Army Acquisition of Services Through The Jet Propulsion Laboratory

Report Number 93-059

February 25, 1993

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MEMORANDUM FOR THE INSPECTOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on the Army Acquisition of Services Through the Jet Propulsion Laboratory (Report No. 93-059)

We are providing this final report for your review and comments. This audit was initiated as a result of an anonymous Hotline allegation that the Army was using the Jet Propulsion Laboratory as a conduit for facilitating procurements. Management comments on a draft of this report were considered in preparing the final report.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, we request that the Army provide additional comments on Recommendation 2. that describe the corrective actions taken or planned, the completion dates for actions already taken, or the estimated dates for completion of planned actions by April 26, 1993.

We appreciate the cooperation and courtesies extended to the audit staff. If you have any questions on this audit, please contact Mr. Richard Jolliffe, Program Director, at (703) 692-2999 (DSN 222-2999), or Mr. Timothy Staehling, Project Manager, at (703) 692-3012 (DSN 222-3012). The planned distribution of this report is listed in Appendix G.

Edward R. Jones
Deputy Assistant Inspector General for Auditing

cc:
Secretary of the Army
Inspector General,
National Aeronautics and Space Administration
Office of the Inspector General, DoD

Audit Report No. 93-059
(Project No. ICA-8004)

February 25, 1993

ARMY ACQUISITION OF SERVICES THROUGH
THE JET PROPULSION LABORATORY

EXECUTIVE SUMMARY

Introduction. This audit was initiated as a result of an
anonymous Hotline allegation that:

- the Army used the Jet Propulsion Laboratory, a federally
  funded research and development center sponsored by the National
  Aeronautics and Space Administration, as a conduit for
  facilitating procurements,

- the Jet Propulsion Laboratory justified its activity by
  adding engineering and overhead costs to these procurements, and

- a possible conflict of interest related to Jet Propulsion
  Laboratory contracting existed.

Objectives. The objectives of this audit were to examine
allegations of improprieties involving Army interagency
acquisitions placed through the Jet Propulsion Laboratory, to
ascertain whether the Army used appropriate acquisition
procedures, and to determine whether internal controls for the
use of interagency acquisitions were adequate.

Audit Results. The Hotline allegation that the Army used the Jet
Propulsion Laboratory as a conduit for facilitating procurements
had merit. The audit disclosed that program officials at three
Army commands circumvented established policy and exceeded their
authority by not obtaining required approvals from contract
officials in placing $10.5 million of interagency acquisitions
through the Jet Propulsion Laboratory. As a result, the Army
paid $1.5 million for add-on costs for services chiefly performed
by Jet Propulsion Laboratory subcontractors. In addition, Army
program officials circumvented public laws and Federal and
Defense acquisition regulations that govern the use of
interagency acquisitions.

The Office of the Inspector General, National Aeronautics and
Space Administration, is reviewing the appropriateness of the Jet
Propulsion Laboratory expenditures for engineering, overhead and
subcontracts; the adequacy of internal controls; and the possible
conflict of interest issue. The Office of the Inspector General,
National Aeronautics and Space Administration, review has not
been completed.
Similar conditions, also involving the Army, were reported in the Inspector General, DoD, Quick-Reaction Report No. 92-069, "DoD Procurements Through the Tennessee Valley Authority," April 3, 1992. The report showed that DoD officials who lacked authority under Federal acquisition regulations to approve interagency acquisitions improperly authorized interagency orders issued to the Tennessee Valley Authority. The Director of Defense Procurement and the Army responded to the report recommendations and implemented procedures that should resolve similar conditions discussed in this report.

Internal Controls. The audit identified material internal control weaknesses relating to the interagency acquisition approval process. See Part I for the internal controls reviewed and the finding in Part II for details of these weaknesses.

Potential Benefits of Audit. The report recommendations should produce monetary benefits through the elimination of unauthorized interagency acquisitions and improved control of the interagency acquisition approval process. However, we could not quantify these potential monetary benefits. Appendix E summarizes the potential benefits resulting from the audit.

Summary of Recommendations. We recommended that the commanders of the Army Armament Research, Development, and Engineering Center, the Army Missile Command, and the Army Tank-Automotive Command prohibit the placement of supplemental work under existing interagency acquisitions if not approved by DoD contracting officers and take disciplinary action against program officials who knowingly exceeded their authority by placing interagency acquisitions with the Jet Propulsion Laboratory. We also recommended that the commanders of the Army Armament Research, Development, and Engineering Center and the Army Tank-Automotive Command establish local procedures for the use of interagency acquisitions in accordance with current DoD and Army policies.

Management Comments. The Office of the Deputy Assistant Secretary of the Army (Procurement) provided comments to a draft of this report. The Army generally concurred with the report recommendations but did not agree with all the audit conclusions. The Army proposed alternative wording, which we accepted, to the recommendation related to establishing procedures for the use of interagency acquisitions. The Defense Contract Audit Agency and the Inspector General, National Aeronautics and Space Administration, provided comments to the draft report that we considered in preparing the final report. The full discussion of the responsiveness of the Army comments is in Part II and the complete text of the Army comments is in Part IV of the report. We request that the Army provide additional comments by April 26, 1993.
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Department of the Army

This report was prepared by the Contract Management 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, (703) 614-6303 (DSN 224-6303).
PART I - INTRODUCTION

Background

The audit was initiated as a result of an anonymous Hotline allegation that the Army was using the Jet Propulsion Laboratory (JPL) as a conduit for facilitating procurements. The allegation stated that JPL consented to the Army procurement requests to maintain the Laboratory's workload, and that JPL justified its activity by adding engineering and overhead costs to these procurements. Another concern in the allegation involved a possible conflict of interest related to JPL contracting.

The Economy Act of 1932, 31 U.S.C. 1535 (Appendix A), provides the authority and conditions for interagency acquisition of goods and services. The Economy Act authorizes the head of an agency or major organizational unit within an agency to acquire goods or services from another agency if:

- the other agency is in a position to provide or obtain by contract the services or goods ordered;

- the head of the agency or unit determines that it is in the best interest of the Government; and

- the head of the agency determines that the services cannot be obtained as conveniently or cheaply from a commercial enterprise.

The Federal Acquisition Regulation (FAR) part 6, "Competition Requirements," section 6.002, "Limitations," states that no agency shall contract for supplies and services from another agency for the purpose of avoiding the requirements of competitive contracting. The FAR part 17.5, "Interagency Acquisitions Under the Economy Act," section 17.502, "General," requires the head of the requesting agency or a designee to make a determination that orders placed under the Act with another agency are in the best interest of the Government prior to placing the orders. The Defense Federal Acquisition Regulation Supplement (DFARS), subpart 217.5, "Interagency Acquisitions Under the Economy Act," section 217.502, "General," provides that the DoD contracting officer is the designee to make the determination required by the FAR. The purpose of the FAR and DFARS requirements is to ensure that the expert knowledge of DoD contracting officers is fully utilized in determining that it is in the best interest of DoD to obtain required supplies or services through an interagency acquisition rather than through direct contracting by DoD.

JPL is a National Aeronautics and Space Administration (NASA)-sponsored federally funded research and development center
(FFRDC), governed by the Office of Federal Procurement Policy Letter 84-1, "Federally Funded Research and Development Centers," and operated by the California Institute of Technology. DoD transferred funds totaling $478.7 million (see Appendix B) to JPL for DoD-sponsored work during FYs 1990 and 1991.

Funds Transferred to JPL During FYs 1990 and 1991 for DoD-Sponsored Work

![Pie chart showing funds transferred to JPL during FYs 1990 and 1991 for DoD-sponsored work.]

**Objectives**

The objectives of this audit were to examine allegations of improprieties involving Army interagency acquisitions placed through JPL, to determine whether the Army used appropriate acquisition procedures, and to determine whether internal controls for the use of interagency acquisitions were adequate. The specific allegations are discussed in Part II of this report.

**Scope**

*Locations and interagency acquisitions reviewed.* We reviewed the interagency acquisition process at the Army Missile Command; the Army Armament Research, Development, and Engineering Center; and the Army Tank-Automotive Command to determine:

- the validity of the allegations of improprieties involving interagency acquisitions through JPL, and
- the effectiveness of internal controls applicable to the interagency acquisition process.

We reviewed Military Interdepartmental Purchase Requests issued from FY 1988 to FY 1991 that transferred $10.5 million to JPL for DoD-sponsored work directly related to the allegations. Further, we reviewed JPL Task Plans for DoD-sponsored work performed from FY 1988 to FY 1991 and Army correspondence with JPL that was
directly related to the allegations. We also interviewed program officials involved with the interagency acquisitions related to the specific allegations.

On October 29, 1991, and later clarified on March 26, 1992, we requested the Office of the Inspector General (OIG), NASA, to review JPL management and administration of the Army-sponsored interagency acquisitions on four task orders related to the specific allegations to determine:

- the total costs incurred/billed by individual cost elements,

- the subcontracts' values and basis for JPL awards,

- the appropriateness of JPL expenditures, and

- the adequacy of internal controls for administering the task orders and ensuring the billing/vouchers are properly prepared.

The OIG, NASA, completed part of its review and provided us listings of total costs incurred by cost element and billed as of June 21, 1992, together with schedules of subcontracts issued. The OIG, NASA, review of the appropriateness of JPL expenditures for engineering, overhead and subcontracts; the adequacy of JPL internal controls; and the possible conflict of interest issues was not complete as of the date of this report.

Audit period and standards. This economy and efficiency audit was made from September 1991 through March 1992 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included such tests of internal controls as were considered necessary. The results of the audit are qualified to the extent that we did not interview JPL personnel or review JPL accounting records and internal controls since the OIG, NASA, is responsible for auditing JPL. The OIG, NASA, is reviewing the adequacy of JPL internal controls over the management and administration of the four task orders related to the specific hotline allegations.

The OIG, NASA, provided computer-processed DoD funding data, which represented funds transferred to JPL during FYs 1990 and 1991. We determined that the DoD funding data were reliable by verifying the data to selected DoD activity records.

Internal Controls

Internal controls assessed. We evaluated internal controls covering the interagency acquisition process. Specifically, we reviewed the Army approval process for interagency acquisitions.
Internal control weaknesses. The audit identified material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Controls were either not established or were not effective in precluding unauthorized Army officials from approving interagency acquisitions or from inappropriately using JPL as a conduit for facilitating procurements to specific contractors. Recommendations 1. and 2., if implemented, will correct the weaknesses. We could not determine the monetary benefits to be realized by implementing these recommendations because it was not possible to project future benefits based on our review of the allegations. Copies of the final report will be provided to the senior official responsible for internal controls within the Army.

Prior Audits and Other Reviews

Since 1990, the OIG, DoD, issued six reports concerning contracting by interagency acquisitions. Also, the Army and Navy issued reports addressing the use of interagency acquisitions. These reports disclosed that DoD officials, who lacked authority under the FAR and DFARS to approve interagency acquisitions, improperly authorized interagency orders to transfer expiring funds to achieve technical obligation of those funds. In addition, interagency orders involved "contract offloading" or using non-DoD contracting capabilities rather than the DoD contracting system. Synopses of these reports are shown in Appendix C.

Other Matters of Interest

Although the Defense Contract Audit Agency (DCAA) reviews parts of the JPL accounting system through ongoing audits, we could not determine when the JPL accounting and cost estimating systems were last totally reviewed by either NASA or DCAA. However, the NASA Resident Office (NRO), as a part of a NASA-wide initiative, on May 11, 1992, requested DCAA to review the JPL estimating system. In addition, JPL cost proposals to its customers are not subject to cost and pricing data submission requirements. The DCAA suboffice at JPL has encountered problems with timely access to accounting and contracting data at JPL. Specifically, in certain instances, accounting data requested by DCAA requires comprehensive reconciliation procedures and is not received in a timely manner.

The Senate Committee on Government Affairs, Subcommittee on Oversight of Government Management, cited in its report, "Inadequate Federal Oversight of Federally Funded Research and Development Centers," July 8, 1992, that JPL was not required to annually submit indirect costs for audit. On September 27, 1988, NASA granted JPL a deviation from the contract clause at FAR subsection 52.216-7, "Allowable Cost and Payment." This
deviation waived all FAR requirements for audit of indirect costs and indirect billing rates. As a result, NASA treats all JPL expenses as direct costs. The subcommittee concluded that the lack of audit of indirect costs historically resulted in contract overcharges and that the NASA deviation from the FAR simply rejects the standard government practice that requires indirect costs to be audited annually.

At the time of our audit, the General Accounting Office (GAO) was performing a survey review (Assignment Code 397046) at JPL based on a congressional request from the Chairmen, Senate Committee on Governmental Affairs, and Subcommittee on Oversight of Government Management. The objective of the review was to evaluate NASA management of the contract for the operation of JPL. The GAO survey objectives were to analyze the existing terms of the contract, to analyze contract implementation, and to analyze the effectiveness of NASA in controlling costs and in ensuring the wise use of Federal funds. The GAO scope of work will cover, but will not be limited to, the impact of the JPL contract waivers and exemptions from Federal regulations, guidelines, and standard contract clauses; the effectiveness of cost controls, audits, and accounting practices; and the quality of NASA contract administration and oversight.
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PART II - FINDING AND RECOMMENDATIONS

ARMY USE OF INTERAGENCY ACQUISITIONS THROUGH THE JET PROPULSION LABORATORY

Program officials at three Army commands circumvented established laws and regulations and exceeded their authority by not obtaining required approvals from contract officials in placing interagency acquisitions through JPL. This condition occurred because the three commands did not have established or effective internal control procedures to preclude the unauthorized use of interagency acquisitions. As a result, the Army paid $1.5 million of $10.5 million in procurement costs for add-on costs, such as administrative management fees and overhead, to JPL for services that were primarily performed by JPL subcontractors.

DISCUSSION OF DETAILS

Background

An anonymous allegation charged the Army with using JPL as a conduit for facilitating procurements. The allegation stated that JPL cooperated with the Army requests to maintain the JPL work load, and that JPL justified its participation by adding engineering and overhead costs to these procurements. Another concern in the allegation involved a possible conflict of interest related to JPL contracting. The anonymous allegation cited three examples of improper Army procurements:

- The Army directed JPL to procure tank kits from Israel. As part of this procurement, JPL added engineering and overhead costs to test and evaluate the tank kits. Although the NRO contracting officer refused to grant a waiver from the Buy American Act for this procurement, the Army subsequently obtained a waiver from an unknown source.

- The Army Missile Command (MICOM) directed JPL to procure the services of the Perkin Elmer Corporation to develop an optical correlator seeker. The majority (79 percent) of the total cost ($11,896,000) was for the contractor effort. JPL added $763,000 for engineering direct compensation and an additional $1,475,000 for overhead expenses.

The allegation also claimed a possible conflict of interest related to JPL contracting for a study to introduce a new artillery propellant system for the Army.

Tank Kit from Israel

subpart 17.5, "Interagency Acquisitions Under the Economy Act," and DFARS subpart 217.5, "Interagency Acquisitions Under the Economy Act," when they exceeded their authority by not obtaining required approvals from contract officials in placing interagency acquisitions with JPL. DASCP personnel told us they were unaware of the requirement for obtaining contracting officer approval on interagency acquisitions. DASCP officials directed JPL to procure a tank teleoperation kit (tank kit) from Israel Aircraft Industries, Limited, (Israel Aircraft) for a total cost of $770,000. The tank kit is a robotic device designed to provide remote control driving capability to a combat vehicle. DASCP officials directed the procurement through JPL to:

- obligate special funds that would otherwise have expired December 31, 1990,
- obtain expedient contracting and avoid more detailed and time-consuming Army procurement channels, and
- obtain services from a specific contractor.

In addition, the DASCP office did not perform cost analyses to determine if the interagency acquisition for the tank kit through JPL was more economical and efficient than obtaining the services directly from Israel Aircraft or to determine if JPL cost proposals were reasonable. As a result, TACOM paid $170,000 for JPL negotiation and technical management services. The JPL scope of work was to monitor the acquisition and preparation of the statement of work leading to the award for the tank kit. The JPL subcontractor, Israel Aircraft, was paid $600,000 and was responsible for the overall tank kit system design, engineering, integration, testing, quality assurance, acceptance, and final delivery to TACOM.

Our review determined that the allegation concerning the waiver from the Buy American Act was not valid. An NRO contracting officer, not an unknown authority, authorized the waiver to JPL for the procurement of the tank kit system based on documentation from TACOM.

**MICOM Directed Procurement**

Officials of the MICOM Research, Development, and Engineering Center circumvented public law, FAR, and DFARS policy (as referenced under the tank kit discussion above) when they exceeded their authority by not obtaining required approvals from MICOM contracting officials in placing interagency acquisitions with JPL. MICOM officials directed JPL to negotiate a follow-on subcontract with Perkin Elmer Corporation to prevent program delays. MICOM justified the procurement for JPL because it was a follow-on contract (JPL awarded the initial contract) for the continued development of highly specialized equipment. However, MICOM personnel told us they were unaware of the requirements for obtaining contracting officer approval on interagency
acquisitions. In addition, MICOM had not established effective internal control procedures to preclude the unauthorized use of interagency acquisitions. As a result, MICOM contracting officials were not utilized to determine if the procurement could have been performed more conveniently or economically by contracting directly with Perkin Elmer Corporation.

The JPL procurement plan for the follow-on contract with Perkin Elmer Corporation documented that all work was to be performed at the contractor’s facility and at MICOM. The plan also indicated that Perkin Elmer Corporation was the only known source capable of performing the work. During FYs 1988 through 1991, Perkin Elmer Corporation received 74.5 percent ($6,760,000) of the project actual costs of $9,073,000. As a result of the Army directing the procurement through JPL, the Army paid overhead costs of $1,263,000 that represented 55 percent of JPL actual costs totaling $2,313,000* incurred during FYs 1988 through 1991.

Actual Costs of MICOM-Directed Procurement
From FYs 1988 Through 1991

Conflict of Interest

The Army Armament Research, Development, and Engineering Center (ARDEC), Picatinny Arsenal, New Jersey, placed an interagency acquisition with JPL to conduct a study to introduce a new artillery propellant system for the Army. JPL awarded a subcontract to Cypress International, Incorporated (Cypress), to assist in completing Phase 1 of the study.

JPL determined that Cypress was ineligible for the award of Phase 2, the follow-on study, because of a potential conflict of

*JPL actual costs equal the total of overhead, direct costs, and NASA contract administration fee.
interest. The potential conflict was that Cypress was teamed as a subcontractor to FMC Corporation in a proposal to develop another type of artillery propellant.

Cypress-MPRI relationship. Since Cypress was ineligible for the award, JPL noncompetitively selected Military Professional Resources, Incorporated (MPRI), to perform work for the Phase 2 study. However, Cypress is a major stockholder in MPRI, and the Chief Executive Officer of MPRI is also on the board of directors of Cypress. In addition, employees of MPRI assisted in the Phase 1 effort. One MPRI team member who worked on the Phase 2 study was employed by Cypress to assist in the Phase 1 effort. Another MPRI employee on the Phase 2 study was also contracted by JPL as an independent consultant to assist in the review of Phase 1 work performed by Cypress.

Interviews with ARDEC officials concerning the alleged conflict of interest disclosed that ARDEC:

- selected JPL based on its expertise in liquid propulsion systems,
- officials were unaware of the Cypress and MPRI relationship, and
- officials stated if they had been aware of the relationship, they would not have approved the contract with MPRI because of a possible conflict of interest.

The OIG, NASA, will address the Cypress-MPRI conflict of interest issue as part of its current audit of JPL task orders directly related to the specific allegations.

Use of interagency acquisitions. ARDEC officials did not comply with established public law or with FAR and DFARS policy as referenced under the tank kit discussion when they exceeded their authority by not obtaining required approvals from ARDEC contracting officials in placing interagency acquisitions with JPL. The purpose of the FAR and DFARS requirements are to ensure that interagency acquisitions cannot otherwise be contracted by DoD, that the acquisition does not circumvent competition requirements and that the acquisition is in the best interest of the Government. ARDEC sponsored the addition of Task 3 to the Phase 1 effort under JPL Task Plan 81-2808, "Safe Liquid Propellant Technology," Revision A, to study the implementation effects of introducing a new artillery propellant system. The JPL scope of work for Task 3 was to draft statements of work and to manage subcontracts. On January 28, 1988, JPL awarded Cypress a $225,000 noncompetitive contract for the implementation effects study. Prior to contract award, on July 29, 1987, ARDEC officials, after reviewing the Cypress statement of work for the implementation effect study, notified JPL that Cypress was the desired company for this effort. In addition, ARDEC officials placed the interagency acquisition for the study with JPL knowing
that JPL did not the experience required to complete the task (see ARDEC message in Appendix D). On August 21, 1987, the JPL sole-source justification for the award to Cypress stated that, "the time and funding required to bring JPL or an alternate consultant up to speed on the specific issues critical to this task would be prohibitive." The requirements for the implementation effect study further led to a noncompetitive contract with MPRI. ARDEC officials stated that the work contributed by JPL to the study consisted of directing the study activities and briefing the results to Government officials. As a result of adding Task 3, ARDEC paid JPL for negotiation and technical management services in addition to paying JPL subcontractors that performed the implementation effect study.

**Internal Controls**

**Internal control weaknesses.** Internal controls were inadequate to preclude the unauthorized issuance of interagency orders. Program officials at three Army commands circumvented established FAR and DFARS policy and exceeded their authority by not obtaining required approvals from DoD contracting officers before placing interagency orders with JPL. In response to prior audit reports of interagency acquisitions through the Library of Congress (Report No. 90-034) and the Department of Energy (DoE) (Report No. 90-085), officials of the Department of Defense took actions that were recorded by the Inspector General as complete and responsive as of December 18, 1990. These more recent conditions can be attributed to officials of these commands circumventing or misunderstanding the FAR and DFARS requirements and the clarifying guidance issued in response to those audit reports. In DoD's FY 1991 Annual Statement of Assurance, the Army identified the inappropriate issuance of interagency acquisitions as a material weakness. The target date for correction of the weakness was FY 1992.

**Internal controls established.** On March 7, 1991, the Army Materiel Command (AMC) issued an interagency acquisition policy, instituting required controls. The policy required an AMC Principal Assistant Responsible for Contracting to write a concurrence before issuing an interagency acquisition between an AMC command and another Government agency. However, at the three AMC commands directly related to the anonymous allegation involving interagency acquisitions at JPL, only MICOM had issued guidance and established procedures for the use of interagency acquisitions. In accordance with AMC policy, MICOM established new policy and compliance guidance that requires the Principal Assistant Responsible for Contracting to review and approve the issuance of interagency acquisitions by program officials to other Government agencies. This MICOM policy conforms with FAR subpart 17.5.

The Army, in response to the OIG, DoD, Report No. 92-069, "DoD Procurements Through the Tennessee Valley Authority," April 3, 1992, issued a December 26, 1991, message to all legal offices,
comptrollers/resource managers, and finance and accounting offices requiring that all Military Interdepartmental Purchase Requests to non-DoD agencies and related interagency agreements shall be approved in writing by an Army contracting officer and shall be reviewed by legal counsel.

Conclusions

Program officials at the three Army commands did not obtain the proper approvals prior to entering into interagency acquisitions with JPL. In each allegation reviewed, a contracting official did not approve the interagency acquisition or prepare a determination and finding concluding that the acquisition through JPL was in the best interest of the Government and that the services could not be obtained as conveniently or more economically from a commercial source. With the exception of MICOM, corrective actions had not been implemented on similar deficiencies reported in prior audits of interagency acquisitions. These conditions were caused by the absence of established internal controls to preclude the unauthorized use of interagency acquisitions. In addition, program officials at the three Army commands circumvented public laws and Federal and Defense acquisition regulations that prescribe the use of interagency acquisitions. This may have resulted in the Army paying $1.5 million of $10.5 million in procurement costs for add-on costs such as administrative management fees and overhead to JPL for services that were mostly performed by JPL subcontractors.

Finally, program officials at the three Army commands circumvented competition requirements by directing JPL to contract with specific contractors. DFARS section 217.503, "Determination Requirements," requires that the justification for using an interagency acquisition be supported by a finding that the acquisition cannot be provided by contract as conveniently or more economically by a commercial source. Compliance with the DFARS requirement will prevent the issuance of interagency acquisitions to circumvent the competitive contracting specified by FAR section 6.002. We concluded that the interagency acquisitions issued by MICOM and ARDEC officials should have been considered for competitive procurements. Detailed procedures for the finding to support the justification should be established to further improve the controls of the interagency acquisition approval process.
RECOMMENDATIONS, MANAGEMENT COMMENTS, AND AUDIT RESPONSE

1. We recommend that the commanders of the Army Armament Research, Development, and Engineering Center; the Army Missile Command; and the Army Tank-Automotive Command:

   a. Prohibit the placement of supplemental work under existing interagency acquisitions if not properly approved by DoD contracting officers.

   b. Take disciplinary action against program officials who knowingly exceeded their authority by placing interagency acquisitions with the Jet Propulsion Laboratory.

Management comments. The Director for Procurement Policy, Office of the Deputy Assistant Secretary of the Army (Procurement), provided summary Army comments for the three Army commands. The Army concurred with Recommendation 1.a. and nonconcurred in part with Recommendation 1.b. The Army stated that the report contains no evidence that officials knowingly exceeded their authority. Further, guidance was issued as cited in the report, to ensure that acquisition personnel were aware of Economy Act requirements as implemented by the FAR and DFARS.

Audit response. We agree with the Army that their guidance now in place should ensure that acquisition personnel are aware of Economy Act requirements as implemented in the FAR, DFARS, and Army regulations and this satisfies the intent of Recommendation 1.a. The Army program officials' actions did violate the acquisition regulations related to placement of Economy Act orders. Our audit work did not disclose that the officials intentionally disregarded the regulations. The Army response implies that Army officials' lack of knowledge regarding DoD acquisition regulations is acceptable. We accept the Army position that the Army does not wish to initiate disciplinary actions unless it can be proved there was a willful violation of acquisition regulations. No further action is required of the Army on Recommendation 1.b.

2. We recommend that the commanders of the Army Armament Research, Development, and Engineering Center and the Army Tank-Automotive Command establish local procedures for the use of interagency acquisitions in accordance with current DoD and Army policies and regulations.

Management comments. The Army concurred and stated that this recommendation should be revised to require the commanders to promulgate local procedures for the use of interagency acquisitions in accordance with current DoD and Army policies rather than just policy issued by the Army Materiel Command.
Audit response. We revised Recommendation 2. based on the Army comments. We request the Army provide additional comments on Recommendation 2. that describe the corrective actions taken or planned, including the completion dates for actions already taken or the estimated dates for completion of actions planned.

Army comments to the finding. The Army did not agree that the finding reflected the facts relating to responsibilities for procurements with JPL. The Army also did not concur with the audit report assertion that $1.5 million paid for JPL expenses was excessive, unreasonable, or inappropriate.

The Army further stated that MICOM personnel issued orders to JPL from FY 1988 through FY 1991 under the misimpression that a non-binding Memorandum of Understanding between JPL (not NASA) and the Under Secretary of the Army authorized MICOM to issue interagency acquisitions to JPL. The Army further stated that the Research, Development, and Engineering Center, at MICOM, had issued no additional funding to NASA for JPL since August 1991.

The Army stated that if the work could have been performed by TACOM personnel, the total estimated cost for the tank kit work would have been between $190,000 and $220,000, which exceeded JPL charges of $170,000 for negotiation and technical management services. The Army further stated that the $170,000 paid to JPL was not wasted.

The Army comments also requested that we clarify certain facts related to the ARDEC acquisition through JPL.

Audit response. We disagree with the Army that our report does not reflect the facts relating to responsibilities for procurements with JPL. We continue to believe that the basic issue is that the Army activities did not follow required procedures to determine if the interagency acquisitions were in the best interest of the Government. Also, the Army did not determine whether these acquisitions could have been competitively procured directly from commercial sources. Therefore, we believe that the Army paid JPL $1.5 million for add-on costs, such as administrative and management fees, and for services that were mostly performed by JPL subcontractors. The OIG, NASA, audit will examine the appropriateness of the JPL expenditures.

The Memorandum of Understanding between the Under Secretary of the Army and JPL in no way precluded the Army from complying with Federal regulations and the requirements of the Economy Act governing the use of interagency acquisitions. We agree with the Army that MICOM personnel and managers are now aware of the requirements and procedures for obtaining approval of Economy Act transactions.
Finally, the Army provided no detailed support for the total estimated cost of $190,000 to $220,000 if the Army had performed the work at TACOM. Additionally, our report does not state that the $170,000 paid to JPL was wasted. The report concluded that officials of the Directorate for Advanced Systems, Concepts, and Planning, TACOM, did not perform cost analyses to determine if the interagency acquisition for the tank kit through JPL was more economical and efficient than obtaining the services directly from Israel Aircraft. The acquisition of the tank kit is similar to most unauthorized interagency acquisitions. Unless the proper cost analyses are performed and the proper approvals of knowledgeable officials are obtained before the acquisition, there will always be the question of whether or not the acquisition was economical or in the best interests of DoD.

We have revised the report to incorporate Army comments related to the ARDEC acquisition through JPL.
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PART III - ADDITIONAL INFORMATION

APPENDIX A - Title 31, United States Code, Section 1535 - The Economy Act

APPENDIX B - DoD Funds Transferred to the Jet Propulsion Laboratory

APPENDIX C - Synopses of Prior Audits and Other Reviews

APPENDIX D - Army Message to the Jet Propulsion Laboratory

APPENDIX E - Summary of Potential Benefits Resulting From Audit

APPENDIX F - Activities Visited or Contacted

APPENDIX G - Report Distribution
§ 1535. Agency agreements

(a) The head of an agency or major organizational unit within an agency may place an order with a major organizational unit within the same agency or another agency for goods or services if—

(1) amounts are available;

(2) the head of the ordering agency or unit decides the order is in the best interest of the United States Government;

(3) the agency or unit to fill the order is able to provide the ordered goods or services; and

(4) the head of the agency decides ordered goods or services cannot be provided as conveniently or cheaply by a commercial enterprise.

(b) Notwithstanding subsection (a)(3) of this section, the Secretary of Defense, the Secretary of a military department of the Department of Defense, the Secretary of Transportation in carrying out duties and powers related to aviation and the Coast Guard, the Secretary of the Treasury, the Administrator of General Services, and the Administrator of the Maritime Administration may place orders under this section for goods and services that an agency or unit filling the order may be able to provide or procure by contract.

(c) Payment shall be made promptly by check on the written request of the agency or unit filling the order. Payment may be in advance or on providing the goods or services ordered and shall be for any part of the estimated or actual cost as determined by the agency or unit filling the order. A bill submitted or a request for payment is not subject to audit or certification in advance of payment. Proper adjustment of amounts paid in advance shall be made as agreed to by the heads of the agencies or units on the basis of the actual cost of goods or services provided.

(d) An order placed or agreement made under this section obligates an appropriation of the ordering agency or unit. The amount obligated is deobligated to the extent that the agency or unit filling the order has not incurred obligations, before the end of the period of availability of the appropriation, in—

(1) providing goods or services; or

(2) making an authorized contract with another person to provide the requested goods or services.

(e) This section does not—

(1) authorize orders to be placed for goods or services to be provided by convict labor; or

(2) affect other laws about working funds.

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### APPENDIX B — DoD FUNDS TRANSFERRED TO THE JET PROPULSION LABORATORY

<table>
<thead>
<tr>
<th>Service Organization</th>
<th>FY 1990</th>
<th>FY 1991</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Army</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Systems Concepts</td>
<td>$350,000</td>
<td>$350,000</td>
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<tr>
<td>Army Materiel Command</td>
<td>183,000</td>
<td>183,000</td>
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<tr>
<td>Army Forces Command</td>
<td>374,815</td>
<td>374,815</td>
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<tr>
<td>Army Research Office</td>
<td>$270,000</td>
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<td>423,680</td>
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<tr>
<td>All Source Analysis</td>
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<td>Systems Program Office</td>
<td>178,502,047</td>
<td>95,506,929</td>
<td>274,008,976</td>
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<tr>
<td>Army Science Board</td>
<td>12,186,644</td>
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<td>12,186,644</td>
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<tr>
<td>Ballistic Research Laboratory</td>
<td>15,000</td>
<td>85,000</td>
<td>100,000</td>
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<tr>
<td>Communications-Electronics Command</td>
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<td>21,393,011</td>
<td>47,896,944</td>
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<td>Corps of Engineers</td>
<td>115,000</td>
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<td>115,000</td>
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<tr>
<td>Center for Signal Warfare</td>
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<tr>
<td>Center for Space Systems</td>
<td>100,000</td>
<td></td>
<td>100,000</td>
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<tr>
<td>Engineer Topographic Laboratory</td>
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<tr>
<td>Joint Warfare Center</td>
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<td>Laboratory Command</td>
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<td>Missile Command</td>
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<td>Missile &amp; Space Intelligence Center</td>
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<td>Operational Test &amp; Evaluation Command</td>
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<td>5,425,000</td>
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<td>17,325,000</td>
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<tr>
<td>Strategic Defense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Command</td>
<td>10,000</td>
<td>100,000</td>
<td>110,000</td>
</tr>
<tr>
<td>Tank-Automotive Command</td>
<td>1,400,000</td>
<td>894,500</td>
<td>2,294,500</td>
</tr>
<tr>
<td>Training Command</td>
<td>486,262</td>
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<tr>
<td>Vulnerability Assessment Laboratory</td>
<td>250,000</td>
<td>330,000</td>
<td>580,000</td>
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<tr>
<td>Waterway Experiment</td>
<td>115,000</td>
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<tr>
<td>White Sands Missile Range</td>
<td>77,000</td>
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<tr>
<td>Other-Army*</td>
<td>18,756,531</td>
<td>9,553,591</td>
<td>28,310,122</td>
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<tr>
<td><strong>Army Total</strong></td>
<td>$255,214,281</td>
<td>$151,797,258</td>
<td>$407,011,539</td>
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*Activities were not identified by NASA.*
## APPENDIX B - DOD FUNDS TRANSFERRED TO THE JET PROPULSION LABORATORY (cont'd)

<table>
<thead>
<tr>
<th>Service - Organization</th>
<th>FY 1990</th>
<th>FY 1991</th>
<th>Total</th>
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<tbody>
<tr>
<td>Navy</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Chief of Naval Research</td>
<td>$647,286</td>
<td>$533,700</td>
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<tr>
<td>Naval Air Development Center</td>
<td>200,000</td>
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<tr>
<td>Naval Civil Engineering Laboratory</td>
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<tr>
<td>Naval Oceanography Command</td>
<td>50,000</td>
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<tr>
<td>Naval Ocean Systems Center</td>
<td>22,605</td>
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<tr>
<td>Naval Research Laboratory</td>
<td>558,000</td>
<td>605,600</td>
<td>1,163,600</td>
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<tr>
<td>Naval Space Warfare Command</td>
<td>175,000</td>
<td>258,000</td>
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<tr>
<td>Naval Surface Warfare Center</td>
<td>115,000</td>
<td>115,000</td>
<td></td>
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<tr>
<td>Naval Weapons Center</td>
<td>194,000</td>
<td>151,000</td>
<td>345,000</td>
</tr>
<tr>
<td>Navy Ocean Atmosphere Research Laboratory</td>
<td>100,000</td>
<td>375,000</td>
<td>475,000</td>
</tr>
<tr>
<td><strong>Navy Total</strong></td>
<td>$1,747,891</td>
<td>$2,238,300</td>
<td>$3,986,191</td>
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<tr>
<td>Air Force</td>
<td></td>
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<tr>
<td>Aeronautical Systems Division</td>
<td>$15,000</td>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td>Air Logistics Center, Kelly Air Force Base</td>
<td>$5,000</td>
<td>5,084</td>
<td>10,084</td>
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<tr>
<td>Armament Division</td>
<td>345,000</td>
<td>150,000</td>
<td>495,000</td>
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<tr>
<td>Astronautics Laboratory</td>
<td>8,300,780</td>
<td>4,704,921</td>
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<tr>
<td>Electronics Systems Division</td>
<td>2,970,000</td>
<td>2,135,000</td>
<td>5,105,000</td>
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<tr>
<td>Eastern Space and Missile Center, Patrick Air Force Base</td>
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<td>Geophysics Laboratory</td>
<td>493,807</td>
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<td>Headquarters, Space Systems Division</td>
<td>4,990,879</td>
<td>5,174,470</td>
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<td>Materials Laboratory</td>
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<tr>
<td>Office of Scientific Research</td>
<td>458,200</td>
<td>324,000</td>
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APPENDIX B - DoD FUNDS TRANSFERRED TO THE JET PROPULSION LABORATORY (cont’d)

<table>
<thead>
<tr>
<th>Service - Organization</th>
<th>FY 1990</th>
<th>FY 1991</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Air Force (cont’d)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rome Air Development Center</td>
<td>$167,000</td>
<td>$167,000</td>
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<tr>
<td>Space Technology Center, Phillips Laboratory</td>
<td>1,255,000</td>
<td>1,369,000</td>
<td>2,624,000</td>
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<tr>
<td>Research and Development Center, Wright-Patterson Air Force Base</td>
<td>1,784,100</td>
<td>269,260</td>
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<td>Other Air Force*</td>
<td>5,521,500</td>
<td>8,256,500</td>
<td>13,778,000</td>
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<td><strong>Air Force Total</strong></td>
<td>$26,998,266</td>
<td>$23,363,235</td>
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<td><strong>Other DoD</strong></td>
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<td></td>
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<tr>
<td>Center for C³ Systems</td>
<td>$1,009,000</td>
<td>$848,000</td>
<td>$1,857,000</td>
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<tr>
<td>Defense Advanced Research Projects Agency</td>
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<td>703,000</td>
<td>2,339,600</td>
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<td>Defense Information Systems Agency</td>
<td>151,200</td>
<td>197,100</td>
<td>348,300</td>
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<tr>
<td>Defense Nuclear Agency</td>
<td>150,000</td>
<td>293,455</td>
<td>443,455</td>
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<tr>
<td>National Security Agency</td>
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<td>425,000</td>
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<td>Transportation Office, Fort Meade</td>
<td>170,000</td>
<td>170,000</td>
<td>340,000</td>
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<tr>
<td>Strategic Defense Initiative Organization</td>
<td>5,320,000</td>
<td>6,229,000</td>
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<tr>
<td>Other DoD Activities*</td>
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<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Other DoD Total</strong></td>
<td>$8,761,800</td>
<td>$8,590,555</td>
<td>$17,352,355</td>
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<tr>
<td><strong>Summary Total</strong></td>
<td>$292,722,238</td>
<td>$185,989,348</td>
<td>$478,711,586</td>
</tr>
</tbody>
</table>

*Activities were not identified by NASA.
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APPENDIX C - SYNOPSIS OF PRIOR AUDITS AND OTHER REVIEWS

Inspector General, DoD, Report No. 93-042, "Allegations of Improprieties Involving DoD Acquisition of Services Through the Department of Energy," January 21, 1993. The audit evaluated the work performed for DoD under the Department of Energy Work-for-Others program at the Oak Ridge National Laboratory. The audit was initiated as a result of a Hotline allegation and was performed with the Office of the Inspector General, DoE, cooperation. The report determined that internal controls either did not exist or were inadequate to preclude the unauthorized issuance of interagency orders and payments on interagency orders that were not approved by DoD contracting officers. The report also showed that senior DoD managers were unaware of the amount of funds spent for support services through interagency acquisitions and that a system did not exist to identify where and how $3.4 billion of DoD funds were spent. In addition, the report concluded that the Military Departments did not take prompt action to correct internal control weaknesses reported in the Inspector General, DoD, Report No. 90-085, "DoD Hotline Allegation of Irregularities in DoD Contractual Arrangements with DoE," June 19, 1990. The report recommended that the Director of Defense Procurement issue guidance to establish criteria and details to be included in an interagency agreement and reissue related interagency acquisition policies. The report also recommended that the Under Secretary of Defense for Acquisition establish a system for tracking interagency orders and dollars. The Director of Defense Procurement nonconcurred with the need for a tracking system, but will address the need for approvals for interagency agreements through the Defense Acquisition Regulation Council. The Army concurred with the report findings by stating that the Army has already implemented a number of corrective actions to reduce unauthorized Economy Act transfers and contract offloading.

Inspector General, DoD, Quick-Reaction Report No. 92-091, "Accountability of Government Automatic Data Processing Equipment at U.S. Army Special Operations Command," May 15, 1992. The audit was a cooperative effort between the Inspector General, DoD, and the Inspector General, Tennessee Valley Authority (TVA), to evaluate the DoD use of interagency orders in obtaining contracting support from TVA. The report showed that the Army Special Operations Command, Fort Bragg, North Carolina, had not established adequate property accountability records for $3.4 million of automatic data processing equipment. The report recommended that the Commanding General, Army Special Operations Command, conduct a physical inventory and establish property accounting controls for the equipment. The report also recommended that Army management account for this equipment and report shortages in accordance with Army Regulation 190-40. The Army Special Operations Command concurred with these recommendations.
APPENDIX C - SYNOPSIS OF PRIOR AUDITS AND OTHER REVIEWS (cont’d)

Inspector General, DoD, Quick-Reaction Report No. 92-069, "DoD Procurements Through the Tennessee Valley Authority," April 3, 1992. The audit was a cooperative effort between the Inspector General, DoD, and the Inspector General, TVA, to evaluate the DoD use of interagency orders in obtaining procurements through TVA. The report showed that DoD officials who lacked authority under the FAR and DFARS to approve interagency acquisitions improperly authorized interagency orders to transfer $84.4 million of expiring funds during August and September 1991 to TVA to achieve technical obligations of those funds. The report also showed that internal control procedures and practices at the DoD activities involved were not adequate to ensure that contracting officers approved interagency orders as required by the FAR and DFARS, or to preclude the transfer of funds to the TVA on orders that were not properly authorized. Recommendations included the initiation of action against those program officials who exceeded their authority and circumvented applicable laws and regulations by placing interagency orders with TVA. Additional recommendations included discontinuing the use of Military Interdepartmental Purchase Requests (DD Form 448) and similar forms to order goods and services from other Federal agencies and developing a form to include a section to be completed by the contracting officer for documenting compliance with the FAR and DFARS. The Director of Defense Procurement, the Army, the Navy, and the Air Force concurred with the finding and recommendations and initiated corrective action.

Inspector General, DoD, Report No. 90-085, "DoD Hotline Allegation of Irregularities in DoD Contractual Arrangements with DoE," June 19, 1990. The report noted that program officials circumvented established policy and exceeded their authority by not obtaining required approval from DoD procurement officials or designated senior DoD officials in placing orders for interagency acquisitions through DoE. In addition, material internal control weaknesses were identified in DoD operations regarding contract overpricing and susceptibility of the procurements to mismanagement, abuse, and fraud. Corrective actions included establishing internal control procedures and practices to minimize the risk that orders for interagency acquisitions will be placed by unauthorized DoD program officials, training for program officials who exceeded their authority by placing interagency acquisitions with DoE, and taking appropriate disciplinary action against DoD program officials who flagrantly disregarded the requirements of the interagency acquisitions. Management concurred with the findings and recommendations and initiated corrective action.
APPENDIX C - SYNOPTES OF PRIOR AUDITS AND OTHER REVIEWS (cont'd)

Inspector General, DoD, Report No. 90-034. "Contracting Through Interagency Agreements with the Library of Congress." February 9, 1990. The report found that contractor services and supplies were obtained beyond those routinely and reasonably provided by the Library of Congress, and contracts awarded on behalf of DoD by the Library of Congress were not effectively administered. DoD program officials circumvented established policy and exceeded their authority by not obtaining required approvals from DoD procurement officials or designated senior DoD officials in placing orders for interagency acquisitions through the Library of Congress. Recommendations were made to establish arrangements with the Library of Congress to ensure that effective contract administration is provided for all existing interagency acquisitions. The recommendations also included establishment of internal control procedures and practices to minimize the risk that orders for interagency acquisitions will be placed by unauthorized DoD program officials. The Army, Navy, Air Force, and DLA concurred that actions were needed to ensure effective contract administration. The Army and DLA partially concurred with the recommendation that required disciplinary action. They stated that disciplinary action should be limited to those who knowingly falsified information to obtain contractor support through interagency acquisitions.

Army Audit Agency Advisory Report No. WE 91-A1, "Contract Offloading." September 11, 1991. The report concluded that Army activities and installations did not have policies and procedures in place to control contract offloading. The report cited that controls over offloaded contracts did not require reviews by knowledgeable personnel and frequently resulted in Public Law, FAR, and funding regulation violations; noncompetitive acquisitions; internal control breakdowns that led to apparent illegal acts; and the absence of oversight by Army managers.

Army Audit Agency Report No. SW 91-200, "Contract Offloading," January 22, 1991. The report found that controls over the use of offloaded contracts to acquire general purpose automatic data processing equipment, software, training, personnel, maintenance, and services were not adequate. Also, Army personnel used procedures to acquire goods and services that bypassed scrutiny by knowledgeable activity experts. The Army Audit Agency recommended the reinforcement of policies and procedures to require contracting, legal, and resource management personnel to review purchase requests before the requests are forwarded to other Government agencies or activities. The Army concurred with the recommendations and issued a letter, dated November 1, 1990, to commanders reinforcing policies and procedures to require review and approval of interagency acquisitions.
Office of the Assistant Secretary of the Navy (Shipbuilding and Logistics), "Special Procurement Management Review of Contracting Through Navy Laboratories and Use of Federally Funded Research and Development Centers (FFRDC)," July 1989. The report concluded that no Navy policy covers interagency acquisitions with FFRDCs to preclude the potential misuse of FFRDCs to bypass statutory procurement requirements. Corrective action included publishing guidance to all Navy activities concerning the requirements for interagency acquisitions under the Economy Act and establishing adequate reviews and oversight.
ARPAnet Message from ARDEC

From: JPLLSI:STX* @ARDEC.ARPA* 29-JUL-1987 14:55
To: Cypress International
Subj: Cypress International

Received: from ARDEC-AC4.ARPA by Jpl-VLSI.ARPA with INTERNET;
Wed, 29 Jul 87 14:55:38 PDT
Date: Wed, 29 Jul 87 17:47:08 EDT
From: (FSS) < @ARDEC.ARPA>
To: @JPL-VLSI.ARPA
cc: @ARDEC.ARPA, @ARDEC.ARPA
Subject: Cypress International
Message-ID: <8707291747.aa015910@ARDEC-AC4.ARDEC.ARPA>

We have reviewed the Cypress International SOW and they are the desired company for this effort. We base this on their background and past performance. Also I view that JPL does not have this type of experience and we require the results quickly it makes sense to go to an experienced organization.

When Cypress International is on board please advise so we can have a kick-off meeting with them.

(Proprietary data has been deleted.)
<table>
<thead>
<tr>
<th>Recommendation Reference</th>
<th>Description of Benefit</th>
<th>Type of Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a</td>
<td>Internal Control. Elimination of the placement of supplemental work under existing interagency acquisitions without proper approval by a DoD contracting officer.</td>
<td>Nonmonetary.</td>
</tr>
<tr>
<td>1.b</td>
<td>Compliance. Elimination of the placement of interagency acquisitions by unauthorized personnel.</td>
<td>Nonmonetary.</td>
</tr>
<tr>
<td>2</td>
<td>Internal Control. Elimination of unauthorized interagency acquisitions and the assurance that interagency acquisitions contain appropriate reviews and approvals prior to transfer of funds.</td>
<td>Monetary, however, the potential monetary benefits cannot be quantified.</td>
</tr>
</tbody>
</table>
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APPENDIX F - ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Washington, DC
Director of Defense Procurement, Washington, DC
Assistant Secretary of Defense (Production and Logistics), Washington, DC

Department of the Army

Assistant Secretary of the Army (Financial Management), Washington, DC
Assistant Secretary of the Army (Research, Development, and Acquisition), Washington, DC
Army Tank-Automotive Command, Warren, MI
Army Missile Command, Redstone Arsenal, AL
Army Armament Research, Development, and Engineering Center, Picatinny Arsenal, NJ
All-Source Analysis System Project Office, Joint Tactical Fusion Program Office, McLean, VA

Department of the Navy

Assistant Secretary of the Navy (Financial Management), Washington, DC
Assistant Secretary of the Navy (Research, Development, and Acquisition), Washington, DC
Naval Research Laboratory, Washington, DC

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller), Washington, DC
Headquarters, Air Force Space Systems Division, El Segundo, CA
Air Force Space Technology Center, Phillips Laboratory, Kirtland AFB, NM

Defense Agencies

Branch Office, Alexandria, VA
Suboffice, Jet Propulsion Laboratory, Pasadena, CA
Headquarters, Defense Logistics Agency, Alexandria, VA

Non-Defense Federal Organizations

Inspector General, National Aeronautics and Space Administration, Washington, DC
Inspector General, National Aeronautics and Space Administration, Resident Office, Jet Propulsion Laboratory, Pasadena, CA
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APPENDIX G - REPORT DISTRIBUTION

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition
Director of Defense Procurement
Assistant Secretary of Defense (Production and Logistics)

Department of the Army

Secretary of the Army
Assistant Secretary of the Army (Financial Management)
Assistant Secretary of the Army (Research, Development, and Acquisition)
Inspector General, Department of the Army
Auditor General, Army Audit Agency

Department of the Navy

Assistant Secretary of the Navy (Financial Management)

Department of the Air Force

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

Defense Agencies

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency

Non-Defense Federal Organizations and Individuals

Office of the Inspector General, National Aeronautics and Space Administration
Office of Federal Procurement Policy
Office of Management and Budget
U.S. General Accounting Office, National Security and Internal Affairs Division, Technical Information Center

Chairman and Ranking Minority Member 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
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PART IV - MANAGEMENT COMMENTS

Department of the Army Comments
MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE
(AUDITING)

SUBJECT: Draft Audit Report on the Army Acquisition of Services Through the Jet Propulsion Laboratory (Project No. 1CA-8004)

This responds to your request for comment on subject draft report dated October 13, 1992. The report has been reviewed by the three Army commands cited and their comments are synopsized in the attached.

In general, although the Army does not agree with many of the conclusions reached by your auditors, we concur in principle with your proposed recommendations. As stated previously, in response to DoD IG audit reports on offloading to the Tennessee Valley Authority and to Department of Energy's Oak Ridge National Laboratory, we believe that the Army has taken corrective actions sufficient to ensure future Army compliance with Federal acquisition regulations and the Economy Act, and to overcome internal control weaknesses.

It should be recognized that formal procurement transactions involving the Jet Propulsion Laboratory (JPL) are the responsibility of the National Aeronautics and Space Administration (NASA). As a Federally Funded Research and Development Center (FFRDC), JPL is sponsored by NASA and is not authorized to compete with other agencies, academia or business concerns. It is also our understanding that NASA does not allow JPL or to enter into direct contractual relationships with other agencies. All Army taskings of JPL are effected under the auspices of the NASA umbrella cost contract with JPL, and funding documents (Military Inter-departmental Purchase Requests (MIPRs)) are forwarded to and accepted by NASA under the Economy Act, and often the Space Act.

NASA is responsible for preparing any required justifications required by the Competition in Contracting Act (CICA) of 1984, although Defense agencies requesting that work specifically be accomplished by JPL should be prepared to provide validated data to support NASA's justification.
Specific responses to the Finding and the Recommendations for Corrective Actions are attached, as well as additional comments on the Executive Summary and the Discussion and Conclusions contained in the audit report.

Joseph R. Varady, Jr.
Director for Procurement Policy

Attachments

CF:
SAIG-PA
AMCIR
Response to the Finding and Recommendations for Corrective Action

I. Finding: Program officials at three Army commands circumvented established law and regulations and their authority by not obtaining required approvals from contract officials in placing interagency acquisitions through JPL. This condition occurred because the Army did not have established or effective internal control procedures to preclude the unauthorized use of interagency acquisitions. As a result, the Army paid $1.5 million of $10.3 million in procurement costs for add-on costs, such as administrative management fees and overhead to JPL for services that were mostly performed by JPL subcontractors.

Army response: Concur in part. The Army does not concur with the audit report inference that the $1.5 million paid for JPL expenses was excessive, unreasonable and/or inappropriate. The inference in the report is that: 1. that the Army activities were improperly contracting out the contracting function; 2. that JPL expenses were non-value added pass-through costs, and; 3. that these costs would not have been incurred if the requirements had not been acquired from NASA/JPL. We do not agree that these inferences reflect the actual facts relating to JPL's responsibilities.

II. Recommendations for Corrective Action

1. We recommend that the Commanders of the Army Armament Research, Development and Development Center, the Army Missile Command and the Army Tank-Automotive Command.

   a. Prohibit the placement of supplementary work under existing interagency acquisitions if not properly approved by DoD contracting officers.

   Army Response: Concur.

b. Take disciplinary action against program officials who knowingly exceeded their authority by placing interagency acquisitions with than Jet Propulsion Laboratory.

   Army Response: Non-concur in part. There is no evidence in the report that the acts of Army officials involved in transferring requirements and funds to NASA represented "knowing" attempts to subvert law, regulation or DoD/Army policy; nor was there evidence of personal gain or conflicts of interest, or non-compliance with DoD/Army Standards of Conduct. Guidance is now in place, as stated
elsewhere in the report, to ensure that acquisition personnel
are aware of Economy Act requirements as implemented in the
Federal Acquisition Regulation (FAR) and DoD FAR Supplement
and in Army regulations (AR 70-1 and AR 37-1).

2. We recommend that the Commanders of the Army
Armament Research, Development and Engineering Center and the
Army Tank-Automotive Command establish procedures for the use
of interagency acquisitions in accordance with the policy

Army Response: Concur, with comment. The Army Materiel
Command policy issuance dated March 7, 1991 implemented
higher level guidance issued by the Office, Assistant
Secretary of the Army (Research, Development and Acquisition)
(ASA(RDA)) in January 1991. Subsequent to that time, addi-
tional guidance was issued by ASA(RDA) in December 1991. In
addition, changes to Army Regulations 37-1 and 70-1 have been
issued. Further clarifications of this policy area are in
development at HQDA and will be issued soon. We request,
therefore, that this Recommendation be changed to read as
follows:

"2. We recommend that...Tank-Automotive Command
promulgate local procedures for the use of interagency
acquisitions in accordance with current DoD and Army
policies."
ADDITIONAL FACTS

I. U.S. Army Missile Command (MICOM). MICOM personnel issued orders to JPL during the FY 88 through FY 91 timeframe under the misimpression that they were authorized by a (non-binding) Memorandum of Understanding that the Under Secretary of the Army had entered into with JPL (now NASA).

Since the audit of DoD Procurement through JPL (Project No. ICA-8004) was initiated in August 1991, the MICOM Research, Development and Engineering Center (RDEC) has issues no additional funding to NASA for JPL. RDEC personnel and managers are now very much aware of the requirement to obtain approval for Economy Act transactions and any contract offloading, especially to other agencies, and will fully comply with all requirements.

Although at the time RDEC personnel were generally unaware of the special requirements related to interagency acquisitions, that lack of knowledge was not unusual for Army/DoD activities at the time. On January 10, 1992, (reiterated on September 9, 1992) the MICOM Commander issued a memorandum to all MICOM customers admonishing compliance with contract offloading review and approval requirements, and stating that disciplinary action may be initiated against future violators.

II. U.S. Army Tank-Automotive Command (TACOM).

a. The following information was provided to the auditors by TACOM personnel but was omitted from the Draft report. It should be considered, in order to provide perspective for the Finding.

- The JPL Planetary Rover Office was asked to do the Tank Teleoperation Kit (TTK) program as a follow-on assignment to the Computer-Aided Remote Driving (CARD) Tank established in 1988. The JPL Planetary Rover Office, with over twenty years of remote vehicle experience, provided the TTK program with overall program management; technical management (including systems engineering); definition and oversight of safety and transportation support requirements; and detailed interface control documentation; in addition to solicitation, negotiation and contract management efforts.

- The TTK includes several computer aided driving techniques. Plans, although presently unfunded, included upgrade of the TTK with JPL's CARD. This would provide TTK a complete set of technologies to improve system performance and provide TACOM the ability to evaluate the comparable technologies on a common baseline vehicle.
At the time of the initial JPL tasking, the enhancement of TTK with video compression technology to achieve non-line-of-sight operation was integrated into the plan. JPL had the unique capabilities to objectively provide required technical management support, not available at TACOM, to integrate the General Dynamics Land Systems (GDLS) Tadiran Radio video compression technique with the TTK. JPL pursued negotiation with GDLS until a full cost estimate was developed, but available funding was inadequate to integrate the enhancement.

b. Cost analysis. The draft report implies on p. 11 that $170,000 was wasted as a simple mark-up by JPL. This is not true. Assuming the Army could have done the work, the comparative cost, if performed at TACOM, would have involved at least two man-years of a TACOM senior project engineer's time alone. This equates to a minimum cost of $160,000 counting overhead. In addition, 6 to 12 months of TACOM procurement time and efforts were avoided, a savings of $30-60,000, for a total estimated cost between $190,000 and $220,000.

c. TACOM also points out that the timing of the TTK JPL order predated extensive policy guidance on this subject issued by ASA(RDA) and Army Materiel Command issued in 1991 and 1992. They note that the report, on p. 12, indicates that NCOM RDEC "personnel were unaware of the requirements for properly using interagency (JPL) acquisitions." The report, on page 10, should reflect the same for the TACOM Research, Development and Engineering Center personnel, for accuracy and consistency.

III. U.S. Army Armament Research, Development and Engineering Center (ARDEC), U.S. Army Armament, Munitions and Chemical Command (AMCCOM).

a. The report implies that ARDEC officials improperly directed work to Cypress International through JPL in order to circumvent the requirements of the Competition in Contracting Act. This is not the case. In addition, the facts in the draft report need to be put into context. The DoDIG(A) draws support for their conclusion from a brief message between ARDEC and JPL (Appendix D of draft report). After the work packages (tasks which APAS needed accomplished) were sent to JPL, JPL identified a relatively small portion of the work (implementation effects) for which they did not possess the required experience. It was JPL which independently selected Cypress as a proposed subcontractor to perform the implementation effects tasks.
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After JPL obtained a detailed statement of the capabilities of Cypress and a description of how Cypress proposed to accomplish the work, JPL then sent the Cypress statement of work (SOW) to ARDEC for review. In accordance with acceptable procurement practices, the SOW was reviewed by technical personnel at ARDEC to assure that the proposed subcontractor, Cypress, understood the requirements of the task and offered an acceptable approach to accomplish those requirements. No Army official directed JPL to solicit or select Cypress. It is certainly not unusual for a prime contractor under a cost contract to seek Government approval for a proposed subcontract. When understood in this context, the message in Appendix D does not convey the connotation of impropriety which the draft report appears to attribute to it.

b. The finding also states that "officials placed the interagency acquisition for the Phase I study with JPL knowing JPL did not have any experience in determining the implementation effects of introducing a new artillery propellant system." JPL is recognized as expert in the area of liquid propellant, liquid propellant handling, and liquid propellant propulsion systems as a result of its support to NASA and the USAF. JPL has, in fact, been an innovator in regenerative liquid propellant and regenerative gun technology since the early 1950's. Their monopropellant and high velocity gun work for the U.S Navy was the direct predecessor of the current APAS regenerative LP gun system. JPL's experience in these technologies and the logistics of such propellants eminently qualified JPL to develop a notional logistics system capable of supporting a liquid propellant-based cannon artillery system. JPL chose to subcontract a small portion of the effort relative to the implementation effects task, recognizing MPRI's and Cypress' greater expertise in the area of military artillery logistics. This minor subcontract effort was JPL's prerogative and judgment to best serve the needs of their customer.

c. The report also addressed a possible conflict of interest related to JPL's contract for Phase II of the study with MPRI. There is no conclusion as to whether an improper conflict existed. If there is no conclusion or effect affecting ARDEC, then there can be no basis for a recommendation for corrective action. Unresolved discussions of a conflict of interest serve only to unjustifiably raise suspicions of wrongdoing by involved parties. Request that references to a conflict of interest as a potential JPL subcontracting issue, be deleted from the report, or cited in an Appendix of matters raised to the NASA IG for investigation.
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