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Audit Report

OFFICE OF THE INSPECTOR GENERAL

QUICK REACTION REPORT ON THE AUDIT OF THE ARMY CONTRACT WITH THE UNIVERSITY OF TEXAS AT AUSTIN INSTITUTE FOR ADVANCED TECHNOLOGY

Report Number 93-013 October 27, 1992

Department of Defense

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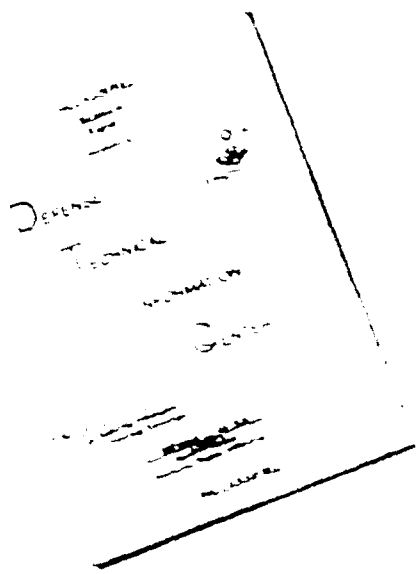

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The following acronyms are used in this report.

ARDEC..Army Armament Research, Development and Engineering Center
ASA(RDA)...Assistant Secretary of the Army (Research, Development and Acquisition)
CASE/BIC.....Combined Arms Systems Engineering/Battlefield Integration Center
DARPA.....Defense Advanced Research Projects Agency
FAR.....Federal Acquisition Regulation
FFRDC.....Federally Funded Research and Development Center
GD/FW.....General Dynamics, Fort Worth Division
IAT.....Institute for Advanced Technology
J&A.....Justification and Approval
OFPP.....Office of Federal Procurement Policy

INSPECTOR GENERAL
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Report No. 93-013 October 27, 1992

MEMORANDUM FOR DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
INSPECTOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Quick-Reaction Report on the Audit of the Army Contract with the University of Texas at Austin Institute for Advanced Technology (Project No. 1CH-5012.01)

We are providing this final report for your information and use. This report addresses the events leading up to the establishment of the Institute for Advanced Technology, an Army-sponsored Federally Funded Research and Development Center, in May 1990, and the proposed contract modification to significantly expand the activities of the Institute. This audit was performed as part of the Special Audit of Federally Funded Research and Development Centers requested by the Office of Federal Procurement Policy and the House Appropriations Committee. Management comments on a draft of this report were considered in preparing the final report. The complete text of the comments is in Part III of this report.

DoD Directive 7650.3 requires that audit recommendations be resolved promptly. Therefore, we request the Army provide additional comments on Recommendation 3. by November 27, 1992.

The courtesies extended to the audit staff are appreciated. If you have any questions on this final report, please contact Mr. Garold E. Stephenson, Program Director, at (703) 692-3179 (DSN 222-3179) or Mr. John M. Gregor, Project Manager, at (703) 692-3205 (DSN 222-3205). The planned distribution of this report is listed in Appendix D.

Robert J. Lieberman
Assistant Inspector General
for Auditing

cc:
Secretary of the Army
Director of Defense Procurement
Administrator, Office of Federal Procurement Policy

Office of the Inspector General, DoD

AUDIT REPORT NO. 93-013 October 27, 1992
(Project No. 1CH-5012.01)

QUICK-REACTION REPORT ON THE AUDIT OF THE ARMY CONTRACT WITH THE UNIVERSITY OF TEXAS AT AUSTIN INSTITUTE FOR ADVANCED TECHNOLOGY

EXECUTIVE SUMMARY

Introduction. Office of Federal Procurement Policy (OFPP) Policy Letter 84-1, "Federally Funded Research and Development Centers (FFRDCs)," as implemented by part 35.017 of the Federal Acquisition Regulation, provides Government-wide policy for the establishment, use, periodic review, and termination of FFRDCs. This policy requires agencies to rely on existing in-house or contractor resources, to the extent practical, for satisfying special research or technical requirements. This audit was performed as part of the Special Audit of Federally Funded Research and Development Centers requested by the Office of Federal Procurement Policy and the House Appropriations Committee. The DoD sponsors 11 FFRDCs with annual operating costs of about $1.5 billion. This report was issued because the Army proposed to expand significantly the operations of the Institute for Advanced Technology at the University of Texas at Austin during FY 1992 through FY 1994.

Objectives. The objectives of the overall audit were to:

- o determine whether sponsoring DoD activities adequately review the need for their FFRDCs,
- o assess the nature and extent of the use of the DoD FFRDCs,
- o determine if FFRDCs have adhered to mission statements and sponsoring agreements,
- o determine if overhead rates were developed according to Government standards,
- o determine if conflict of interest regulations were violated within the FFRDC operation or structure or in the DoD relationship with these organizations, and
- o evaluate applicable internal controls.

This report examines the requirement for establishing the Institute for Advanced Technology as an Army FFRDC and the justification for a proposed modification to increase the scope of the FFRDC contract from $13 million to $97 million for 5 years. We will issue a report in the future that addresses the other objectives.

Audit Results. The audit disclosed that the Army did not thoroughly analyze requirements or assess alternative capabilities for meeting its research requirements prior to establishing the Institute for Advanced Technology as an FFRDC. Also, the proposed $84 million modification to the Institute's contract was not adequately justified. Competition for the contract to establish the FFRDC was unnecessarily restricted, and the contract was awarded without adequate price competition. The proposed $84 million sole-source modification significantly changes the scope of the original contract award. In addition, the Army establishment of and the Army plans to increase the use of the Institute for Advanced Technology as an FFRDC are contrary to Government-wide policy of relying on established resources for meeting needs.

Internal Controls. No material internal control deficiencies were identified during the audit. See details in Part I, page 3 for a discussion of controls assessed.

Potential Benefits of Audit. Implementing the recommendations in this report will promote compliance with Government-wide policy of relying on existing capabilities for satisfying special research needs. Further, increased competition in the procurement of requirements could result in decreased prices. The potential benefits of the audit are listed in Appendix B.

Summary of Recommendations. We recommended that the Army stop further action on the proposed $84 million modification to the FFRDC contract and reassess its needs in the electromechanics and hypervelocity physics areas. The Army should identify available alternatives to the FFRDC, to include expanding in-house staffing or using non-FFRDC contracts, or both, and either terminate the FFRDC contract or continue under current funding levels for the contract.

Management Comments. The Assistant Secretary of the Army (Research, Development and Acquisition) and the Deputy Director, Defense Research and Engineering (Plans and Resources) concurred with the recommendation to stop the $84 million modification, concurred with comment to reassess research needs, and partially concurred with the recommendation to terminate or operate the FFRDC under current funding ceilings. The Assistant Secretary stated that a new funding ceiling of $15 million per year for FY 1992 and FY 1993 was proposed to and approved by the Director, Defense Research and Engineering, and that the Army planned to transition the Institute to a non-FFRDC organization in FY 1994. He stated that the $15 million funding level was a compromise recognizing political and resource priorities and constraints.

We request that the Army provide additional comments on what research requirements are included in the increased funding in response to the final report by November 27, 1992. A discussion of the management comments is included in Part II of the report, and the complete texts of management comments are included in Part III of the report.

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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 Information Officer, Audit Planning and Technical Support Directorate, (703) 614-6303 (DSN 224-6303).

PART I - RESULTS OF AUDIT

Introduction

The Office of Federal Procurement Policy (OFPP) and the House Appropriations Committee requested that we examine specific aspects of the Federally Funded Research and Development Centers (FFRDCs) sponsored by the DoD. The objectives of the audit were to:

- o determine whether sponsoring DoD activities adequately review the need for their FFRDCs,
- o assess the nature and extent of the use of the DoD FFRDCs,
- o determine if FFRDCs have adhered to mission statements and sponsoring agreements,
- o determine if overhead rates were developed according to Government standards,
- o determine if conflict of interest regulations were violated within the FFRDC operation or structure or in the DoD relationship with these organizations, and
- o evaluate applicable internal controls.

This report addresses the need for an FFRDC at the University of Texas at Austin (the University) Institute for Advanced Technology (IAT) to conduct research in the area of electromechanics and hypervelocity physics. One or more reports issued at a later date will address the other audit objectives.

This report is being issued because the Army Armament Research, Development and Engineering Center (ARDEC) prepared a justification and approval (J&A) document for a sole-source modification to the contract with the University for the IAT, an Army-sponsored FFRDC. The modification would have increased the scope of work and the funding ceiling on the 5-year contract for the IAT from $13 million to $97 million. We concluded that the proposed $84 million modification was not justified because neither the original contract nor the modification was based on a thorough analysis of DoD requirements for the related technology, the availability of existing private sector expertise, and the use or development of in-house resources to provide required support. We also concluded that the solicitation of the basic contract for an FFRDC was not adequate to ensure full and open competition, that the contract was awarded without adequate price competition, and that the establishment of the IAT as an FFRDC was contrary to the Government-wide policy of relying on existing capabilities for satisfying special research and development

needs. Accordingly, the Army should reevaluate the need for the IAT to be an FFRDC to accomplish the research.

Background

OFPP Policy Letter 84-1, "Federally Funded Research and Development Centers," as implemented by subpart 35.017 of the Federal Acquisition Regulation (FAR), provides policy guidance for the establishment, use, periodic review, and termination of FFRDCs. The OFPP letter states:

> Agencies will rely, to the extent practicable, on existing in-house and contractor sources for satisfying their special research or development needs consistent with established procedures under The Economy Act of 1932 (31 U.S.C. 1535), other statutory authority or procurement/assistance regulations. A thorough assessment of existing alternative sources for meeting these needs is especially important prior to establishing an FFRDC.

DoD should only maintain FFRDCs when it can be clearly demonstrated that their purpose will be or continues to be of vital importance to the national security, and when the skills or capabilities needed to meet that purpose are not commonly available from in-house or private-sector resources.

On May 25, 1990, the Army established the IAT as an FFRDC with the award of contract DAAA21-90-D-0009 for 5 years at an estimated cost of $13 million. The IAT was established to conduct research and education in electromechanics and hypervelocity physics for application to electric gun weapons systems and related spin-off technologies. The contract was awarded by ARDEC and is administered by the Office of Naval Research Resident Representative, Austin, Texas. The Army provides oversight to the IAT through an Institute Executive Advisory Board, chaired by the Assistant Secretary of the Army (Research, Development and Acquisition) (ASA(RDA)).

Scope

We reviewed documentation related to the establishment of the IAT as an Army-sponsored FFRDC and to the proposed modification. The documentation included decision and information memoranda, justification documents, procurement and contract files, funding documents, and subcontract information.

This portion of the overall program results audit is based on work performed from March through June 1992. 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, and accordingly, included such tests of internal controls as were considered necessary. We did not rely on any computerized data to conduct this review. The activities visited or contacted during the audit are listed in Appendix C.

Internal Controls

The audit disclosed no material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. We reviewed internal controls related to requirements determination and contractor selection practices by evaluating the Army compliance with criteria in OFPP Memorandum 89-21, "Improving Management Controls Over Government Procurement," July 17, 1989, and Under Secretary of Defense for Acquisition Memorandum, "Certification of Procurement Systems," in the award of the basic contract for the FFRDC and the processing of the proposed modification. We concluded that DoD and the Army had established adequate internal controls in the procurement system.

Discussion

Requirement for the FFRDC. In March 1988, a University official who had been a senior DoD official at the Defense Advanced Research Projects Agency (DARPA) and ARDEC, briefed the ASA(RDA) on a proposal to establish an Army FFRDC at the University. As a DoD employee, the senior official initiated and directed the National Program on Electromagnetic Propulsion and the DARPA Hypervelocity Mechanics Program. At the time of the briefing, this former DoD official was employed by the University's Center for Electromechanics. The Chancellor of the University, who also was a former senior DoD official familiar with the operation of FFRDCs, supported the proposal. The Center for Electromechanics at the University had previously performed research and development work in support of the Army tactical electrical gun system demonstration program. A chronology of events that cover establishment of the IAT as an FFRDC and planned expansion of the IAT is at Appendix A.

Based on Headquarters, Department of the Army officials' favorable reaction to the proposal, and a subsequent tasking from them, the ARDEC prepared a J&A document to award a sole-source contract to the University to establish an FFRDC. On July 22, 1988, the Commanding General, ARDEC, forwarded the J&A document to the ASA(RDA). In the transmittal memorandum, the Commanding General expressed concerns about properly publicizing the requirement for an FFRDC and the lack of a formal requirements document. He believed a sufficient knowledge base existed in the electromagnetic gun area for adequate competition. On August 8, 1988, the ASA(RDA) requested ARDEC to provide additional information on these concerns.

In a memorandum dated August 24, 1988, the Commanding General, ARDEC, provided the ASA(RDA) additional information on alternative sources for meeting research needs. His memorandum stated that the University was the only Army contractor with a large-scale laboratory capable of investigating and testing electromechanical technology. The Commanding General's response

further stated that retention of the University's research capability was necessary if research of electromechanical concepts was to continue and noted that establishment of an FFRDC was a way to accomplish this objective. The Commanding General, ARDEC requested authority to proceed with the award of a sole-source contract to the University to establish an FFRDC based on retention of essential research capability.

The Army Competition Advocate did not agree with the J&A document and in a memorandum dated August 30, 1988, expressed concerns about establishing the FFRDC by a noncompetitive contract and about the lack of a formal requirements document. He believed that other sources could meet the research needs of the Army. Also, OFPP Policy Letter 84-1 required a thorough assessment of the capability of existing in-house and contractor sources to satisfy research needs.

The Army did not thoroughly evaluate the effectiveness of alternative sources to meet identified research needs, even though many in-house and contractor sources existed. DoD activities performing research and development in aspects of electric gun technology included ARDEC, Ballistics Research Laboratory at Aberdeen Proving Grounds, Defense Nuclear Agency, DARPA, Strategic Defense Initiatives Organization, Naval Surface Weapons Center White Oak, Army Strategic Defense Command, and Air Force Armaments Technology Laboratory. Contractor sources included Kaman Science Land Systems, FMC Corporation, LTV Aerospace and Defense Company, General Dynamics Corporation, Westinghouse Naval Systems, Sparta Incorporated, Maxwell Laboratories Incorporated, University of Texas at Austin Center for Electromechanics, Systems Planning Corporation, Science Applications International Corporation, Physical Sciences Incorporated, BDM International Incorporated, Lawrence Livermore National Laboratory, Jet Propulsion Laboratory, and Lawrence Berkeley Laboratory.

On May 5, 1989, the Secretary of the Army approved the requirement to establish an FFRDC and directed that the procurement be competitive, based on recommendations from the Army General Counsel and the ASA(RDA). On June 12, 1989, ARDEC issued a request for proposals document (DAAA21-89-R-0127) for establishing the FFRDC prior to ARDEC developing an acquisition plan. The acquisition plan was not completed until April 1990, after the proposals received in response to the solicitation were evaluated.

Requirements analysis. The Army did not perform a thorough requirements analysis prior to proceeding with contracting for the FFRDC. The basis for the Army decision was the belief that an FFRDC would meet Army research needs more effectively than the existing capability in industry. ARDEC personnel believed the establishment of an FFRDC to conduct basic and applied research would augment and bring stability to the Army-directed efforts related to the electric gun program. The FFRDC would also

provide training to DoD personnel and facilitate technology transfer into industry for eventual military use. We did not find documentation to support a detailed analysis of alternatives to fulfill the role envisioned for the FFRDC, such as use of in-house personnel, use of a non-FFRDC contract arrangement, or both. We found evidence that the Army also did not give adequate consideration to resource costs. Before the solicitation was issued, ARDEC expressed concern to the Deputy Assistant Secretary of the Army (Research and Technology), regarding the level of funding authorized for the contract, because it was questionable whether the funding profile in the solicitation was realistic or adequate to attract the number and quality of competitors for optimum competition. The funding ceiling for the procurement was $13 million for 5 years. This funding profile was included in the solicitation.

OSD actions. In August 1988, the Army approached the Deputy Director, Defense Research and Engineering (Research and Advanced Technology) (the Deputy Director) with the proposal from the University to establish an FFRDC. The Deputy Director requested the Army to review non-FFRDC alternatives before making a final decision to establish an FFRDC. In a memorandum to the ASA(RDA), dated July 27, 1989, the Deputy Director reiterated his opposition to the establishment of an FFRDC in the area of electromagnetic propulsion. The Deputy Director's primary argument was that in 1976 DoD made a decision to eliminate laboratories from being classified as FFRDCs, with the exception of the Massachusetts Institute of Technology's Lincoln Laboratory. According to the Deputy Director, the work performed by these laboratories was not unlike work performed by other universities and, therefore, these laboratories should not be given special status as FFRDCs. The Deputy Director believed this argument also applied to the proposed Army FFRDC. Furthermore, the Army had not identified the other options that it considered before deciding to establish an FFRDC.

In a memorandum dated November 30, 1989, the Secretary of the Army (the Secretary) informed the Director, Defense Research and Engineering that the Army had comprehensively evaluated the capabilities currently inside and outside the Government in these technologies. The Secretary stated that cancellation of the procurement action would probably evoke severe criticism from industry, academia, and the Congress. The Secretary also stated that the Army would make a final decision on an FFRDC following completion of its LAB 21 Study and prior to award of the FFRDC contract.

In a March 8, 1990, memorandum, the Acting Deputy Under Secretary of Defense for Acquisition informed the Secretary of the Army that the proposed FFRDC was not consistent with the policy guidelines in OFPP Policy Letter 84-1 and that the establishment of the FFRDC could jeopardize the continuing use of FFRDCs by the other Services and OSD. The Acting Deputy also stated that the Army could meet its needs through normal contracting channels.

In a memorandum dated May 16, 1990, the Secretary of the Army assured the Under Secretary of Defense for Acquisition that it was in the best interest of the Army and DoD to proceed with the contract award to establish an FFRDC at the University. The Secretary stated that his staff had reviewed the congressional language, law, and DoD regulations and directives governing FFRDCs and did not agree with the OSD staff assessment that establishment of the FFRDC would be noncompliant, inconsistent with the Army LAB 21 Study, or even too limited in scope to be justified as an FFRDC. The Secretary further noted that the responses to the competitive solicitation showed potential for tremendous leverage of this relatively small Army investment. On May 25, 1990, the Deputy Under Secretary of Defense for Acquisition approved the award of the contract. The Army did not provide documentation on their review of requirements for the FFRDC.

Competition. ARDEC sent the request for proposals document (DAAA21-89-R-0127) for establishment of the FFRDC to 112 prospective offerers, but received only 2 proposals. The offerers submitting proposals were the University and Picatinny Arsenal Technical Associates, a commercial company. Reasons cited for not submitting a proposal included "lack of resources," "not in a position to respond," "unable to meet autonomous organization requirements," "lack of staff," "cannot comply with specifications," and "management decision to decline." The $439,100 proposal from Picatinny Arsenal Technical Associates was determined to be technically unacceptable because it failed to address many areas in the solicitation. The $13 million proposal from the University was rated acceptable or better in all areas. The University proposed establishing the IAT as an autonomous organization separate from its Center for Electromechanics and the Engineering Department.

Picatinny Arsenal Technical Associates protested the elimination of its proposal from the competitive range without an opportunity for a best and final offer. The ARDEC contracting officer denied the protest. ARDEC conducted negotiations with the University from March 1 through April 23, 1990. The University's $13 million proposal was negotiated at the $13 million funding ceiling. On May 25, 1990, ARDEC awarded contract DAAA21-90-D-0009 to the University to establish the IAT as an FFRDC.

FFRDC staffing. The University appointed as the IAT Director the former senior official of DARPA and ARDEC who made the March 1988 proposal to the ASA(RDA) to establish an FFRDC at the University. The University also appointed as the IAT Executive Director a retired Army lieutenant general who had participated on a DARPA study that assessed electric energy gun systems and military applications. The IAT filled other key positions with personnel who had prior involvement with the

electric gun research program. The IAT currently has about 50 employees, including 28 professional and 22 administrative personnel.

Subcontracts. The IAT awarded the following subcontracts with private sector companies to support its technical operations:

o Physical Sciences, Incorporated, received a $111,098 subcontract to assist IAT with evaluating the state-of-the-art in hypervelocity impact mechanics and aerothermodynamics, planning meetings and workshops, and participating in system design and analysis of hypervelocity weapons systems. The period of performance for this contract was October 1, 1990, through September 30, 1991. Subsequent modifications to this subcontract increased the funding by $62,062 for additional work in support of the aerophysics program and extended the period of performance through June 30, 1992. In the sole-source justification for this subcontract dated October 16, 1990, the Director, IAT, stated that Physical Sciences, Incorporated, had unique and extensive expertise in hypervelocity aerothermodynamics, in hypervelocity terminal ballistics, and in implementation of new technologies into cost-effective weapons systems. On October 30, 1990, the ARDEC contracting officer questioned how the work that Physical Sciences, Incorporated, would be tasked to do was any different from that which the FFRDC was set up to do. The contracting officer requested that IAT provide additional information. On November 8, 1990, IAT provided a revised proposal, which stated that Physical Sciences, Incorporated, would provide IAT with the services of a nationally recognized technical expert. The revised proposal included specific technical qualifications and study areas.

o Microelectronics and Computer Technology Corporation received a $110,001 subcontract to conduct a feasibility study related to the application of computing technology developed under a previous DARPA-funded contract (MDA972-88-C-0013) on hypervelocity computations. The period of performance of the subcontract was December 10, 1990, to April 10, 1991. The sole-source justification for this subcontract discussed the expertise that the contractor had gained through DARPA-sponsored research, and also the fact that the subcontractor was located in the same office complex as the IAT.

o Burdeshaw Associates, Limited, was awarded a $17,008 subcontract to assist the IAT in conducting and evaluating the potential of hypervelocity gun technology for theater missile defense application. This work involved the services of a retired Army lieutenant general for about 10 days. The period of performance of this work was May 7 through August 31, 1991.

The IAT also incurred costs of $74,786 for the services of 43 consultants from August 1990 through May 1992.

Pending contract modification. In January 1992, ARDEC proposed a modification to increase the ceiling in the IAT contract from $13 million to $97 million. The $13 million ceiling on the contract was allocated for fiscal years 1990, 1991, 1992, 1993, and 1994 at $1 million, $2 million, $3 million, $3 million, and $4 million, respectively. The $84 million increase is allocated over fiscal years 1992, 1993, and 1994 and is estimated to include $45 million for simulation/modeling; $29 million for additional funding for electromechanics and hypervelocity physics research, training, and education; $6 million for Strategic Defense Initiatives Organization support; and $4 million for other Army support. The J&A document for the proposed $84 million increase states that the original mission and scope of the contract, as well as the $13 million ceiling, was based solely on the Army needs and investment strategy as projected in 1989. It further states that since 1989, the DoD posture significantly changed with increased emphasis on research and development in a number of critical technologies, including hypervelocity projectiles, pulsed power, and simulation and modeling.

Other reasons for modification. The IAT wanted funding raised to about $30 million per year to attract a research staff, to operate laboratories, and to conduct experiments. A February 20, 1992, memorandum from the Director, IAT, to the Deputy Assistant Secretary of the Army (Research and Technology) stated that the $13 million on the original contract was not intended to be the total funding needed to operate the IAT and that the IAT could not be expected to operate under the ceiling in the contract. The Director further stated that if the contract ceiling was not increased, the Army should change the "customer cap." The IAT believed that, in addition to ARDEC, it would receive near-term taskings from the Strategic Defense Initiatives Organization, the DARPA, the National Aeronautics and Space Administration, and the Army Ballistics Research Laboratory.

The Director, IAT, wanted the basic contract modified to conform to other DoD FFRDC contracts; that is, to include a 5-percent fee to pay for expenses that are not specifically allowable or allocable to the contract, to ease cash flow problems, and to grant authority to reallocate funding among tasks, as long as the total dollar ceiling on the contract was not exceeded. The Director, IAT, also wanted the contract statement of work rewritten to articulate clearly the presently accepted scope and mission of the IAT as seen by the Deputy Assistant Secretary of the Army (Research and Technology).

A contract modification would be needed to expand the mission and scope of IAT to operate the Combined Arms Systems Engineering/Battlefield Integration Center (CASE/BIC) facility and to perform a wider range of prototyping, testing, and evaluation efforts. In February 1991, the Deputy Assistant Secretary of the Army (Research and Technology) requested that

IAT investigate acquisition of the CASE/BIC facility. The General Dynamics, Fort Worth Division (GD/FW) had approached the IAT about participating as a subcontractor on a DARPA-funded project that involved prototype applications for analysis and evaluation. One of the first applications was likely to be hypervelocity weapons in an electric gun configuration. The Chancellor of the University was receptive to the Deputy Assistant Secretary's proposal.

Congressional actions. The FY 1992 Defense Authorization Act authorized $15 million for the IAT to lease and operate the CASE/BIC facility in Fort Worth, Texas. The FY 1992 Defense Appropriation Act (Public Law 102-72) appropriated $8 million to the Army for distributed interactive simulation technology in support of future weapons systems. The Act requires the Army to provide a plan for the use of the facility and a lease-purchase analysis on the facility to the Appropriations Committees. Another $15 million was appropriated to the Army for hypervelocity physics research and development in support of the electric gun development. These appropriations were added by Congress and not included in the Army budget submission for FY 1992. Increased funding for the IAT could result in corresponding cuts at other DoD-sponsored FFRDCs since the FY 1992 Defense Appropriation Act also included a general provision limiting amounts available to finance DoD FFRDCs to 4 percent less than FY 1991 appropriated amounts.

Conclusions

The Army did not perform a thorough requirements analysis or conduct adequate advance planning before deciding to establish an FFRDC for electric gun technology needs and before issuing requests for proposal to meet those needs. No real competition existed for the award of the basic contract because of the inadequate definition of the mission and scope of the FFRDC, the restrictive funding profile, and the exclusion of the Picatinny Arsenal Technical Associates proposal from the competitive range. The University proposal was based on the Army funding ceiling rather than a realistic estimate of the funding needed to operate the IAT for 5 years. The proposed modification into the area of simulation and modeling and the additional customer funding is an expansion beyond the scope of the original plans for the FFRDC. A market survey to identify competing sources for these additional services has not been conducted. The Army did not comply with the requirement of OFPP Policy Letter 84-1 in establishing the FFRDC.

RECOMMENDATIONS, MANAGEMENT COMMENTS, AND AUDIT RESPONSES

1. We recommended that the Assistant Secretary of the Army (Research, Development and Acquisition) stop further action on the proposed sole-source modification to increase funding from $13 million to $97 million on contract number DAAA21-90-D-0009.

Management comments. The Assistant Secretary of the Army (Research, Development and Acquisition) and the Deputy Director, Defense Research and Engineering (Plans and Resources), concurred with the recommendation. The Assistant Secretary stated that the Army, with the concurrence of the Director, Defense Research and Engineering, proposed a ceiling of $15 million per year for FY 1992 and FY 1993 for the IAT. He also stated that the Army planned to transition the IAT to a non-FFRDC organization in FY 1994 and that this action was consistent with the new FFRDC Management Plan. The Deputy Director stated the Army was reevaluating its needs in electromechanics and hypervelocity physics.

2. We recommended that the Assistant Secretary of the Army (Research, Development and Acquisition) reassess research needs relative to electromechanics and hypervelocity physics and related resource costs and identify alternatives to the Federally Funded Research and Development Center for accomplishing these needs. Alternatives should include expanding the staffing at the Army Armaments Research, Development and Engineering Center, using non-Federally Funded Research Development Center contracts, or both.

Management comments. The Assistant Secretary of the Army (Research, Development and Acquisition) and the Deputy Director, Defense Research and Engineering (Plans and Resources), concurred with the recommendation. The Assistant Secretary stated that after careful review, the Army and the Office of the Director, Defense Research and Engineering, decided that for FYs 1992 and 1993 the needs of the Army and Federal Government relative to electromechanics and hypervelocity physics could best be met under the current FFRDC arrangement, funded at the minimum responsible level of $15 million per year. He also stated that the decision to continue the IAT as an FFRDC until FY 1994 was reflected in the new OSD FFRDC Management Plan.

3. We recommended that the Assistant Secretary of the Army (Research, Development and Acquisition), based on the results of the assessment, either terminate the contract for the Federally Funded Research and Development Center or continue its operations under the current funding ceiling for the contract.

Management comments. The Assistant Secretary of the Army (Research, Development and Acquisition) and the Deputy Director, Defense Research and Engineering (Plans and Resources), partially concurred with the recommendation, and stated their position was to fund the IAT at $15 million per year during FY 1992 and FY 1993. The Assistant Secretary stated that the original funding ceiling of $13 million represented the only firm program funding at the time of contract solicitation and award, and that this level of funding was not sufficient for significant research and experimentation. He stated that the $15 million annual funding level for FY 1992 and FY 1993 was a compromise that recognized political and resource priorities and constraints.

Audit response. The funding limit of $15 million per year for FY 1992 and FY 1993 represents an increase in funding for the IAT. The Army response does not identify the research requirements covered by this increase, or whether any part of the increase relates to transitioning the IAT to a non-FFRDC organization. We request that the Army provide this information in response to the final report.

Management comments on the findings and conclusions. The Assistant Secretary of the Army (Research, Development and Acquisition) disagreed with the finding and several conclusions. He stated that the Army thoroughly analyzed requirements and assessed alternatives over a 2-year period prior to establishing the FFRDC and that the decision to proceed with establishing the FFRDC was made based on adequate and complete information and included a September 1988 memorandum to the Assistant Secretary of the Army (Research, Development and Technology). He also stated that the only restrictive aspects in the competition to establish the FFRDC were the requirements of OFPP Policy Letter 84-1. Additionally, the Assistant Secretary stated that the General Accounting Office had summarily dismissed the protest by the Picatinny Arsenal Technical Associates because the reason for its protest was not valid.

Audit response. During the audit, we requested all documentation in support of decisions by the Army to establish an FFRDC. Among the documents that we obtained was the September 21, 1988, memorandum from the Army Deputy for Technology and Assessment to the Assistant Secretary of the Army (Research, Development and Technology) that discussed the pros and cons of the University of Texas proposal to establish an FFRDC. The memorandum recognized the University's proposal to establish the FFRDC and stated that, based on "extensive discussions with Army leadership" and an "assessment from the Army technical community" the Army should continue to maintain facilities at the University in the areas of electromagnetics and hypervelocity impacts. The memorandum stated that the benefits to the Army from establishing an FFRDC were increased visibility of and stability to the research effort at the University. We were never provided nor could we locate an assessment by the Army technical community that concluded the establishment of an FFRDC at the University was absolutely required for the research to be performed. In regard to the restrictive aspects in the competition, the documentation indicated that the $13 million funding profile for the 5-year contract for the FFRDC was also a reason why some potential sources did not submit a proposal. Also, the Comptroller General never issued a decision on the protest by Picatinny Arsenal Technical Associates, because the contractor never formally requested a ruling by the Comptroller General.

PART II - ADDITIONAL INFORMATION

APPENDIX A - Chronology of Events on the Institute for Advanced Technology

APPENDIX B - Summary of Potential Benefits Resulting from Audit

APPENDIX C - Activities Visited or Contacted

APPENDIX D - Report Distribution

APPENDIX A - CHRONOLOGY OF EVENTS ON THE INSTITUTE FOR ADVANCED TECHNOLOGY

March 3, 1988 - A representative of the University briefed the Assistant Secretary of the Army (Research, Development and Acquisition) (ASA(RDA)) on a proposal to establish an Army FFRDC operated by the University.

July 22, 1988 - The Commanding General, ARDEC forwarded a J&A document to the ASA(RDA) for approval to award a sole-source contract to the University to establish an FFRDC.

August 8, 1988 - The ASA(RDA) directed the Commanding General, ARDEC to provide additional information regarding establishment of an FFRDC.

August 24, 1988 - The Commanding General, ARDEC provided additional information requested by the ASA(RDA) and requested authority to proceed with the award of a sole-source contract to the University to establish an FFRDC.

August 30, 1988 - The Army Competition Advocate nonconcurred with the proposed sole-source contract.

September 21, 1988 - In a memorandum to the ASA(RDA), the Army Deputy for Technology and Assessment discussed a proposal to establish an FFRDC at the University of Texas and recommended pursuing the establishment of the FFRDC.

September 22, 1988 - In a memorandum to the ASA(RDA), the Army General Counsel recommended that the requirement for establishment of an FFRDC be competed.

March 16, 1989 - In a memorandum to the Secretary of the Army, the ASA(RDA) requested permission to compete the requirement to establish an FFRDC.

May 5, 1989 - The Secretary of the Army approved the requirement to establish an FFRDC through competitive procurement.

June 2, 1989 - In a memorandum to the ASA(RDA), the ARDEC contracting officer questioned whether the funding profile ($13 million for 5 years) for the FFRDC was sufficient to interest an adequate number of qualified competitors for optimum competition. He cited the OFPP Policy Letter 84-1 prohibition on FFRDCs competing for other Federal procurements and noted that the University had received $35 million in contract awards in research related to electromechanical guns since 1983, of which $17 million was awarded competitively.

June 5, 1989 - The Commanding General, ARDEC authorized the issuance of the request for proposals document in advance of an approved acquisition plan.

APPENDIX A - CHRONOLOGY OF EVENTS ON THE INSTITUTE FOR ADVANCED TECHNOLOGY (cont'd)

June 12, 1989 - ARDEC issued the request for proposals document DAAA21-89-R-0127 for the FFRDC.

July 14, 1989 - In a memorandum, the ASA(RDA) informed the Deputy Director of Defense Research and Engineering (Research and Advanced Technology) of plans to issue a competitive solicitation to establish an Army FFRDC for electromechanics and hypervelocity research.

July 27, 1989 - The Deputy Director of Defense Research and Engineering (Research and Advanced Technology) informed the ASA(RDA) by memorandum that he continued to oppose the establishment of an FFRDC in the area of electromagnetic propulsion.

November 20, 1989 - The Deputy Under Secretary of Defense for Acquisition informed the ASA(RDA) by memorandum that the establishment of the FFRDC violated the policy guidelines of OFPP Policy Letter 84-1, which could bring unwarranted attention from the Congress, and recommended the Army meet requirements through more conventional contracting methods.

November 30, 1989 - The Secretary of the Army informed the Director, Defense Research and Engineering by memorandum that an evaluation was on-going; that cancellation of the procurement action would evoke severe criticism from industry, academia, and the Congress; and that a final decision on the FFRDC would be made after completion of the LAB 21 Study but before award of the FFRDC contract.

November 30, 1989 - The Secretary of the Army informed the Under Secretary of Defense for Acquisition by memorandum that the Army was reviewing proposals solicited many months ago and upon which responding institutions had spent considerable funds in bid and proposal costs. The Secretary stated that he believed an FFRDC was only marginally justifiable.

March 9, 1990 - The Acting Deputy Under Secretary of Defense for Acquisition informed the Secretary of the Army by memorandum that the proposed FFRDC was not consistent with the LAP 21 Study results, the Army's desire to build up its in-house capability in research and exploratory development, or the policy guidelines of OFPP Policy Letter 84-1.

April 18, 1990 - The acquisition plan for establishment of an FFRDC was approved by the Principal Assistant Responsible for Contracting, ARDEC.

April 23, 1990 - Contract negotiations with the University, which had begun March 1, 1990, were concluded by ARDEC.

APPENDIX A - CHRONOLOGY OF EVENTS ON THE INSTITUTE FOR ADVANCED TECHNOLOGY (cont'd)

May 3, 1990 - The Deputy Assistant Secretary of the Army (Research and Technology) in a memorandum to the ASA(RDA) recommended award of the FFRDC contract and stated his belief that establishing an FFRDC was not contrary to LAB 21 Study recommendations.

May 4, 1990 - The ASA(RDA) in a memorandum to the Secretary of the Army stated that establishment of the FFRDC was consistent with LAB 21 Study results since the capability was not available in-house in the near term. He stated that the Army was consolidating and building its in-house capability to further pioneer this revolutionary technology. The ASA(RDA) further stated that the Army could be severely criticized by Congress if the procurement was canceled. He recommended that OSD be notified of the Army intention to award the FFRDC contract.

May 16, 1990 - The Secretary of the Army informed the Under Secretary of Defense for Acquisition by memorandum that he disagreed with the OSD staff objections to establishing an FFRDC; that his staff had determined the Army proposal complied with law, OFPP and DoD regulations and directives, and Congressional report language; that the Army needs could not be met by other contractual means; and that the Army intended to proceed with the award of the FFRDC contract.

May 25, 1990 - The Deputy Under Secretary of Defense for Acquisition approved the award of the contract based on the Army determination that an FFRDC best met Army needs.

May 25, 1990 - ARDEC awarded contract DAAA21-90-D-0009 to the University to establish the IAT as an FFRDC.

January 30, 1991 - The Director, IAT, notified the Deputy Assistant Secretary of the Army (Research and Technology) by letter that General Dynamics, Forth Worth Division (GD/FW) had requested the IAT to participate as a subcontractor on a research project for the DARPA. GD/FW planned to use its Combined Arms Systems Engineering/Battlefield Integration Center (CASE/BIC) to perform the research work.

February 16, 1991 - The Deputy Assistant Secretary of the Army (Research and Technology), the Director, IAT, and others attended a briefing and toured the GD/FW CASE/BIC facility. General Dynamics wanted to sell the facility and the Deputy Assistant Secretary of the Army (Research and Technology) requested the IAT to investigate how the University might acquire the facility and to determine the contract modifications needed to accommodate supporting and utilizing the facility.

APPENDIX A - CHRONOLOGY OF EVENTS ON THE INSTITUTE FOR ADVANCED TECHNOLOGY (cont'd)

May 13, 1991 - The National Defense Authorization Act for Fiscal Years 1992 and 1993 (House Report 102-60) recommended an authorization of $15 million for the IAT to lease and operate the CASE/BIC facility.

August 2, 1991 - The first meeting of the IAT Executive Advisory Board was held, and the Director, IAT discussed deficiencies in the existing FFRDC contract.

August 26, 1991 - Representatives of the ASA(RDA), ARDEC, and IAT met to discuss changes to the FFRDC contract in response to the deficiencies identified by the Director, IAT.

November 29, 1991 - The Fiscal Year 1992 Defense Appropriation Act (Public Law 102-72) appropriated $8 million to the Army for simulation technology in support of future weapons systems subject to the Army providing a plan on the use of the CASE/BIC facility and a lease-purchase analysis on the facility to the Appropriations Committees. Another $15 million was appropriated to the Army for hypervelocity physics research and development in support of electric gun development.

January 31, 1992 - ARDEC prepared a J&A document proposing a sole-source modification to increase the fund ceiling on the existing FFRDC contract from $13 million to $97 million and to increase the scope of work.

February 20, 1992 - The Director, IAT, in a memorandum to the Deputy Assistant Secretary of the Army (Research and Technology), discussed inadequacies of the original funding ceiling and needed changes.

May 12, 1992 - Headquarters, Army Materiel Command, Office of the Deputy Chief of Staff for Acquisition, requested additional information on the proposed $84 million sole-source contract modification. Requested was a detailed breakdown of the funding, a description of controls to ensure that only legitimate delivery orders were placed with the FFRDC, an explanation of why competition of the requirements was not feasible, and an evaluation of IAT's capacity to perform the additional work in the time remaining on the contract.

June 5, 1992 - ARDEC provided additional information to Headquarters, Army Materiel Command on the sole-source contract modification.

APPENDIX B - SUMMARY OF POTENTIAL BENEFITS RESULTING FROM AUDIT

Recommendation Reference	Description of Benefits	Amount and Type of Benefit
1.	Economy and Efficiency. Suspend proposed sole-source modification. Improve competition and reduce costs.	Nonmonetary.
2.	Program Results. Improve compliance with OFPP policy by relying on existing capabilities to satisfy requirements.	Nonmonetary.
3.	Program Results. Terminate use of unnecessary FFRDC.	Nonmonetary.

APPENDIX C - ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Deputy Director, Defense Research and Engineering (Plans and Resources), Washington, DC

Department of the Army

Office of the Deputy Assistant Secretary of the Army (Research and Technology), Washington, DC
Office of the Deputy Assistant Secretary of the Army (Procurement), Washington, DC
Headquarters, U.S. Army Materiel Command, Alexandria, VA
U.S. Army Armament, Munitions and Chemical Command, Rock Island, IL
U.S. Army Armament Research, Development and Engineering Center, Picatinny Arsenal, NJ
U.S. Army Ballistics Research Laboratory, Aberdeen Proving Grounds, MD

Department of the Navy

Office of Naval Research Resident Representative, Austin, TX

Other

Institute for Advanced Technology, Austin, TX

APPENDIX D - REPORT DISTRIBUTION

Office of the Secretary of Defense

Director, Defense Research and Engineering
Director of Defense Procurement

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
Commander, Army Materiel Command
Commander, Army Armament, Munitions and Chemical Command
Commander, Army Armament Research, Development and Engineering Center
Director, Army Research Laboratory

Non-DoD

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

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

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

PART III - MANAGEMENT COMMENTS

Defense Research and Engineering

Department of the Army

OFFICE OF THE DIRECTOR OF
DEFENSE RESEARCH AND ENGINEERING
WASHINGTON, DC 20301-3030

AUG 25 1992

MEMORANDUM FOR PROGRAM DIRECTOR, INSPECTOR GENERAL, DoD
(CONTRACT MANAGEMENT DIRECTORATE)

SUBJECT: Quick-Reaction Report on the Audit of the Army Contract with the University of Texas at Austin, Institute for Advanced Technology (Project No. 1CH-5012.01)

In response to the DoD Inspector General (IG) request of July 22, 1992, to review and comment on the IG's draft report of the audit of the Institute for Advanced Technology (IAT), I am providing the following comments.

DoD IG Recommendation 1. Stop further action on the proposed sole-source modification to increase funding from $13 million to $97 million on contract number DAAA21-90-D-0009.

Concur with DoD IG recommendation for the Army to stop efforts to increase the IAT contract ceiling from $13 million to $97 million. The Army is reevaluating its needs in the areas of electromechanics and hypervelocity physics and is no longer seeking an $84 million increase in this contract.

DoD IG Recommendation 2. Reassess research needs relative to electromechanics and hypervelocity physics and related resource costs and identify alternatives to the Federally Funded Research and Development Center for accomplishing these needs to include expanding the staffing at the Army Armaments Research, Development and Engineering Center or using non-FFRDC contracts, or both.

Concur with DoD IG recommendation that the Army reassess its needs relative to electromechanics and hypervelocity physics and determine if there are alternatives to effectively accomplish this research and development. However, it is recommended that the ongoing research and development program at IAT not be interrupted while the Army reassesses its needs in these important areas.

DoD IG Recommendation 3. Based on the results of the assessment, either terminate the contract for the FFRDC or continue its operations under the current funding ceiling for the contract.

DEFENSE RESEARCH AND ENGINEERING COMMENTS (cont'd)

Concur in part with comment. Concur with DoD IG recommendation that the IAT contract continue during FY 92 and FY 93. It is the DDR&E position that the funding ceiling during FY 92 and FY 93 be at the $15M per year level in order to permit the Army to conduct and complete necessary research and experimentation. Since it is felt that necessary work can be completed during FY 93, the need for continuing or terminating the contract should be examined by the Army and appropriate action taken in accordance with applicable regulations and laws.

John W. Bachkosky
Deputy Director
Defense Research and Engineering
(Plans and Resources)

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, DC [illegible]

SARD-ZT

24 AUG 1992

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE (AUDITING)

SUBJECT: Quick Reaction Report on the Audit of the Army Contract with the University of Texas at Austin, Institute for Advanced Technology (Project No. 1CH-5013.01)

This responds to your memorandum of July 22, 1992, requesting comments on the subject draft report. The Army's response to each Recommendation and our comments on the findings and conclusions are attached.

In general, the Army does not concur with many of the findings and assumptions cited nor on the conclusions you reached. We found the draft report factually deficient in many respects, as noted in the attached comments. In particular, the report fails to recognize current Army initiatives, coordinated with the Office of the Director, Defense Research and Engineering, to establish reasonable funding levels at the Institute for Advanced Technology, and to explore non-FFRDC alternatives due to rapidly evolving changes in Defense and Federal priorities and technical direction.

Stephen K. Conver
Assistant Secretary of the Army
(Research, Development and Acquisition)

Attachment

CF:
DDRE
SAIG-PA

DEPARTMENT OF THE ARMY COMMENTS

INSPECTOR GENERAL, DOD, DRAFT QUICK-REACTION REPORT

PROJECT NO. 1CH-5012.01

Although the Army generally concurs with the Recommendations as explained in the following responses, we do not concur with many of the findings and conclusions of the Inspector General, as further discussed below.

1. IG Recommendation: **Stop further action on the proposed sole-source modification to increase funding from $13 mil to $97 mil on contract number DAAA21-90-0009.**

DA Position: Concur. The proposal to increase program and contract funding to the $97 million level was amended some time ago. The Army, for various programmatic reasons, and with the concurrence of DDR&E, has proposed a contract ceiling of $15 mil per year for FY92 and FY93. The Army intends to transition the Institute for Advanced Technology to a non-Federally Funded Research and Development Center (FFRDC) organization in FY94. This action is consistent with the new DoD FFRDC Management Plan.

2. IG Recommendation: **Reassess research needs relative to electromechanics and hypervelocity physics and related resource costs, and identify alternatives to the Federally Funded Research and Development Center for accomplishing these needs to include expanding the staffing at the Army Armament Research, Development and Engineering Center, using non-FFRDC contracts, or a combination.**

DA Position: Concur, with comment. As further discussed below, the Army has reviewed this matter for some time in coordination with OSD and other concerned agencies. As a matter of policy, the Army is constantly reassessing its research needs and its science and technology base priorities in light of changing threats, technological opportunities, doctrine and resources. After careful review, the Army and the ODDR&E decided that, for the present (FY92/93), the needs of the Army and the Federal Government relative to electromechanics and hypervelocity physics research can best be met under the current FFRDC arrangement, funded at the minimum responsible level cited above. The considered decision to continue the IAT as an FFRDC until FY94 is reflected in the new OSD FFRDC Management Plan.

3. IG: **Based on the results of the assessment, either terminate the contract for the FFRDC or continue its**

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operations under the current funding ceiling until the contract expires.

DA Position: Concur, in part with comment; non-concur in part. (See the response to Recommendation 2, above.) As a result of our coordinated assessment, the Army and ODDR&E decided to continue under the FFRDC arrangement through FY93. The decision to establish an FFRDC is not made lightly, nor is it effected easily. It requires extraordinary preparation, analysis, coordination, public notices and Congressional approval. Terminating this special, and supposedly long-term, relationship is also a very serious decision and a deliberate process (e.g., Office of Federal Procurement Policy (OFPP) Policy Letter 84-1 directs that sponsoring agencies notify other federal agencies of their intent to dissolve an FFRDC to allow them an opportunity to assume sponsorship).

The original funding ceiling of $13 million represented the only firm, programmed funding that could be identified at the time of solicitation and award. At the time, all parties recognized that this amount was, and is, insufficient for any significant laboratory research and experimentation, and that the FFRDC would grow deliberately as it matured and attracted funding from other sources and other program managers. The agreed upon IAT funding level for FY92/93 of $15 million per year is, itself, a compromise which recognizes political and resource priorities and constraints.

RESPONSE TO IG FINDINGS AND CONCLUSIONS

Description of IG Findings and Conclusions

The report asserts that the Army did not thoroughly analyze requirements or assess alternative capabilities for meeting its "electric gun" technology research needs prior to establishing the IAT as an FFRDC. The IG further found that the competition for the contract to establish the FFRDC was unnecessarily restricted, and that the contract was awarded without "adequate price competition". The IG also found that the proposed $84 million sole-source modification to the IAT contract would have significantly changed the scope of the original "contract award". In summary, the IG concluded that the establishment of the FFRDC by the Army, and plans to increase its use, are "contrary to Government-wide policy of relying on established resources for meeting needs."

1. IG CONCLUSION: The Army did not thoroughly analyze requirements or assess alternative capabilities for meeting its research requirements.

DA RESPONSE: Nonconcur. This issue was addressed thoroughly by the Army on several occasions over a two-year period. In July 1988, the Army conducted a market survey consisting of a review of

the capabilities existing in the for-profit industry as well as non-profit-making activities such as national laboratories (Sandia, Los Alamos, Brookhaven and Jet Propulsion). In August 1988, the Army again performed a market survey consisting of a review of existing test facilities and Railgun/Electromechanical experience among private industry contractors and national laboratories. In September 1988, a memorandum to ASA(RDA) provided the pros and cons, and ultimately a recommendation, for proceeding with the plan to establish an FFRDC. Finally, in May 1990, the Secretary of the Army provided an information paper to the Under Secretary of Defense for Acquisition (USD(A)) which reiterated that the Army's needs could not be met by other contractual means. Given these actions, the Army strongly disagrees that the analysis was not thorough. When creation of the FFRDC was being considered, some individuals disagreed with the Army's decision, but the decision was based on adequate and complete information and, more importantly, it was approved by the USD(A) after considering all of the facts.

2. IG CONCLUSION: The proposed $84 million modification to the IAT contract has not been adequately justified and significantly changes the scope of the contract.

DA RESPONSE: Nonconcur. This conclusion by the IG is moot since the Army has rescinded that proposal. Currently, a new J&A is being staffed which proposes a ceiling of $15 million per year for FY92 and FY93. This funding level is consistent with funding ceiling in the new DoD FFRDC Management Plan.

The statement that the scope of the contract, whether it is for $84 million or $30 million, is significantly changed is not correct from the standpoint that the scope and mission of the FFRDC has not changed. The nature of the work authorized and planned for assignment to the FFRDC is not being changed by virtue of this action, only the funding ceiling level is changed. As was correctly noted in the report, the current funding ceiling in the contract is $13 million for 5 years through FY96. At the time of the contract award, the Army recognized a need to eventually increase the ceiling. At that time, however, there was no basis for any higher figure. The basis now exists and is fully explained in the proposed J&A, which accounts for both mission and customer funding.

The proposed increase in the funding for the FFRDC is not unprecedented. The GAO looked at this issue in its March 1988 report to Congress on FFRDCs. In comparison, Lincoln Laboratories funding growth increased by 72% from FY82-86; DOD funding of Lawrence Livermore National Laboratory increased by 256% from FY82-86; DOD funding for Los Alamos National Laboratory increased by 561% from FY82-86. Although these institutions have been in existence for some time, it is apparent that their use has increased. An increase in the utilization of the IAT had also been anticipated.

3. IG CONCLUSION: Competition for the contract to establish the FFRDC was unnecessarily restricted.

DA RESPONSE: Nonconcur. The only restrictive aspects in the competition to establish the FFRDC were the requirements of OFPP Policy Letter 84-1 which stipulates criteria for establishing FFRDCs. Although at one point the Army did consider a sole source contracting strategy, once it was decided to procure on a full and open competition basis, everything possible was done to ensure the competition was not unnecessarily restricted. As the OFPP letter requires, there were three notices in the Commerce Business Daily as well as the Federal Register notifying industry and academia of the planned procurement. There was a pre-proposal conference held in which prospective offerers were able to ask any and all questions and make any suggestions for changes to either the Army's solicitation or strategy to establish an FFRDC. There were 112 requests for copies of the solicitation from interested parties. As recounted in the IG report, the feedback from industry for not responding with a proposal were varied and not atypical of the reasons for failing to respond to a "normal", complex DoD solicitation. The IG report states that the funding profile was restrictive, referring to a memorandum from the PCO to OASA(RDA) which raised the question whether $13M would be funded. Procurement regulations prohibit requirements being solicited, negotiated, or contracted unless there is a reasonable expectation that the requirements will be funded.

The IG report also states that the University of Texas at Austin proposal was based on the Army funding ceiling rather than a realistic estimate of the funding needed to operate the IAT for 5 years. Although it was not expressly stated in the solicitation, by including the funding profile it was implied to all offerers that their proposals should be structured to the funding available rather than some higher estimate.

The most likely reason that only two offerors submitted proposals in response to the solicitation was the stringent requirements detailed in the OFPP Policy Letter. A review of those requirements shows that, in order to be identified as an FFRDC an activity must, among other things:

1) receive from the Government the majority of its financial support (70%)

2) have most or all of its facilities owned or funded by the Government

3) be operated, managed and/or administered by either a university or consortium of universities, other non-profit organization or industrial organization or firm as an autonomous organization or separate operating unit

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4) agree not to compete with any non-FFRDC in response to a Federal solicitation

The above requirements are necessary to ensure that the independence and freedom from conflict of interest of the organization are maintained. Although necessary, the resulting effect is that most organizations are unwilling to accept such an arrangement, in spite of the fact that numerous contractor sources were performing research and development in various aspects of electric gun technology.

4. IG CONCLUSION: The contract was awarded without adequate price competition.

DA RESPONSE: Concur, but there was nothing illegal, irregular, or improper about this approach. The term "adequate price competition" is explained in FAR 15.804-3. It is a basis for not requiring a contractor to submit certified cost or pricing data. It can also serve as a basis for a PCO's determination that a price is a fair and reasonable one. In the case of the award of the FFRDC, the PCO never planned or expected that there would be adequate price competition. The alternative method of determining that a price is fair and reasonable is by analyzing, evaluating and negotiating the cost. This is also the most commonly employed method of determining price reasonableness on a negotiated procurement, and this is the method that was used on the procurement for the FFRDC.

ADDITIONAL COMMENTS

The following additional comments are offered on other areas of the DOD IG report:

1. Page 5: The report states that an Unsolicited Proposal was submitted by the University of Texas at Austin in 1988. There was a briefing describing a concept for an FFRDC at the University of Texas at Austin made by Dr. Harry Fair (who left government service at DARPA in 1987) to key Army leadership in March 1988. Although it may have been described as an Unsolicited Proposal, and perhaps even by some individuals in the Army, when the "document" was subjected to a review IAW FAR 15.500 the Army determined that it did not qualify as an Unsolicited Proposal and it was not treated as such.

"Unsolicited Proposal" not in Draft Report.

3

2. Page 7: The report states that the RFP was issued June 1989 and that the Acquisition Plan was not completed until April 1990. The report seems to imply that this was inappropriate. While the Army Supplement to the FAR requires that an Acquisition Plan be approved prior to release of the solicitation under normal conditions, the regulations also provide for exceptions to this requirement. Such an exception was prepared and approved by the

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appropriate authority prior to release of the solicitation. As mentioned in the report, the Acquisition Plan was prepared, reviewed, and approved in accordance with Agency procedures prior to award of the contract.

3. Page 9: The Report states that the ARDEC PCO denied the protest from Picatinny Arsenal Technical Associates (PATA). While this is true, it is also true that the protest was summarily dismissed by the GAO based on the fact that the GAO did not consider PATA's stated reason to be a valid basis for protest. — 6

4. Page 9: The section termed "OSD Approval" describes the various memoranda that went back and forth between the Army and the DOD which expressed various opinions on the pros and cons of establishing the FFRDC. This give and take is not unusual for decision-making in the DoD or elsewhere. It is worth emphasizing that the Under Secretary of Defense for Acquisition, after considering all of the views and recommendations of Army and OSD staffs, approved the award of the contract establishing the FFRDC under Army sponsorship. — "OSD action" in Draft Report. 5

5. Page 11: Although the statements are true regarding the appointment of former government employees and experts in the fields of Hypervelocity and Electromechanics to the FFRDC staff, there is nothing in law or regulation which prohibits this as long as the Standards of Conduct are not infringed. The Army has no evidence that infringements have existed or exist at present. — 6

6. Page 11: The section which addresses subcontracts provides various facts regarding subcontracts which were awarded by the FFRDC, apparently implying that something improper had been done. There is no prohibition on the award of subcontracts by an FFRDC, although the amount of subcontracting is always a concern which must be monitored. If, for example, the FFRDC were subcontracting significant portions of their efforts, it might raise the question of the necessity for an FFRDC. At the time of contract award the FFRDC estimated $500K for subcontracts during the course of the contract, which is not considered significant. — 7

List of Audit Team Members

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Garold E. Stephanson, Audit Program Director
John M. Gregor, Audit Project Manager
John H. Christian, Senior Auditor
Samuel J. Scumaci, Senior Auditor
Noble C. White, Auditor