** We evaluated procedures used by personnel in the Military Department program offices and inventory control points to validate limited rights assertions claimed by contractors and subcontractors on spare parts. Validation is required by United States Code, title 10, section 2321, "Validation of Restrictive Markings on Technical Data"; DFARS 252.227-7037; and DFARS Appendix E. We did not assess management's self-evaluation of the applicable management controls.

**Adequacy of Management Controls.** We identified a material management control weakness as defined by DoD Directive 5010.38 relating to validating technical data rights. Military Department program offices and inventory control points were not validating restrictive markings on technical data as required by DFARS 227.403-73, "Validation of Restrictive Markings on Technical Data," and DFARS Appendix E. Validation was not performed because the breakout screening personnel and DoD contracting officers had either inadequate or no procedures in place to validate the limited rights assertions on technical data as required by DFARS 252.227-7037 and the "Users' Guide for the Management of Technical Data and Computer Software," April 1, 1987. The program offices and inventory control points did not make maximum use of informal requests and did not perform prechallenge and formal challenges of contractor and subcontractor limited rights assertions. Also, program offices were not identifying technical data with limited rights assertions early in the acquisition process as required by DFARS 227.402-70(d), "Rights In Data And Copyrights," 1991 edition. Further, program offices were not acquiring complete technical data packages. The lack of challenging prevented the Military Department program offices and inventory control points from reducing contract costs through the maximum use of competitive procurements.

Recommendation 1.a., if implemented, will correct the weaknesses in not identifying and evaluating limited rights assertions early in the acquisition. Identifying and evaluating limited rights assertions on technical data early in the acquisition process will let the program manager know whether spare parts can be competed in the future and assist the program manager in deciding which technical data packages to buy. Recommendations 1.b. and 2., if implemented, will correct the weaknesses in using informal requests, prechallenges, and formal challenges of contractor's limited rights assertions.

We could not readily determine the potential monetary benefits to be realized by implementing the recommendations. The benefits to be realized would be removing limited rights assertions on technical data that were inaccurately marked with limited rights and being able to use that technical data to purchase spare parts through full and open competition. However, we could not identify the specific spare parts that would be competed if the limited rights assertions were removed. See Appendix D for a description of all benefits related to the audit. The senior officials in charge of management controls for the Army, the Navy, and the Air Force will receive a copy of the report.

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## **Appendix B. Summary of Prior Audits and Other Reviews**

### **General Accounting Office**

**Report No. NSIAD-92-23 (OSD Case No. 8891), "Defense Procurement: Improvement Needed in Technical Data Management," February 1992.** The subject report states that the Military Departments and Defense Logistics Agency repositories could neither evaluate timeliness of requests nor determine the status of requests for technical data. The report recommended that the Secretaries of the Military Departments and the Director, Defense Logistics Agency, require that managers at each Military Department and Defense Logistics Agency technical data repository verify compliance with the appropriate management control procedures necessary to measure how quickly technical data requests are filled and to permit repository managers to determine the status of in-process requests. The report also states that poor data quality, such as illegible drawings, obsolete data, and inaccurate or incomplete information, continued to inhibit contractors from competing for Government work or completing the work after a contract was awarded. The report also recommended that the Secretaries of the Military Departments and the Director, Defense Logistics Agency, reinforce their guidance to the organizations and entities charged with analyzing and accepting technical data for DoD to verify that technical data accepted during the acquisition process are as current, accurate, and complete as possible. DoD concurred with the first recommendation, stating that the computer-aided acquisition and logistics support initiative will improve the capability of its engineering repositories to provide current and complete technical data in a timely manner to both Government and industry users. Repository managers also stated that data quality problems originate during the acquisition process and that they cannot fix the problems. Repository managers are mainly responsible for receiving, storing, and distributing technical data.

**Report No. NSIAD-91-313 (OSD Case No. 8813), "Defense Procurement: Acquiring Technical Data for Spare Parts Reprocurement," September 1991.** The subject report states that for 11 of the 14 systems reviewed, program managers had purchased the technical data for their systems. For the remaining three systems, the program managers either were in the process of buying the technical data (two systems) or did not anticipate any further reprocrements (one system). The report also states that because the spare parts procurement process is so complex, assessing DoD progress toward increased spare parts competition is difficult. The report made no recommendations. DoD officials agreed with the facts presented in the report.

**Report No. NSIAD-91-53 (OSD Case No. 8531), "Defense Procurement: Not Providing Technical Data May Limit Defense Logistics Agency Competition," January 1991.** The subject report states that the Defense General Supply Center did not identify the nature and extent of technical data available to the Government on spare parts being solicited. The report

## Appendix B. Summary of Prior Audits and Other Reviews

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recommended that the *Commerce Business Daily* notices for part-numbered solicitations at the Defense General Supply Center more clearly identify the nature and extent of technical data available to the Government and the extent to which potential offerers may appropriately have access to such data. The report also states that when purchasing responsibility for the spare parts was transferred from the Military Departments to the Defense General Supply Center, Defense General Supply Center procurement officials did not always receive access to all technical data reported to be available on spare parts. As a result, opportunities for competition were missed. The report recommends that DoD require the Military Departments to ensure the completeness of the technical data transferred to Defense Logistics Agency supply centers. DoD concurred with all the report recommendations. DLA negotiated memorandums of agreement with the Army, the Navy, and the Air Force to govern the transfer of technical data from the Military Departments to the Defense Logistics Agency.

### Inspector General, DoD

**Report No. 94-071, "Transfer of the Management of Consumable Items to the Defense Logistics Agency," March 31, 1994.** The subject report states that the Military Departments did not transfer essential logistics management data in a timely manner, or when data were transferred, the receiving Defense Logistics Agency inventory managers did not always use the data. As a result, weapon systems availability could be adversely affected. The report recommended that the Defense Logistics Agency establish a tracking system to initiate timely followup actions when the essential weapon system data have not been submitted and to reconcile the number of technical data packages that are overdue from the Military Departments. The Defense Logistics Agency concurred with the recommendations. The report also recommended that the Military Departments and Defense Logistic Agency resolve the issues preventing the transfer and support of program requirements for items transferred under the Consumable Items Transfer Program. The Navy, the Air Force, and the Defense Logistics Agency concurred with the recommendation. The Army partially concurred, but proposed actions that were responsive to the recommendation.

**Report No. 92-072, "Quick-Reaction Report on Acquiring Competitive Technical Data Packages for Engine Spare Parts Used on the UH-60 Black Hawk Helicopter," April 6, 1992.** The subject report states that the Army Aviation Systems Command did not take advantage of a contractual provision that would enable it to obtain, at no additional cost, competitive technical data packages for 54 spare parts classified as "high-consumption dollar spare parts." The report states that the command could have avoided \$1.9 million in procurement costs for 27 of the 54 spare parts had it obtained the technical data packages. The report recommended obtaining the competitive technical data packages for the 27 spare parts and constraining future sole-source procurements for the 27 spare parts that did not have technical data packages to the quantities required to fulfill immediate operational needs until the technical data packages

were obtained and competition established. The Army Contracting Support Agency concurred with the recommendations, but disagreed with the estimated potential future cost benefits of \$4.7 million because having a technical data package does not guarantee that spare parts can be competed. Monetary benefits were not realized because only 1 of 27 parts was procured.

### Army Audit Agency

**Report SR 92-207, "Technical Data Packages," August 10, 1992.** The subject report states that the Army did not adequately plan for the acquisition of technical data packages, did not actively pursue Government-purpose license rights to technical data, and did not effectively use reverse engineering to develop technical data packages needed to increase competition and reduce costs. The report also states that Army procedures for identifying open contracts and planned awards for parts affected by changes to technical data were not adequate and that the Army needed to better manage the implementation of its automated data repositories. The report recommended that the Assistant Secretary of the Army (Research, Development, and Acquisition) develop guidance on materiel developers' planning for technical data acquisitions and participate in the Government - Industry Committee on rights in technical data. The Assistant Secretary of the Army (Research, Development, and Acquisition) concurred with both recommendations. The report also recommended that the Army Materiel Command establish a permanent Army-wide reverse engineering program and develop plans and milestones to implement a standard automated system. The system identifies open contracts and plans awards affected by the engineering changes to spare parts in technical data packages throughout the command. The Army Materiel Command agreed with both recommendations.

**Report NR 92-200, "Technical Data Packages: Fort Monmouth, New Jersey," January 7, 1992.** The subject report states that the Communication-Electronics Command did not adequately use technical data to increase competition. About \$3.4 billion was budgeted for system acquisition plans in future years; however, the plans did not clearly explain how technical data would be used for competition or specify restrictions on data rights. The report recommended that the program executive officers develop detailed instructions for project managers explaining how to discuss competition in acquisition plans. The program executive officer for Communications Systems did not concur with the recommendation, believing that its current policy was adequate and that the recommendation could go beyond the requirements of the Federal Acquisition Regulation. During the resolution process, the Army agreed to include requirements and procedures needed to buy technical data and technical data rights when updating Army regulations to implement DoD acquisition directives. The Communications-Electronics Command instituted a formal coordination policy on acquisition plans and developed additional internal guidance on review responsibilities.

## Appendix B. Summary of Prior Audits and Other Reviews

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**Report SR 92-200, "Technical Data Packages: U.S. Army Missile Command Huntsville, Alabama," December 2, 1991.** The subject report states that a review of acquisition plans and strategies for three major weapon systems showed that system developers did not prepare cost-benefit analyses to support decisions to acquire technical data packages and did not identify the resources needed to acquire and maintain technical data. The report recommended that system developers, when planning for future acquisitions of technical data, perform cost-benefit analyses supporting technical data acquisition and specify in financial plans the resources needed to acquire technical data and maintain it. The program executive offices partially concurred with the recommendations and proposed acceptable alternative actions to satisfy the recommendations.

**Report EC 91-205, "Technical Data Package: U.S. Army Tank-Automotive Command, Warren, Michigan," August 12, 1991.** The subject report states that materiel developers did not always adequately specify plans to buy technical data or include required information in acquisition plans to justify the type of technical data the Army was buying. The report recommended requiring acquisition planning for technical data that adequately specify future requirements for vehicles, components, and repair parts; extent of restricted data and plans for obtaining rights to the data; cost-benefit analyses; resource requirements; and the consequences of not buying competitive technical data. The program executive officer concurred with the recommendations.

### Air Force Audit Agency

**Project No. 92064007, "Engineering Data Acquisition and Management" February 28, 1994.** The subject report states that the Air Force Materiel Command neither adequately completed engineering data planning nor adequately defined engineering data requirements for the five weapon systems (seven contracts) reviewed. As a result, program managers did not have a detailed planning document to show how they would plan for and acquire engineering data, place essential engineering data on contracts, or have complete historical information to maintain continuity in the data management program. The report recommended that Deputy Chief of Staff Logistics, in coordination with the Office of the Assistant Secretary of Acquisition, issue a memorandum instructing program managers to place sufficient priority on the engineering data acquisition function by assigning a program Engineering Data Management Office as early as possible in the acquisition cycle no later than the beginning of the demonstration and validation phase of the programs and by preparing a data management plan, in accordance with Air Force Regulation 800-34, which provides detailed plans for accomplishing the engineering data acquisition function. The Deputy Chief of Staff Logistics and the Office of the Assistant Secretary of Acquisition concurred, stating that a memorandum would be issued instructing program managers to place sufficient priority on the engineering data acquisition function, by assigning a program Engineering Data Management Office as early as possible in the acquisition cycle, no later than the beginning of the demonstration and validation phase, and preparing a data management plan in accordance with Air Force Regulation 800-34.

## Appendix B. Summary of Prior Audits and Other Reviews

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**Project No. 0046412, "Air Force Management of Rights in Technical Data," September 20, 1990.** The subject report states that data managers and contracting officers were not formally challenging contractor's limited rights claims and resolving whether the claims were valid. The report recommended that Air Force Regulation 800-34, "Engineering Data Acquisition," be revised to establish time limits for resolving contractor data rights claims. The report also recommended that contracting officers formally challenge contractor data rights claims when the contractor fails to respond to data managers informal inquiries. The Air Force concurred with the recommendations. The revised Federal Acquisition Regulation 800-34 will require data managers to request a formal contracting officer challenge to the data rights claims when informal attempts to resolve the claims are unsuccessful. Contracting officers should unilaterally determine whether the contractor's data rights claims are valid if the contractor did not submit substantiating documentation to support the claims within a specified period.

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## Appendix C. Sample Items for Prechallenge Letter

These sample items were taken from Air Force Regulation 800-34, Air Force Regulation 800-34 Supplement 1, and the prechallenge letter the prime contractor was asked to issue to subcontractors. The Army and the Navy have no requirements on what should be stated in a prechallenge letter.

An Air Force contracting officer may include the following requirements in a prechallenge letter:

- short statement as to why the proprietary legend is appropriate and should not be removed;
- part number;
- application or next higher assembly identification;
- description of item, material, or feature that causes the item to be proprietary;
- period when the item, process, material, or feature was developed causing the item, process, material, or feature to be proprietary;
- source of funds;
- use of any Government funds;
- customer other than the U.S. Government;
- for commercial items only, a record of previous customers and sale dates;
- for noncommercial items, a copy of the basic (first issue) drawing, showing date of preparation; and
- statement that the item, component, or process was developed at private expense.

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## Appendix D. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Type of Benefit
1.a.	Management Controls. Reduces the risk of contractors making unsubstantiated assertions of limited rights on technical data.	Nonmonetary.
1.b.	Management Controls. Increases the possibility that the contractor will relinquish limited rights assertions or provide documentation substantiating the assertion.	Undeterminable.*
2.	Management Controls. Increases competitive contracting and reduces spare parts costs.	Undeterminable.*
3.	Economy and Efficiency. Increases the possibility that the contractor will relinquish limited rights assertions or provide documentation substantiating the assertion.	Undeterminable.*
4.	Economy and Efficiency. Increases competitive contracting and reduces spare parts costs.	Undeterminable.*
5.	Economy and Efficiency. Increases the possibility that the contractor will relinquish limited rights assertions or provide documentation substantiating the assertion.	Undeterminable.*

\*We could not readily determine the potential monetary benefits to be realized by implementing the recommendations. The amount of the benefits to be realized would be based on the removal of restrictions on technical data and use of that technical data to acquire spare parts through use of full and open competition.

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## **Appendix E. Organizations Visited or Contacted**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition and Technology, Washington, DC  
Director, Defense Procurement, Washington, DC

### **Department of the Army**

Deputy Chief of Staff for Logistics, Washington, DC  
Army Materiel Command, Alexandria, VA  
Army Communications-Electronics Command, Fort Monmouth, NJ  
Army Missile Command, Redstone, AL  
Army Aviation and Troop Command, St. Louis, MO

### **Department of the Navy**

Assistant Secretary of the Navy (Research, Development and Acquisition),  
Washington, DC  
Naval Air Systems Command, Washington, DC  
Naval Supply Systems Command, Washington, DC  
Naval Aviation Supply Office, Philadelphia, PA  
Naval Air Technical Service Facility, Washington, DC

### **Department of the Air Force**

Deputy Chief of Staff for Logistics, Washington, DC  
Aeronautical Systems Center, Dayton, OH  
Warner Robins Air Logistics Center, Warner Robins Air Force Base, GA

### **Other Defense Organizations**

Defense Plant Representative Office, McDonnell Douglas Aircraft Company,  
St. Louis, MO  
Defense Plant Representative Office, McDonnell Douglas Helicopter Company,  
Mesa, AZ

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## **Appendix F. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition and Technology  
Deputy Under Secretary of Defense (Logistics)  
Director, Defense Logistics Studies Information Exchange  
Under Secretary of Defense (Comptroller)  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)  
Assistant Secretary of Defense (Economic Security)  
Director, Defense Procurement

### **Department of the Army**

Auditor General, Department of the Army  
Commander, Army Aviation and Troop Command

### **Department of the Navy**

Assistant Secretary of the Navy (Financial Management and Comptroller)  
Commander, Naval Air Systems Command  
Commander, Naval Aviation Supply Office  
Auditor General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Program Executive Office for Tactical and Airlift Programs  
Commander, Aeronautical Systems Center  
Commander, Warner Robins Air Logistics Center  
Auditor General, Department of the Air Force

### **Other Defense Organizations**

Director, Defense Contract Audit Agency  
Director, Defense Logistics Agency  
Director, National Security Agency  
Inspector General, National Security Agency  
Defense Plant Representative Office, McDonnell Douglas Aircraft Company, St.  
Louis, MO  
Defense Plant Representative Office, McDonnell Douglas Helicopter Company,  
Mesa, AZ

## Appendix F. Report Distribution

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### Non-Defense Federal Organizations

Office of Management and Budget  
Technical Information Center, National Security and International Affairs Division,  
General Accounting Office

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 National Security, Committee on Appropriations  
House Committee on Government Reform and Oversight  
House Subcommittee on National Security, International Affairs, and Criminal  
Justice, Committee on Government Reform and Oversight  
House Committee on National Security

## **Audit Team Members**

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