# Audit Report

OFFICE OF THE INSPECTOR GENERAL

**NAVY PROPOSED FOLLOW-ON RESEARCH AND DEVELOPMENT CONTRACT FOR JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY**

Report No. 95-001 October 3, 1994

**Department of Defense**

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**Acronyms**

| | |
|---|---|
| FAR | Federal Acquisition Regulation |
| J&A | Justification and Approval |
| SPAWAR | Space and Naval Warfare Systems Command |

October 3, 1994

MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY
(FINANCIAL MANAGEMENT)

SUBJECT: Audit Report on the Navy Proposed Follow-on Research and Development Contract for Johns Hopkins University Applied Physics Laboratory (Report No. 95-001)

We are providing this report for your review and comments. This report is the first of two reports from our ongoing audit of the Navy research and development contract for Johns Hopkins University Applied Physics Laboratory (Project No. 4CH-5006.01). This report discusses the Space and Naval Warfare Systems Command plan to noncompetitively award a follow-on contract to the Johns Hopkins University Applied Physics Laboratory. Comments from the Assistant Secretary of the Navy (Research, Development, and Acquisition) on a draft of this report were considered in preparing this final report.

The Navy comments were responsive to the intent of the recommendations; however, the Navy did not provide a completion date for actions to be taken. DoD Directive 7650.3 requires that all recommendations be resolved promptly. Therefore, we request that the Navy provide a completion date by December 5, 1994, for its proposed action to transition the research and development contract with the Applied Physics Laboratory from a task order contract to a basic ordering agreement (Recommendation 3.)

We appreciate the cooperation and courtesies extended to the audit staff. If you have any questions on this audit, please contact Mr. Garold E. Stephenson, Audit Program Director, at (703) 604-9332 (DSN 664-9332) or Mr. Eugene E. Kissner, Audit Project Manager, at (703) 604-9213 (DSN 664-9213). Copies of the final report will be distributed to the organizations listed in Appendix E. The audit team members are listed inside the back cover.

David K. Steensma

David K. Steensma
Deputy Assistant Inspector General
for Auditing

# Office of the Inspector General, DoD

**Report No. 95-001** **October 3, 1994**
(Project No. 4CH-5006.00)

## NAVY PROPOSED FOLLOW-ON RESEARCH AND DEVELOPMENT CONTRACT FOR JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY

## EXECUTIVE SUMMARY


**Introduction.** This report is the first of two reports from our ongoing audit of the Navy research and development contract for the Johns Hopkins University Applied Physics Laboratory (the Applied Physics Lab) (Project No. 4CH-5006.01). This report discusses the Navy's planned noncompetitive award of a 1-year task order contract with two 1-year options to be effective after the existing contract with the Applied Physics Lab expires on September 30, 1994. The total value of the proposed contract, including the option years, is $1.2 billion.

**Objectives.** The primary audit objective was to evaluate policies and procedures at the Space and Naval Warfare Systems Command for awarding and administering the Navy research and development contract with the Applied Physics Lab. We also reviewed applicable internal controls. This report covers only the portion of the objective concerning the proposed contract award and related internal controls. The portion of the objective concerning administration of the contract and the internal controls over contract award and administration will be discussed in a subsequent report.

**Audit Results.** The Navy intends to award, without adequate justification for other than full and open competition, a 1-year task order contract with two 1-year options to the Applied Physics Lab. The task order structure of the proposed contract does not require task sponsors to seek competition for the individual task orders issued under the contract and causes management and control problems for contracting personnel and other oversight groups. Additionally, the use of the fee paid to the Applied Physics Lab has not been evaluated since 1962. As a result of the absence of competition and the absence of a recent evaluation of the fee paid to the Applied Physics Lab, the Navy may be paying more for the services procured from the Applied Physics Lab than necessary and may be denying other qualified contractors the opportunity to compete for the work awarded sole-source to the Applied Physics Lab. See Part II for details.

**Internal Controls.** We limited our review of internal controls to the process used to approve the proposed noncompetitive contract award. We did not identify any material internal control weaknesses. See Part I for the internal controls reviewed.

**Potential Benefits of Audit.** Implementation of the recommendations will result in a clear definition of the essential capabilities the Navy needs to maintain at the Applied Physics Lab, improved justifications for orders awarded sole-source to the Applied Physics Lab, identification of sources other than the Applied Physics Lab for the services now procured sole-source, and decreased costs to the Government through competition. Although we believe potential monetary benefits will result from the implementation of the recommendations, we could not quantify the amount because the amount of future contracting is unknown. Appendix C summarizes the potential benefits of the audit.

**Summary of Recommendations.** We recommend that the Navy clearly define the essential capabilities that the Navy wants to maintain at the Applied Physics Lab. We also recommend that the Navy demonstrate that the Applied Physics Lab is uniquely qualified to provide those capabilities and determine whether sources other than the Applied Physics Lab are capable of providing the services being procured from the Applied Physics Lab. We recommend that the Navy prepare a basic ordering agreement to replace the task order contract with the Applied Physics Lab, and reassess the fee arrangement with the Applied Physics Lab.

**Management Comments.** The Navy stated that ongoing work needs to be continued, and accommodating all of the recommendations was not possible before contract award on October 1, 1994. The Navy has negotiated a number of improvements in the contract. The Navy further stated that using competition to the maximum extent possible is essential. The Navy intends to conduct a study to determine whether other organizations are capable of providing the same types of services as those obtained from the Applied Physics Lab and whether the Applied Physics Lab is uniquely qualified to perform certain services. The Navy also intends to award follow-on contracts in the basic ordering agreement format to other smaller university affiliated laboratories and use the experience to transition the larger Johns Hopkins University Applied Physics Lab contract to a basic ordering agreement. Additionally, the Navy agreed to assess the fee paid to the Applied Physics Lab and included a use of fee clause in the request for proposal for the follow-on contract for the Applied Physics Lab. See Part II for a full discussion of management's responsiveness and Part IV for the complete text of the comments.

**Audit Response.** The Navy comments were responsive. However, the Navy did not provide a completion date for actions to be taken. We request that the Navy provide a completion date by December 5, 1994, for its planned action to transition the research and development contract for the Applied Physics Lab from a task order contract to a basic ordering agreement.

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This report was prepared by the Contract Management Directorate, Office of the Assistant Inspector General for Auditing, Department of Defense.

# Part I - Introduction

## Background

The Navy has been contracting for engineering, research, and development services on a noncompetitive basis with the Johns Hopkins University Applied Physics Lab (the Applied Physics Lab) since World War II. The aggregate value of the contracts awarded to the Applied Physics Lab from March 1942 through September 1994 is $6.4 billion. The existing contract, valued at $2 billion, expires on September 30, 1994, and the Navy plans to award to the Applied Physics Lab a 1-year follow-on contract with two 1-year option periods, valued at $1.2 billion. The Navy justifies the continuing contractual relationship with the Applied Physics Lab on the Navy need to maintain essential engineering, research, and development capabilities at the Applied Physics Lab.

## Objectives

The primary objective of the audit was to evaluate Space and Naval Warfare Systems Command (SPAWAR) policies and procedures for awarding and administering the Navy research and development contract with the Applied Physics Lab. We also reviewed applicable internal controls. This report covers only the portion of the objective concerning the proposed contract award and related internal controls. The portion of the objective concerning administration of the contract and the internal controls over contract award and administration will be discussed in a subsequent report.

## Scope and Methodology

**Limitations to Scope.** For the purpose of this report, we are covering only the portion of the audit objective concerning the Navy proposed award in September 1994 of a $1.2 billion follow-on contract to the Applied Physics Lab.

**Methodology.** We reviewed the acquisition plan, the justification and approval (J&A), and other documents for the planned September 1994 contract award. We also reviewed 55 of the 286 task orders issued during FY 1993 under the existing SPAWAR contract N00039-91-C-0001 with the Applied Physics Lab. We held discussions and obtained information from cognizant officials at SPAWAR, the Defense Contract Audit Agency resident office, and the Navy Technical Representative Office at the Applied Physics Lab. We did not use computer-processed data or statistical sampling procedures in this audit.

**Audit Period, Standards, and Locations.** We performed this economy and efficiency audit from December 1993 through May 1994 in accordance with

auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of internal controls considered necessary. Appendix D lists the organizations visited or contacted during the audit.

## Internal Controls

We limited our review of internal controls to the process used to approve the proposed noncompetitive contract award. Specifically, we evaluated SPAWAR procedures for planning, justifying, and soliciting for the proposed follow-on contract award to the Applied Physics Lab. The audit identified no material internal control weaknesses as defined by DoD Directive 5010.38. Implementation of the recommendations will add internal controls and improve procedures for awarding the Navy research and development contract with the Applied Physics Lab. Although we believe potential monetary benefits will result from the implementation of the recommendations, we could not quantify the amount because the amount of future contracting is unknown. Appendix C summarizes the potential benefits of the audit.

## Prior Audits and Other Reviews

Inspector General, DoD, Report No. 86-062, "Audit of Federal Contract Research Centers and Not-for-Profit Corporations," February 4, 1986. The report discusses the adequacy of policy regarding the levels and uses of reserves accumulated from fees and investments at seven contractor sites including the Applied Physics Lab. The report states that the Navy was providing the Applied Physics Lab with $14.5 million in an advance payment pool to fund the contractor while awaiting processing of the semi-monthly public voucher submitted to the Navy, even though the contractor's reserves could easily accommodate its entire cash needs. The report recommended that the Navy revoke its advance payment pool agreement with the Applied Physics Lab. The Navy no longer makes advanced payments to the Applied Physics Lab.

Assistant Secretary of the Navy (Research, Development, and Acquisition) "Report on Procurement Management Review of Space and Naval Warfare Systems Command," April 20, 1994. The report states that the fee paid to the Applied Physics Lab is based on costs incurred, but that no mechanism in contract N00039-91-C-0001 ensures that the Government receives the contracted level of effort. The report also states that the Applied Physics Lab's subcontracting tends to procure Federal information processing equipment by specific make and model specification, and that the appropriateness of the Applied Physics Lab's procedures in this area should be a major focus of the SPAWAR review of the Applied Physics Lab's purchasing system scheduled for the spring of 1994. The report further states that staffing reductions at the Navy Technical Representative Office adversely affected the quality of subcontracting

reviews. The report recommended that SPAWAR ensure that fee payments to the Applied Physics Lab are derived from levels of effort incurred or deliverables received, that SPAWAR assist the Navy Technical Representative Office to review the Applied Physics Lab's purchasing system, and that SPAWAR perform a review to ensure that the Navy Technical Representative Office has sufficient staffing to fulfill its work load. SPAWAR has not yet taken action on the recommendations at the date of this report. The initial SPAWAR response to the procurement management review report was due October 20, 1994.

# Part II - Finding and Recommendations

# Proposed Noncompetitive Contract Award to the Applied Physics Lab

SPAWAR is in the process of noncompetitively awarding an inadequately structured $1.2 billion contract to the Applied Physics Lab without adequate justification. The task order structure of the proposed contract is inadequate because it does not require task sponsors to seek competition for individual task orders and causes management and control problems for contracting personnel and other oversight groups. The justification for the noncompetitive contract was inadequate because the Navy did not:

o adequately demonstrate that the Applied Physics Lab possesses unique qualifications,

o synopsize the proposed acquisition in the *Commerce Business Daily*, and

o conduct a market survey to determine whether other sources were available.

In addition, the use of the fee paid to the Applied Physics Lab has not been evaluated since 1962. As a result of the absence of competition and the absence of a recent evaluation of the fee paid to the Applied Physics Lab, the Navy could be paying more than necessary for work and could be denying other qualified contractors the opportunity to compete for some of the work awarded to the Applied Physics Lab.

## Background

**Establishing the Applied Physics Lab.** The Applied Physics Lab, established in March 1942 to develop new weapon system concepts, is a Navy-supported university-affiliated research laboratory under contract to SPAWAR. An early product of the Applied Physics Lab's efforts was the proximity fuze used for artillery and aircraft munitions during World War II. Following the war, the Navy continued its relationship with the Applied Physics Lab through noncompetitive contract awards, and in the 1960s, the Applied Physics Lab was designated a Federal contract research center.

**Establishing Federal Contract Research Centers.** Federal contract research centers (now called federally funded research and development centers) are research and development centers established to meet some special long-term research or development need that cannot be met effectively by existing in-house or contractor resources. Federally funded research and development centers are operated, managed, administered, or some combination of the three,

by either a university or consortium of universities, other not-for-profit or nonprofit organizations, or an industrial firm, as an autonomous organization or as an identifiable separate operating unit of a parent organization.

**Removing Federal Contract Research Center Designation.** In 1973, the Navy requested Congress to remove the Federal contract research center designation from the Applied Physics Lab. The Navy stated that the Applied Physics Lab was a viable entity that did not need special treatment from the Navy and that the Applied Physics Lab could operate in a competitive environment. The Navy also stated that, because the Navy gave no preferential treatment to the Applied Physics Lab, the Applied Physics Lab should not be held to the same scrutiny and limitations as a Federal contract research center.

In February 1976, the Director of Defense Research and Engineering recommended that the Applied Physics Lab no longer be considered a Federal contract research center because a Defense Science Board study stated that the Navy assigned tasks to the Applied Physics Lab according to the Applied Physics Lab's capabilities after fully considering alternate sources. Soon after Congress approved the Navy's request to remove the Federal contract research center designation, the Navy declared that the Applied Physics Lab possessed essential engineering, research, and development capabilities required by the Navy, and has justified its continuing noncompetitive contract awards to the Applied Physics Lab on that basis.

**Full and Open Competition Requirements in the FAR.** United States Code, title 10, section 2304 (10 U.S.C. 2304), "The Competition in Contracting Act of 1984," as implemented by FAR part 6, "Competition Requirements," requires, with few exceptions, that contracting officers promote and provide for full and open competition in soliciting offers and awarding Government contracts. The exemption in 10 U.S.C. 2304(c)(3)(B), as implemented by FAR 6.302-3(a)(2)(ii), states that full and open competition is not required when a contract award is made to maintain an essential engineering, research, or development capability provided by an educational or other nonprofit institution or a federally funded research and development center. However, FAR 6.301(d) requires that the contracting officer solicit offers from as many potential sources as is practicable under the circumstances, even though not providing for full and open competition. Also, FAR part 35, "Research and Development Contracting," requires that agencies, to obtain a broad base of the best contractor sources from the scientific and industrial community who are competent to perform research and development work, shall continually search for and develop information on other sources. Further, FAR 6.303-2, "Content," requires that, when a contract is to be awarded without full and open competition, the contracting officer's justification must contain sufficient rationale, including a demonstration of the proposed contractor's unique qualifications, to justify the use of the authority cited.

**Noncompetitive Contract Award**. The Navy has maintained engineering, research, or development capabilities at the Applied Physics Lab on a noncompetitive basis since the Applied Physics Lab was established in 1942. The Navy plans to continue its relationship with the Applied Physics Lab through the award of a 1-year contract with two 1-year options, valued at

$1.2 billion, to be effective October 1, 1994. The J&A prepared by SPAWAR cited FAR 6.302-3(a)(2)(ii) as authority for the proposed noncompetitive award, stating that the contract is needed to maintain essential engineering, research, or development capabilities established at the Applied Physics Lab.

## SPAWAR Demonstration of Applied Physics Lab Capabilities

**Rationale for Exemption to FAR Full and Open Competition Requirements.** The J&A lists nine capabilities that the Navy states are not available elsewhere in their entirety and could not be duplicated without substantial investment over a period of years. The J&A also states that diverse technical and programmatic staff skills, management skills, extensive experience with Navy programs, extensive corporate memory, Applied Physics Lab access to Johns Hopkins University's pool of experts, broad industry interactions, and many supporting facilities are the essential capabilities that the Applied Physics Lab possesses. Appendix A lists the nine broad functional areas in the J&A that the Navy identified as the essential capabilities that must be maintained at the Applied Physics Lab.

According to the J&A, the loss of the essential capabilities maintained at the Applied Physics Lab, including corporate memory, could seriously jeopardize the source of some of the Navy's most critical technologies including missile, radar, sonar, space, and submarine detection. The J&A states that the breadth of the Applied Physics Lab's capabilities is of particular importance to the Navy. While individual capabilities might be obtained from other sources, the strength of the Applied Physics Lab is its ability to draw on research and development resources over its broad spectrum of subject areas to solve complex technical and system problems.

The J&A further states that the capabilities that the Navy seeks to maintain include the ability of the Applied Physics Lab to provide independent evaluations required by the Government, while at the same time working closely with industry, including the transition of technology to industry.

**Evaluation of Exemption Rationale**. The rationale does not support exempting the proposed contract award from full and open competition on the basis that a noncompetitive award is required to maintain essential capabilities at the Applied Physics Lab.

**Identification of Essential Capabilities and Unique Qualifications.** SPAWAR has not clearly identified the essential capabilities that the Navy wants maintained at the Applied Physics Lab, nor has SPAWAR shown that the Applied Physics Lab possesses unique qualifications. SPAWAR contracting and laboratory management officials identified nine functional areas as the essential capabilities the Navy wants to maintain at the Applied Physics Lab and stated that the excellent technical staff, facilities, corporate memory, and ability to work on a broad spectrum of related subject areas are unique qualifications of the Applied Physics Lab to perform the capabilities.

In our opinion, the nine broad functional areas identified do not represent essential capabilities. Also, we do not consider excellent technical staff, facilities, corporate memory, and ability to work on related subjects unique qualifications, particularly for work that the Applied Physics Lab is subcontracting and for work in technologies and services that other contractors are qualified to perform.

**Identification of Funding Required to Maintain Essential Capabilities.** The Navy has not performed any comprehensive studies or analyses to identify the amount that the Navy must spend each year to maintain essential capabilities at the Applied Physics Lab. SPAWAR conducted a survey in 1993 to determine the amount of funding that task sponsors planned to provide to the Applied Physics Lab in the future. SPAWAR asked the potential task sponsors to identify the program or weapon system for which the work would be accomplished and the amount of money that the task sponsor anticipated spending at the Applied Physics Lab during FYs 1995 through 1999. The funding information was used to establish the $1.2 billion ceiling price for the proposed contract award. The method that SPAWAR used to determine the ceiling price for the proposed contract amounted to a determination of how much money will be available for a noncompetitive contract award to the Applied Physics Lab.

Before establishing a contract ceiling price, SPAWAR should reassess and clearly define the essential capabilities that it needs to maintain at the Applied Physics Lab under anticipated operating, economic, and market conditions, and SPAWAR should perform a comprehensive analysis of task sponsor's requirements to determine what work should be awarded sole-source to the Applied Physics Lab to maintain those capabilities.

During discussions concerning the contract ceiling price, the SPAWAR contracting officer and legal counsel stated that, in the past, the Navy always contracted for the entire Applied Physics Lab staff (a full employment plan for the Applied Physics Lab). It appears that the ceiling price for the proposed contract will continue the practice of contracting for the entire Applied Physics Lab staff. Also, the $134 million (33 percent of the $412 million 1993 total contract cost) level of subcontracting by the Applied Physics Lab under contract N00039-91-C-0001 suggests that the Applied Physics Lab is being awarded work that it is not uniquely qualified to perform.

**Task Orders Suitable for Noncompetitive Award.** During discussions concerning the task orders issued to the Applied Physics Lab under contract N00039-91-C-0001, technical personnel at the Navy Technical Representative Office at the Applied Physics Lab acknowledged that the Applied Physics Lab has been increasingly tasked to perform more management and program support services work and less research and development work. During our review and discussion with the director of the technical division at the Navy Technical Representative Office of 55 of the 286 task orders prepared by the Applied Physics Lab for FY 1993, the director stated that very little basic research is done at the Applied Physics Lab and that most tasks are developmental, integration, or program management in nature.

We concluded that only 2 (valued at $1.8 million) of the 55 task orders (valued at $162.9 million) were for engineering, design, and development work suitable for noncompetitive award to the Applied Physics Lab. SPAWAR should have competitively awarded the other 53 task orders. Of the 55 task orders, 8 task orders, valued at $19.8 million, had 50 percent or more of the work subcontracted. Also, of the 55 task orders, 8 task orders were not funded during FY 1993, including 1 of the 2 task orders that were suitable for noncompetitive award to the Applied Physics Lab. The 55 task orders that we discussed with the director of the technical division are listed in Appendix B.

If the Navy intends to continue noncompetitive awards of contracts to the Applied Physics Lab, we believe that the contracting officer should reassess and clearly define the essential capabilities that must be maintained at the Applied Physics Lab in the national interest, and demonstrate that the Applied Physics Lab is uniquely qualified to provide those capabilities as required by FAR 6.303-2.

## Publicizing Government Requirements

**Criteria for Publicizing Requirements.** FAR part 5, "Publicizing Contract Actions," requires the contracting officer to synopsize in the *Commerce Business Daily* proposed acquisitions that exceed $25,000 unless excepted by FAR 5.202, "Exemptions." FAR part 35, "Research and Development Contracting," requires the contracting organization to publish the Government's requirements for research and development work in the *Commerce Business Daily* and to conduct a market survey to search for sources to obtain a broad base of the best contractor sources to perform the research and development work. FAR 6.303-2(a)(8) requires the contracting officer to include in the justification for not using full and open competition a description of the market survey conducted to identify qualified sources capable of satisfying the Government's needs or a statement of the reasons that a market survey was not conducted.

**SPAWAR Intentions For Publicizing Requirements.** SPAWAR does not intend to synopsize its requirements or to conduct a market survey before awarding in September 1994 the follow-on contract to the Applied Physics Lab. The J&A stated that the proposed acquisition is excluded from the synopsis requirement by FAR 5.202(a)(10), because the acquisition is to maintain essential engineering, research, or development capabilities at an educational institution. A market survey would not be conducted for the same reason.

The SPAWAR Director of Contracting stated that he decided not to synopsize the proposed contract in the *Commerce Business Daily* because information from the competition advocate at the Navy Technical Representative Office at the Applied Physics Lab stated that the Applied Physics Lab was meeting its goals for competing subcontracted work. We determined that the competition advocate could not support his conclusion that the Applied Physics Lab level of

competition in subcontracting was adequate. The competition advocate did not obtain supporting documentation or validate the information he received from the Applied Physics Lab to make his conclusion.

SPAWAR should synopsize its requirements in the *Commerce Business Daily* and conduct a market survey to identify sources qualified to perform the work. SPAWAR could then determine whether continuing to noncompetitively fund the Applied Physics Lab at $400 million per year or whether competing the work between the Applied Physics Lab and other qualified sources is in the Government's best interest.

## Structuring the Proposed Contract with the Applied Physics Lab

The proposed contract is a level-of-effort, task order contract to be awarded by SPAWAR on behalf of task sponsors in DoD and other Government agencies.

**Task Order Processing.** After informal discussion with the task sponsor, the Applied Physics Lab proposes an assignment description letter (task order) that defines the statement of work and identifies the estimated cost to perform. The Applied Physics Lab forwards the task order to the task sponsor for review, approval, and funding. The task sponsor forwards the task order and a funding document to SPAWAR. The SPAWAR contracting officer issues a contract modification to fund the task order and to incorporate the task order reference number in the contract. The task order then becomes the work statement under which the Applied Physics Lab performs work for the task sponsor.

**Use of Task Order Contracts.** The task-order-type contract is often used by DoD contracting organizations, although the task order contract is not described in and supported by the FAR for Government use. Contracting officers often use the task order contract because of the convenience and tremendous flexibility provided when the users (task sponsors) do the ordering. A task order contract requires much less contracting officer time than does a basic ordering agreement in which the contracting officer must compete the orders or obtain J&As for noncompetitive procurements, establish the price, and formalize each order.

**Problems With Task Order Contracts.** Contracting personnel, as well as audit and other oversight groups, find task order contracts difficult to manage and control. Prior audits of task order type contracts identified problems. For example, audits disclosed that contracting officers were not aware that some task orders were outside the scope of the contract and that the Government was not able to determine whether it was receiving full value for its money because monitoring of contractor cost and performance was impossible.

Concerning the proposed task order contract, the Defense Contract Audit Agency stated that auditing the Applied Physics Lab's proposed costs will not be possible. The Applied Physics Lab can not provide detailed cost or pricing

data when it submits its proposed contract price because specific statements of work are not available until task orders are issued. Detailed cost and pricing data are not required for the task orders.

After several joint meetings initiated by SPAWAR to discuss improving the proposed contract, the Defense Contract Audit Agency suggested that the contracting officer include a provision in the request for proposal requiring cost or pricing data for all task orders expected to exceed $500,000 and to request the Defense Contract Audit Agency to audit the task orders to determine whether proposed prices are fair and reasonable. The SPAWAR contracting officer decided to include in the request for proposal a provision that requires the Applied Physics Lab to submit cost or pricing data on a Standard Form 1411 for each task order. The provision requires the contractor to certify the cost or pricing data for task orders exceeding $500,000 in accordance with FAR 15.804-4.

**Basic Ordering Agreement More Suitable for Proposed Work.** We believe that a basic ordering agreement as described in FAR part 16, "Types of Contracts," is suitable for the work procured from the Applied Physics Lab and would eliminate the problems with task order contracts that were discussed in this report. A basic ordering agreement would provide increased contracting officer control over the orders, because each order awarded under the basic ordering agreement would be processed and justified as a separate contract. Technical sponsors should be required to provide written justification for each task order, including a statement of why the Applied Physics Lab should perform the work.

On June 29, 1994, we discussed the use of a basic ordering agreement with SPAWAR laboratory management and contracting officials. The SPAWAR officials stated that they do not have sufficient time or staff to prepare a basic ordering agreement before contract N00039-91-C-0001 expires on September 30, 1994, and that the request for proposal for the follow-on task order contract was sent to the Applied Physics Lab on June 24, 1994. According to the SPAWAR officials, preparing the request for proposal and related documents for the follow-on contract took about 18 months.

**SPAWAR to Conduct Competition Feasibility Study.** The SPAWAR officials further stated that many decisions must be made before a basic ordering agreement could be prepared, including the amount of control over the agreement to be retained by SPAWAR and whether the orders should be awarded by a SPAWAR contracting officer or by contracting officers at the task sponsoring activities. The SPAWAR officials also stated that they were tasked by the Assistant Secretary of the Navy (Research, Development, and Acquisition) to determine the feasibility of competing the work awarded noncompetitively to the Applied Physics Lab. A plan for the competition feasibility study was presented to the Assistant Secretary of the Navy (Research, Development, and Acquisition) on August 1, 1994. The plan establishes December 1994 as the completion date for the competition feasibility study.

In view of the time needed to process a procurement and the studies and decisions that have to be made before a basic ordering agreement is executed,

we believe that SPAWAR should begin as soon as possible to prepare a basic ordering agreement to be effective October 1, 1995, following the expiration of the basic year of the follow-on contract scheduled to be awarded in September 1994.

## Justification and Use of Fee

**Paying a Fee to the Applied Physics Lab.** The Navy has paid a fee to the Applied Physics Lab since the mid-1940s. Originally, the Navy paid a fixed sum to Johns Hopkins University as compensation for administration and management services. The monthly fixed sum payment was replaced by a fixed fee in 1949, following the enactment of the Armed Services Procurement Act.

**Agreeing on Use of the Fee Paid to the Applied Physics Lab.** The only definitive agreement on the purpose of the fee is contained in a letter to the Navy dated June 28, 1962, from Dr. Milton Eisenhower, the then-president of Johns Hopkins University. According to the Eisenhower letter, the primary purpose of the fee was to establish a stabilization and contingency fund to provide the Applied Physics Lab staff with a stable environment and to ensure reasonable continuity in the event that the relationship between the Government and the Applied Physics Lab ever substantially changed. Other reasons for the fee included payment of management costs, payment of non-reimbursable items, protection against major disallowances under the contract, and reimbursement to Johns Hopkins University for costs incidental to the operation of the Applied Physics Lab.

The Navy and the Applied Physics Lab agreed that the stabilization and contingency fund should equal 4 months of the Applied Physics Lab's operating costs. The Applied Physics Lab estimated that 4 months in-house operating costs in FY 1993 were $72 million. In June 1993, the stabilization and contingency fund had about $36.6 million, $35.4 million short of the $72 million goal.

**Applied Physics Lab Use of the Fee.** On February 1, 1993, a joint working group that included representatives from the Navy, the Johns Hopkins University, and the Applied Physics Lab issued a report that showed how the Applied Physics Lab used the fee. The Applied Physics Lab used the fee for working capital, building construction, debt service, staff scholarships and fellowships, independent research and development supplements, non-reimbursable contract costs, stabilization and contingency reserves, and allocations to Johns Hopkins University for core teaching, research activities, and related administrative costs. In FY 1983, $2.3 million from the fee was allocated to Johns Hopkins University. By FY 1993, the amount allocated to Johns Hopkins University increased to $9.1 million.

**Reassessing the Need for a Fee.** The joint working group stated that the June 28, 1962, Eisenhower letter was predicated on a needs-based fee, and that the needs and risks had changed over the last 30 years, but that a full

reassessment of fee needs had not occurred. We believe that the SPAWAR contracting officer should reassess the fee arrangement. The evaluation should determine the need for a fee and should consider alternatives to fees such as advanced payments and contract termination provisions. If a fee arrangement is considered necessary, the contract should include a use-of-fee clause that specifies the use of the fee by the Applied Physics Lab.

## Conclusion

While preparing to award a new contract to the Applied Physics Lab, the Navy has the opportunity to make the best possible use of its research and development resources. SPAWAR should:

o clearly identify the essential capabilities that the Navy needs to maintain at the Applied Physics Lab,

o demonstrate that the Applied Physics Lab is uniquely qualified to provide the capabilities,

o seek competition for work that the Applied Physics Lab is not uniquely qualified to perform, and

o evaluate the fee paid to the Applied Physics Lab.

If SPAWAR does so, the Navy may pay less for work because the Applied Physics Lab will be noncompetitively awarded only work it is uniquely qualified to perform. Also, contractors other than the Applied Physics Lab will be able to compete for and perhaps better perform other tasks and at less cost than the Applied Physics Lab. Additionally, the fee paid to the Applied Physics Lab may be reduced.

## Management Comments and Audit Response on the Finding

**Management Comments on Rationale for Exemption.** The Navy did not agree that it did not identify the unique qualifications that the Applied Physics Lab possessed to perform the essential capabilities. SPAWAR contracting and laboratory management officials identified nine functional areas as the essential capabilities the Navy wants to maintain at the Applied Physics Lab and stated that the excellent technical staff, facilities, corporate memory, and ability to work on a broad spectrum of related subject areas are unique qualifications of the Applied Physics Lab to perform the capabilities.

**Audit Response.** We do not believe that the information the SPAWAR officials provided adequately justifies the noncompetitive award of a $400-million-a-year contract to maintain essential engineering, research, or

development capabilities at the Applied Physics Lab. The nine functional areas SPAWAR lists as the essential capabilities it wants to maintain at the Applied Physics Lab are sufficiently broad to encompass virtually every technology applicable to missile systems; command, control, and communications systems; space systems; shipboard combat systems; submarine detection and countermeasure systems; and electronic warfare systems. Other contractors, including Defense contractors, federally funded research and development centers; Government laboratories, and other university-affiliated laboratories, possess capabilities in these technologies. We agree that the Applied Physics Lab has, or should have, over the 50 consecutive years it has contracted with the Navy, put together an excellent technical staff and gained considerable corporate memory on certain Navy programs. We are not recommending that the Navy stop contracting with the Applied Physics Lab. We do recommend that the Navy narrow the scope and clearly define the essential capabilities that it must maintain at the Applied Physics Lab in the national interest and noncompetitively award to the Applied Physics Lab only those tasks that are required to maintain the essential capabilities and that the Applied Physics Lab is uniquely qualified to perform. The Applied Physics Lab, as well as other qualified contractors, should be allowed to compete for the other tasks.

**Management Comments on Tasks Orders Suitable for Noncompetitive Award.** The Navy did not agree that the Applied Physics Lab has been increasingly tasked to perform more management and program support services work and less research and development work. The Navy stated that it is unaware of any study that would indicate an increasing trend in the placement of management and program support services work relative to research and development work. The Navy further stated that SPAWAR reviewed the 55 task orders in our audit sample and concluded the work is within the scope of the contract and approved to maintain essential engineering, research, or development capabilities at the Applied Physics Lab.

**Audit Response.** We do not agree with the SPAWAR position. Because the Applied Physics Lab is subcontracting much of the work as shown in Appendix B, and for other reasons discussed in the report, we continue to believe that much of the work noncompetitively awarded to the Applied Physics Lab is management and program support work that could be competitively awarded.

## Recommendations, Management Comments, and Audit Response

**We recommend that the Commander, Space and Naval Warfare Systems Command:**

**1. Reassess and clearly define the essential capabilities that the Navy needs to maintain at the Applied Physics Lab in the national interest and demonstrate that the Applied Physics Lab is uniquely qualified to provide those capabilities.**

**Management Comments.** The Navy partially concurred with the recommendation and stated it intends to determine whether the Applied Physics Lab is uniquely qualified to provide certain services. The Navy will use clearly defined statements of work to conduct a study to determine whether competition for the services obtained from the Applied Physics Lab is feasible. The Navy further stated the results of the competition feasibility study are expected by the end of December 1994 and that impacts to future procurements are expected in 1 year.

**2. Identify sources capable of providing the services being procured from the Applied Physics Lab by synopsizing the procurement in the *Commerce Business Daily* and conducting a market survey. The survey should include an assessment of in-house capabilities.**

**Management Comments.** The Navy partially concurred with the recommendation and stated that a market survey to determine interest in the work performed by the Applied Physics Lab will be conducted as a part of the competition feasibility study.

**3. Prepare a basic ordering agreement to replace the task order contract with the Applied Physics Lab by October 1, 1995.**

**Management Comments.** The Navy partially concurred with the recommendation and stated that the Navy is evaluating the means to implement the change from a task order contract to a basic ordering agreement. SPAWAR plans to award follow-on contracts in the basic ordering agreement format to other smaller university affiliated research laboratories during the term of the Navy contract with the Applied Physics Lab. The Navy intends to use experience under these basic ordering agreements to establish a basic ordering agreement for the larger Applied Physics Lab effort.

**4. Reassess the fee arrangement with the Applied Physics Lab. If it is determined that a fee is needed, a reasonable amount should be established, and a use-of-fee clause should be inserted in the basic ordering agreement to clarify how the fee will be used.**

**Management Comments.** The Navy concurred with the recommendation and stated that a use-of-fee clause was included in the request for proposal for the follow-on contract to be awarded to John Hopkins University Applied Physics Lab on October 1, 1994.

**Audit Response.** Although the Navy only partially concurred with Recommendations 1., 2., and 3., we consider the proposed Navy action responsive to the intent of the recommendations. We request that the Navy provide a completion date for its planned action in Recommendation 3. in response to the final report.

# Part III - Additional Information

# Appendix A. Nine Essential Capabilities That the Navy Wants to Maintain at the Applied Physics Lab

1. Conduct independent quantitative performance evaluations for operational fleet ballistic missile (FBM) systems and related command, control, and communication ($C^3$) systems; formulate recommendations for corrective action and system improvements; specify requisite data collection and instrumentation requirements; and evaluate or provide instrumentation as appropriate.

2. Investigate and assess all technologies relevant to the continuing survivability of U.S. submarines, and develop countermeasures as necessary; to plan and conduct requisite at-sea experiments, and evaluate or provide instrumentation as appropriate; apply resulting capabilities to submarine and mine detection; and carry out oceanographic research.

3. Conceive, design, and prototype space systems and instruments for precision tracking, location, and navigation systems; establish relevant aspects of the space environment; conduct critical space experiments as appropriate; and accomplish remote sensing of the Earth's surface.

4. Provide the detailed understanding of guided missile system design requisite to the independent evaluation of current systems and the development of concepts and techniques for system improvement, with emphasis on surface-to-air and cruise missile systems; maintain unique evaluation and development facilities; conceive, design, and prototype systems as appropriate; and relate systems design to operational factors including targeting and mission planning.

5. Evaluate shipboard combat system capabilities and deficiencies; conceive and develop solutions to systems problems; conduct related analyses and tests.

6. Evaluate the effectiveness of methods for coordinating warfare systems at the single- and multi-platform level, by exploring system concepts, developing demonstration models, and conducting experiments; and assist in the planning and evaluation of tactical $C^3$ systems for the achievement of regional and global system capabilities.

7. Provide engineering-level interpretation of technical intelligence information; to employ relevant data in the process of systems engineering and evaluation of electronics warfare, guided missile weapon and combat systems, $C^3I$, ballistic and cruise missile systems, underwater warfare, and space systems.

8. Develop and apply simulations and models, and operations analysis techniques, for the engineering, evaluation, and performance assessment of current, planned, and proposed systems and methods for coordinated employment of systems.

9. Conduct mission-related and public-service-oriented research and technology development consistent with the foregoing essential capabilities.

# Appendix B. Task Orders Noncompetitively Awarded to the Applied Physics Lab

| Title | Task Order | Type of Work | Percent Subcontracted | Award Amount |
|---|---|---|---|---|
| Biomedical Implantable Devices-I Program | 13500-13* | Engineering, design, and development | | $' Unfunded |
| Cassins Mission/Magnetospheric Imaging Instrument Hardware Development Phase Program | 13500-68* | Engineering, design, and development | 49 | 1,774,000 |
| Advanced Nondestructive Evaluation and Sensors Program | 13500-2 | Technical advisor and technical task executive agent | 37 | 568,843 |
| National Aerospace Plane Program | 13500-5 | Technical support and development | 9 | 2,115,000 |
| Arc Fault Detector Program | 13500-7 | Routine engineering | 7 | 243,000 |
| F/A-18 E/F Hornet Program | 13500-8 | Technical advisor | 1 | 914,000 |
| Aegis Combat Systems Program | 13500-14 | Systems development and integration | 30 | 8,388,397 |
| Force Anti-Air Warfare Coordination Technology Program | 13500-15 | Systems engineering | 37 | 6,283,400 |
| Advanced Combat Direction Systems | 13500-16 | Systems engineering and technical advisor | 14 | 1,258,284 |
| Navy Embedded Computer Systems Technical Assistance | 13500-17 | Technical support | 40 | 207,000 |
| Cooperative Engagement Capability Program | 13500-20 | Technical direction agent | 45 | 22,388,140 |
| Advanced Computer Systems Architecture Program | 13500-21 | Systems engineering | 51 | 3,100,000 |
| Antitactical Ballistic Missile Program | 13500-22 | Program management | 13 | 3,100,000 |

*Of the 55 task orders we discussed with the Director, Technical Division, Navy Technical Representative Office, Applied Physics Lab, only the 2 task orders marked with an asterisk were for engineering, design, and development work suitable for noncompetitive award to the Applied Physics Lab.

## Appendix B. Task Orders Noncompetitively Awarded to the Applied Physics Lab

| Title | Task Order | Type of Work | Percent Subcontracted | Award Amount |
|---|---|---|---|---|
| Shipboard Surveillance Radar Program | 13500-23 | Systems development and interpretation | 51 | $ 1,252,198 |
| TARTAR Medium Range Weapon Systems Program | 13500-27 | Technical direction agent | 51 | 3,236,000 |
| FFG 7 Class Anti-Air Warfare System Program | 13500-28 | Technical direction agent | 45 | 3,600,000 |
| STANDARD Missile Engineering and Evaluation Program | 13500-30 | Systems engineering and analysis, technical direction agent | 16 | 3,177,000 |
| STANDARD Missile Improvement Program | 13500-31 | Systems engineering and analysis, technical direction agent | 15 | 8,815,000 |
| Navy Worldwide High Frequency Communications Evaluation | 13500-37 | Test, evaluation, and analysis | | Unfunded |
| Navy Vulnerability Assessment Program | 13500-38 | Test, evaluation, and analysis | 6 | 426,000 |
| Satellite Communications Engineering Program | 13500-40 | Systems engineering and integration agent | 44 | 4,900,000 |
| Fleet Ballistic Missile Submarine Communications Continuing Evaluation Program | 13500-47 | Systems test and evaluation | 52 | 2,632,000 |
| Navy Systems Evaluation and Integration Program | 13500-49 | Technical analysis and evaluation | 31 | 280,000 |
| Precision Strike Science and Technology Master Plan Development Program | 13500-52 | Management service | | Unfunded |
| Midcourse Space Experiment Program | 13500-54 | Systems engineering, development, and testing | 33 | 29,549,000 |
| Vehicle Interactions Program | 13500-56 | Systems engineering and modeling | | Unfunded |
| International Solar-Terrestrial Program Energetic Particles and Ion Composition Experiment Mission Operation and Data Analysis Phase Program | 13500-58 | Engineering analysis | 35 | 850,000 |

| Title | Task Order | Type of Work | Percent Subcontracted | Award Amount |
|---|---|---|---|---|
| Evaluation of Satellite Magnetic Fields Program | 13500-78 | Systems engineering | 15 | $ 50,000 |
| Radar Scattering Program | 13500-82 | Engineering analysis and modeling | 1 | 225,000 |
| Star Tracker Program | 13500-87 | Systems testing | | Unfunded |
| Radar Detection Program | 13500-90 | Data analysis | 20 | 2,000,000 |
| Tomahawk Cruise Missiles Program | 13500-94 | Technical direction agent and systems engineering | 18 | 13,112,926 |
| Advanced Medium Range Air-to-Air Missile Project | 13500-95 | Systems engineering | 61 | 2,409,000 |
| Defense Suppression Project | 13500-96 | Systems engineering | 1 | 1,650,000 |
| Air Force Studies and Analysis Agency Study Project | 13500-98 | Studies and analysis | 1 | 15,000 |
| Tactical Aircraft Defense Suppression Project | 13500-100 | Systems engineering services | 1 | 135,000 |
| TOPAZ Program | 13500-102 | Systems engineering | 42 | 10,320,000 |
| Army Tactical Satellite Program | 13500-104 | Studies and analysis | | Unfunded |
| Anti-Satellite Analysis Program | 13500-112 | Studies and analysis | | Unfunded |
| Army Development Support Program | 13500-114 | Systems analysis | 26 | 400,000 |
| Musketeer Hickory Program | 13500-115 | Systems engineering | 38 | 923,286 |
| Space and Electronic Warfare System Engineering Program | 13500-119 | Systems engineering | 12 | 1,000,000 |
| Advanced Systems and Technology Program | 13500-148 | Systems development and interpretation | 49 | 9,984,000 |
| Comparison of Next Generation Water Level Measurement System and ADR Tide Gages For Long Term Bias and Its Implications in the Global Change Program | 13527 | Studies and analysis | 15 | 50,000 |
| Space Systems Engineering Program | 13542 | Systems engineering | 55 | 3,220,000 |

## Appendix B. Task Orders Noncompetitively Awarded to the Applied Physics Lab

| Title | Task Order | Type of Work | Percent Subcontracted | Award Amount |
|---|---|---|---|---|
| Special Sensor Ultraviolet Spectrographic Imager | 13579 | Hardware development | 55 | $ 3,700,000 |
| Army Space Command Engineering Program | 13584 | Technical logistics support | 20 | 300,000 |
| EF-111A Tactical Employment Program | 13591 | Test and evaluation | 23 | 461,000 |
| Advanced Range Instrumentation Aircraft/Sonobuoy Missile Impact Location System Program | 13593 | Systems engineering | 86 | 245,000 |
| Ground Mobile Forces Satellite Communications System Upgrade | 13599 | Systems engineering support | 20 | 600,000 |
| Combined Guidance and Fuzing | 13608 | Systems evaluation and simulation | 32 | 450,000 |
| Near-Earth Asteroid Rendezvous Advanced Technology Development Program | 13624 | Systems engineering and integration | 1 | 1,800,000 |
| Advanced Nondestructive Evaluation and Sensors Program | 13700-1 | Technical advisor and technical task executive agent | | Unfunded |
| EF-111A Electronic Warfare Program | 13700-107 | Vulnerability testing and evaluation | 16 | 675,000 |
| Quantum Cryptography Program | 13730 | Systems development and interpretation | 0 | 100,000 |
| Total | | | | $162,882,474 |

# Appendix C. Summary of Potential Benefits Resulting From Audit

| Recommendation Reference | Description of Benefit | Amount and/or Type of Benefit |
|---|---|---|
| 1. | Internal Controls and Compliance with Laws and Regulations. Defines essential capabilities and validates the Applied Physics Lab's unique qualifications to provide the capabilities as required by the FAR. | Nonmonetary. |
| 2. | Economy and Efficiency. Increases the likelihood that qualified sources other than the Applied Physics Lab will be identified and that costs to the Government will decrease because of competition. | Undeterminable.[1] |
| 3. | Internal Controls. Requires each order to be processed by a contracting officer as a separate contract. Increases the likelihood that orders will be competitively awarded when appropriate. | Undeterminable.[1] |
| 4. | Economy and Efficiency. Validates the need for and use of the fee paid to the Applied Physics Lab. | Undeterminable.[2] |

[1]The value of and the number of orders that will be competed are unknown.
[2]Valid fee amount has not been determined.

# Appendix D. Organizations Visited or Contacted

## Office of the Secretary of Defense

Director, Defense Procurement, Washington, DC
Defense Acquisition Regulations Council, Washington, DC

## Department of the Navy

Assistant Secretary of the Navy (Financial Management), Washington, DC
Assistant Secretary of the Navy (Research, Development, and Acquisition), Washington, DC
Space and Naval Warfare Systems Command, Arlington, VA
  Naval Technical Representative Office, Johns Hopkins University Applied Physics Laboratory, Laurel, MD

## Other Defense Organizations

Defense Contract Audit Agency, Alexandria, VA
  Mid-Atlantic Regional Office, Philadelphia, PA
    District Branch Office, Landover, MD
      SubOffice, Johns Hopkins University Applied Physics Laboratory, Laurel, MD

# Appendix E. Report Distribution

## Office of the Secretary of Defense

Comptroller of the Department of Defense
Director, Defense Research and Engineering
Principal Deputy Under Secretary of Defense for Acquisition and Technology
Director, Defense Procurement
Assistant to the Secretary of Defense (Public Affairs)
Director, Defense Acquisition Regulations Council

## Department of the Army

Auditor General, Department of the Army

## Department of the Navy

Secretary of the Navy
Assistant Secretary of the Navy (Financial Management)
Assistant Secretary of the Navy (Research, Development, and Acquisition)
Commander, Space and Naval Warfare Systems Command
  Commanding Officer, Naval Technical Representative Office,
    Johns Hopkins University Applied Physics Laboratory
Auditor General, Department of the Navy

## Department of the Air Force

Auditor General, Department of the Air Force

## Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, Central Imagery Office
Inspector General, Defense Intelligence Agency
Inspector General, National Security Agency
Director, Defense Logistics Studies Information Exchange

## Non-Defense Federal Organizations

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

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

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

# Part IV - Management Comments

# Department of the Navy Comments

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

SEP 08 1994

MEMORANDUM FOR DIRECTOR, CONTRACT MANAGEMENT DIRECTORATE,
INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

Subj: QUICK-REACTION REPORT ON THE AUDIT OF THE NAVY PROPOSED FOLLOW-ON RESEARCH AND DEVELOPMENT CONTRACT FOR THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY (PROJECT NO. 4CH-5006.00)

Encl: (1) Department of the Navy Comments on Recommendations
(2) Department of the Navy Comments-Clarifications

As requested by your memorandum of 3 August 1994, enclosures (1) and (2) provide our detailed comments on the subject draft report concerning the proposed follow-on contract with The Johns Hopkins University, Applied Physics Laboratory.

This follow-on omnibus contract will provide the means to accomplish mission essential work not only for the Department of the Navy but also for other Department of Defense and civilian agencies. The contract is due to be awarded by 1 October 1994 for a one-year period with two options for additional one-year increments. A substantial portion of the work is ongoing and must be continued without a break in contractual coverage. Consequently, it is not possible to accommodate all of your recommendations before contract award. However, a substantial number of improvements are being negotiated in the follow-on contract. For example, a Use of Fee clause is included in the Request For Proposals and the issue of fee amount will receive close attention.

We believe that in awarding the follow-on contract, we have complied with all relevant statutory and regulatory authority. However, I feel that it is essential that competition be used to the maximum extent practicable. Thus, as a separate action, I previously directed the formation of a study panel to examine the feasibility of competing all or a part of the effort placed at JHU/APL. That panel has commenced its work and is expected to issue a report by the end of December 1994. As a part of this study, a market survey will be performed to help identify potential competitors for work currently performed by APL. This is consistent with the recommendations of your report.

In summary, we will pursue the recommendations of your report and, together with the product of the study panel, seek to make further improvements in contracting for this important research and development effort.

Nora Slatkin

DEPARTMENT OF THE NAVY COMMENTS
ON THE
DODIG 3 AUGUST 1994
DRAFT QUICK REACTION REPORT ON THE AUDIT OF
THE NAVY PROPOSED FOLLOW-ON RESEARCH AND DEVELOPMENT
CONTRACT FOR THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY
(PROJECT 4CH-5006.00)

Recommendation 1

The Commander, Space And Naval Warfare Systems Command should reassess and clearly define the essential capabilities that the Navy needs to maintain at the Applied Physics Lab in the national interest and demonstrate that the Applied Physics Lab is uniquely qualified to provide those capabilities.

DON Comment

Partially concur. It is our intention to determine whether the Applied Physics Laboratory is uniquely qualified to provide certain services to the Navy. This will be accomplished by a method other than that suggested by the recommendation. Using clearly defined statements of work we will conduct a study to determine whether competition of this contract is feasible. The results of this study are expected by December 1994 with impacts to future procurements expected in approximately one year.

Recommendation 2

The Commander, Space And Naval Warfare Systems Command should identify sources capable of providing the services being procured from the Applied Physics Lab, synopsize the procurement in the Commerce Business Daily and conduct a market survey. The survey should include an assessment of in-house capabilities.

DON Comment

Partially concur. As a part of the competition feasibility study, a market survey will be conducted to determine interest in the work at JHU/APL that might be subject to competition.

Recommendation 3

The Commander, Space And Naval Warfare Systems Command should prepare a basic ordering agreement to replace the task order contract with the Applied Physics Lab by October 1, 1995.

DON Comment

Partially concur. The Navy believes, however, that implementation needs to be fully evaluated and is considering the

Enclosure (1)

means to implement such a significant change. As an initial step, SPAWAR plans to award follow-on contracts in the BOA format to other smaller university affiliated research laboratories during the term of the JHU/APL contract. The Navy's intent is to use experience under these BOAs as a basis for transition to the subsequent establishment of a BOA structure for the much larger JHU/APL effort.

Recommendation 4

The Commander, Space And Naval Warfare Systems Command should reassess the fee arrangement with the Applied Physics Lab. If it is determined that a fee is needed, a reasonable amount should be established, and a use-of-fee clause should be inserted in the basic ordering agreement to clarify how the fee will be used.

DON Comment

Concur with the reassessment of fee, consistent with DFARS 215.9 guidance. A Use of Fee clause is included in the RFP now under negotiation.

DEPARTMENT OF THE NAVY COMMENTS
ON THE
DODIG 3 AUGUST 1994
QUICK-REACTION REPORT ON THE AUDIT OF THE
NAVY PROPOSED FOLLOW-ON RESEARCH AND DEVELOPMENT
CONTRACT FOR THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY
(PROJECT 4CH-5006.00

**CLARIFICATIONS**

Enclosure (2)

DEPARTMENT OF THE NAVY COMMENTS
ON THE
DODIG 3 AUGUST 1994
QUICK-REACTION REPORT ON THE AUDIT OF THE
NAVY PROPOSED FOLLOW-ON RESEARCH AND DEVELOPMENT
CONTRACT FOR THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY
(PROJECT 4CH-5006.00

**CLARIFICATIONS**

Enclosure (2)

Final Report Reference

THE FOLLOWING COMMENTS SUGGEST EITHER CLARIFICATIONS IN THE TEXT OF THE DRAFT QUICK-REACTION REPORT OR PROVIDE ADDITIONAL INFORMATION FOR USE IN THE FINAL REPORT.

| | Draft Audit Report | Comment |
|---|---|---|
| Revised | ...the need for ... fee paid to the Applied Physics Lab has not been evaluated since 1962. (P.6) | The need for fee is determined prior to each contract award as the pre-negotiation objectives are established in accordance with DFARS 215.9. |
| Revised | During discussions concerning the task orders issued to the Applied Physics Lab under [the current contract], the SPAWAR contracting officer and technical personnel at the Navy Technical Representative Office ... acknowledged that [APL] has been increasingly tasked to perform more management and program support services work and less research and development work. (P.9) | The contracting officer has indicated that the above attribution to him is incorrect. The Navy is unaware of any study which would indicate an increasing trend in the placement of management and program support services work relative to research and development work. |
| Revised Page 8 | Contracting officials and laboratory management officials at SPAWAR were unable to identify the unique qualifications that the Applied Physics Lab possessed and could not explain why the Applied Physics Lab capabilities are designated essential capabilities that must be maintained at the Applied Physics Lab through repeated noncompetitive contract awards. (P.9) | In fact, examples were offered of why JHU/APL possesses unique qualifications, such as their excellent technical staff, facilities, corporate memory, and ability to work on a broad spectrum of related subject areas. Reasons for maintaining the essential capabilities also were set forth. The Draft Quick Reaction Report should indicate that the DODIG does not concur with the information provided. |
| Revised Page 9 | ...our review and discussion with the director of the technical division at the Navy Technical Representative Office of 55 of the 286 task orders prepared by the Applied Physics Lab for FY 1993 revealed that only 2 of the 55 tasks were for engineering, design, and development work suitable for noncompetitive award... (P.10) | The impression given in the Quick Reaction Report is that the director of the technical division endorsed this position when, in fact, he recalls stating only that very little basic research is done at JHU/APL and that most tasks are developmental, integration, or program management in nature. |

| | | Final Report Reference |
|---|---|---|
| | SPAWAR reviewed the 55 tasks cited in the Draft Audit Report and notes that these tasks generally emphasize systems engineering functions such as design reviews, validation of design, verification and testing, technical oversight, technical program planning and the establishment and operation of tests and test facilities. SPAWAR has concluded that the work is within the scope of the essential capabilities and approved in accordance with 10 U.S.C. 2304(c)(3)(B). | |
| | JHU/APL does not prepare task orders; it prepares proposals in the task order format which thereafter incur several reviews within the sponsor's organization and within SPAWAR prior to placement on contract by a warranted contracting officer. | Revised Page 11 |
| The Defense Contract Audit Agency suggested that the contracting officer include a provision in the request for proposal requiring cost or pricing data for all task orders expected to exceed $500,000 and to request the Defense Contract Audit Agency to audit the task orders to determine whether the proposed prices are fair and reasonable. **(P.12)** | The impression given here is that DCAA acted unilaterally in reaction to a perceived Navy deficiency. In fact, this suggestion was the product of several joint meetings initiated by SPAWAR for the express purpose of improving the follow-on contract arrangements. | Revised Page 11 |
| The SPAWAR officials stated that they started the feasibility study in June 1994 and that no deadline for completing the feasibility study has been established. **(P.13)** | As directed by ASN(RDA), a study plan for the competition feasibility initiative at JHU/APL was prepared and presented to Ms. Slatkin on 1 August 1994. That plan established December 1994 as the completion date for the panel's work. | Revised Page 12 |
| Attachment A: Essential Capabilities | The essential capabilities, as depicted in Appendix A, are those applicable to the current contract. Those that will appear in the follow-on contract are provided as an attachment hereto. * | Revised Appendix |

*Not attached because report revised to reflect changes.

# Audit Team Members

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