

GAO

Report to the Honorable
Charles Pashayan, Jr.
House of Representatives

October 1986

NAVY CONTRACTING

Improvements Needed in Contracting for Simulator Maintenance Services



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United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

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The Honorable Charles Pashayan, Jr.
House of Representatives

Dear Mr. Pashayan:

As requested in your April 17, 1985, letter and in subsequent discussions with your office, we reviewed the Navy's Contractor Operation and Maintenance of Simulators (COMS) program. This report addresses the Navy's compliance with statutory and regulatory requirements on contracting out within the Department of Defense. It also addresses the Navy's claims that the COMS program has resulted in cost savings and increased simulator availability. In addition, we assessed the efficiency of the Navy's administration of the COMS program. This report contains recommendations to the Secretary of the Navy for improving program administration and reducing costs.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 5 days from its issuance date. At that time, we will send copies to the Secretaries of Defense and the Navy and the Director of the Office of Management and Budget. Copies will also be made available to other parties upon request.

Sincerely yours,

A handwritten signature in cursive script that reads "Frank C. Conahan".

Frank C. Conahan
Assistant Comptroller General

Executive Summary

Purpose

Like many efforts to contract out functions formerly performed by government employees, the Navy's Contractor Operation and Maintenance of Simulators (COMS) program has been controversial. The COMS program will eventually replace about 1,600 military and 156 civilian technicians at training locations throughout the Navy. Through December 1985, the Navy had awarded 41 contracts with a total value of about \$86 million.

Congressman Charles Pashayan, Jr., asked GAO to review the program. GAO agreed to

- determine if the Navy had complied with statutory and regulatory requirements for contracting out,
- determine the support for the Navy's claims that the COMS program is saving money and that simulators are more available for training than they were before the program, and
- assess the Navy's administration of the program.

Background

The Navy has a current inventory of training devices, including simulators valued at about \$3 billion, that are used to help military personnel such as pilots, aircrews, and technicians obtain and retain needed military skills.

Until 1983 the simulators were operated and maintained by Department of Defense (DOD) employees—both military and civilian. In 1982, however, the Secretary of the Navy abolished the military career field responsible for maintaining the simulators and the Navy began contracting out the functions in fiscal year 1983.

Office of Management and Budget Circular A-76 establishes procedures to be followed in deciding whether to contract out work formerly performed by federal employees. Public Law 96-342, Public Law 97-252, and DOD Instruction 4100.33 provide additional guidance in determining whether to contract out work formerly performed by DOD employees.

While the government's general policy is to obtain goods and services from the private sector, current functions may not be converted to contract unless it is cost effective. Circular A-76 contains detailed procedures for comparing the costs of in-house and contractor performance.

Results in Brief

The Navy did not fulfill a DOD commitment to the Congress to perform full cost comparison studies on all activities without regard to their size

before contracting out the operation and maintenance of simulators. In the absence of these cost studies, there was no definitive evidence that contractors could perform the maintenance at a lesser cost than an efficiently organized in-house work force. (In the latter stages of GAO's review, the Navy did perform one full cost comparison study and concluded that it would be about 10 percent less costly to have a private contractor do the work.) GAO found no evidence to conclusively determine that simulators are more available for training with contractor than with in-house maintenance.

The Navy could reduce contract costs by adopting more realistic simulator availability requirements and by reducing excess simulator capacity. In addition, there may be opportunities to reduce the number of in-house personnel devoted to monitoring and supporting the contractors.

Principal Findings

DOD's Commitment to the Congress

Although section 1112 of Public Law 97-252 provided a statutory basis for converting small activities from in-house to contractor operation without full cost comparison studies, the Assistant Secretary of Defense (Manpower, Installations and Logistics) told the House Committee on Armed Services that DOD would continue the full cost studies for all conversions without regard to their size. However, the Navy converted most of its simulator maintenance operations on the basis of less than full cost studies. (See pp. 12-16.)

Claims of Decreased Cost and Increased Availability

Evidence about whether contractors can perform the functions at less cost than a well-organized, in-house work force is not conclusive. Studies done in the late 1970s and early 1980s on this question showed differing results. Budgetary analyses performed by the Naval Air Systems Command in 1983 were incomplete and did not provide an answer to the question. These studies compared continued performance with the existing work force to contractor performance. They did not apply the same work performance standards to in-house and contractor operations since adjustments were not made to compensate for the other duties required of military personnel, nor did they consider economies that could be achieved by reorganizing the in-house operation to a mostly

civilian work force even though military overstaffing of the in-house maintenance detachments was a known issue. (See pp. 18-21.)

GAO found no evidence with which it could conclusively determine if simulators are more or less available with contractor maintenance. The Navy's claims that contractors maintain a higher availability rate for the simulators were based on a study of limited scope, which did not use comparable data. (See pp. 21-23.)

Simulator Availability Requirements

Contractors bid for the maintenance work on the basis of keeping simulators available for a specified period or "window" of time. In reality, however, the simulators are scheduled for use much less than this "window" of time. GAO found that in fiscal year 1985, more than half of the simulators were scheduled less than 75 percent of the total time window. Furthermore, in more than half of the cases, the simulators were actually used less than 75 percent of the scheduled time. The inflated availability requirements may be unnecessarily increasing the cost of contracts. In some cases, the low utilization may be due to excess simulator capacity. (See pp. 26-28.)

Personnel Monitoring Contractor Performance

The number of Navy personnel used to monitor and support COMS contractors appears excessive. For example, contractor maintenance of the simulators has eliminated the need for the Training Systems Center's onsite engineering representatives to perform their traditional functions. The Navy has drafted a revised work statement for these employees; but, in GAO's opinion, many of the revised tasks could more appropriately be performed by others, such as the contractors and contracting officers' technical representatives.

Some of the Naval Training Systems Center's contracting officers' technical representatives did not possess sufficient technical qualifications. The Center has agreed to evaluate the qualifications of these representatives in the future. (See pp. 30-34.)

Recommendations

GAO recommends that the Secretary of the Navy take steps to ensure that the Naval Training Systems Center in conjunction with simulator users (1) develop more realistic availability requirements for simulators and (2) identify those simulators with excess capacity and reduce the capacity in line with actual training needs.

GAO also recommends that the Secretary of the Navy (1) direct the Deputy Chief of Naval Operations for Air Warfare to evaluate the continuing need for personnel devoted to monitoring and supporting the COMS contractors, particularly the Training Systems Center's onsite field engineering representatives and (2) instruct the Training Systems Center to develop and implement procedures to assure that contracting officers' technical representatives possess sufficient technical skills to perform their duties.

Agency Comments

At the request of Congressman Pashayan's office, GAO did not obtain agency comments on this report. GAO did, however, discuss its findings with officials of affected organizations.

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Abbreviations

COMS	Contractor Operation and Maintenance of Simulators
DOD	Department of Defense
GAO	General Accounting Office

Introduction

The Navy has an inventory of training devices, or simulators, valued at about \$3 billion, located at training installations and operational units throughout the United States. They are used to impart technical skills to military personnel, such as pilots, aircrews, and technicians, and to help these personnel maintain proficiency in their occupations. In some cases, these training devices can be more complex than the operational equipment they simulate.

Until early 1983, the simulators were operated and maintained primarily by military personnel in the training device maintenanceman occupational specialty. In a few instances, civilian technicians or a combination of civilian and military personnel were used to operate and maintain the devices.

In June 1982, the Secretary of the Navy announced his decision to abolish the training device maintenanceman specialty. At that time, about 2,200 maintenanceman positions¹ were authorized; almost all were at shore facilities. The Secretary determined that these positions could better be used in other technical specialties aboard ships.

The decision to replace the military occupational specialty left the Navy with the options of doing the work in-house with a civilian work force, having contractors maintain the simulators, or a combination of the two. A study conducted by the Office of the Chief of Naval Operations in March 1982 recommended contracting because it would lower costs. The study also noted that the Navy's chances of obtaining authorization for additional civilian positions to perform the operation and maintenance functions in-house were relatively low.

The program for converting to contractors was termed the Contractor Operation and Maintenance of Simulators (COMS) program. Although this program includes all types of training devices, the initial contracts were for aviation simulators. The Navy awarded the first contracts for these simulators in fiscal year 1983 and expects to have all its aviation device contracts awarded by fiscal year 1988. The Navy started awarding contracts for nonaviation devices in fiscal year 1985.

Office of Management and Budget Circular A-76 establishes procedures to be followed in deciding whether to contract out work formerly performed by federal employees. Section 502 of Public Law 96-342, section 1112 of Public Law 97-252, and Department of Defense (DOD) Instruction

¹Only about 1,600 of these positions were actually filled.

4100.33 provide additional guidance in determining whether to contract out work formerly performed by DOD employees.

The policy contained in Circular A-76 is that the government should obtain the best products and services for the least cost consistent with mission requirements. Generally, however, the government is to rely on the private sector to provide needed products and services.

The circular, prior to its revision in August 1983, provided that no government commercial activity with an annual cost in excess of \$100,000 would be converted to contract without a cost comparison showing it to be more economical. The revised circular eliminated the \$100,000 threshold, requiring instead that cost comparisons be done only for those activities having more than 10 full-time employees. The circular prescribes a systematic approach to performing this cost comparison, which requires an activity to prepare a statement of the work to be performed, determine the most efficient in-house organization for performing the work, obtain proposals from contractors interested in performing the work, and compare the costs of the alternatives.

Because most of the training device maintenance personnel were assigned to aviation units, the Deputy Chief of Naval Operations for Air Warfare was given responsibility for planning the entire COMS program. The Naval Air Systems Command is responsible for implementing and managing the program for aviation simulators. The Chief of Naval Education and Training is responsible for the nonaviation devices. These two organizations decide whether the operation and maintenance of a simulator or a group of simulators will be contracted out.

The Naval Training Systems Center in Orlando, Florida, provides technical and management support for the entire COMS program. This organization awards, administers, and monitors performance of the contracts.

At the time of our review, the Training Systems Center had awarded 41 COMS contracts, encompassing about 1,400 training devices. The total price of the contracts was about \$86 million. The Center expects that 15 more contracts will be awarded for existing training simulators.

Objectives, Scope, and Methodology

Based on allegations from one of your constituents that the Navy acted improperly in implementing the COMS program and that the program was wasting money, you requested us to examine the program. We agreed to

- determine if the Navy had complied with statutory and regulatory requirements for contracting out the operation and maintenance of its simulators,
- determine the support for the Navy's claims that the COMS program is saving money and that simulators are more available for training than they were prior to COMS, and
- assess the Navy's administration of the program.

To accomplish these objectives, we reviewed Navy reports, correspondence, and data and discussed these issues with officials in the commands and organizations shown in appendix I. Also, we visited locations on the Atlantic, Pacific, and Gulf coasts where the simulators are located, including both operational units and training command user organizations. Although our review included both aviation and nonaviation devices, we concentrated primarily on aviation simulators because the program was implemented to a much greater extent in the aviation community.

To determine whether the Navy complied with applicable statutes and met the requirements of Circular A-76, we primarily relied on work performed previously by the DOD Inspector General's office. We reviewed workpapers supporting the Inspector General report to assure ourselves that the work was performed in accordance with generally accepted government auditing standards. We also made a limited analysis of the Navy's cost study on simulators for the S-3A aircraft.

We obtained computerized information on the availability of simulators from fiscal years 1972 through 1982 and compared it to the Navy's claimed in-house availability rate. Because of the age of this information, we could not assess its reliability.

We conducted our review between April 1985 and January 1986 in accordance with generally accepted government auditing standards.

We discussed our findings with officials of the affected organizations and considered their comments in preparing this report. At the request of Congressman Pashayan's office, we did not obtain agency comments on this report.

Initial Contract Conversions Did Not Adhere to DOD's Commitment to the Congress

The Navy did not adhere to a DOD commitment to the Congress when it converted the operation and maintenance of its simulators from in-house to contractor performance without full cost comparisons. While section 1112 of Public Law 97-252 provided a statutory basis for converting small activities without the cost comparisons, the Assistant Secretary of Defense (Manpower, Installations and Logistics) made a commitment to the House Committee on Armed Services that no DOD activities would be converted from in-house performance to contract without the cost studies. The Assistant Secretary made this commitment before any conversions had taken place.

DOD's Commitment to the Congress

In June 1982, when the Navy decided to abolish the training device maintenanceman career field and operate and maintain simulators with either civilian employees or contractors, the conversion of DOD activities from in-house to contract performance was governed by section 502 of Public Law 96-342. This law prohibited conversion of any commercial or industrial type function that had been performed by DOD personnel, including both military and civilian, employed on October 1, 1980, to a contractor operation until after completion of a full cost comparison demonstrating that contractor performance would result in a savings. The act further stipulated that the calculation of the cost of in-house performance must be based on the most efficient and cost-effective organization. The Secretary of Defense was required under the act to submit a summary of the cost comparison to the Congress prior to the conversion.

In October 1982, section 1112 of Public Law 97-252, the Department of Defense Authorization Act, 1983, amended section 502 of Public Law 96-342 to permit the conversion of small activities to contract without the full cost studies. It provided that the cost comparison requirements would not apply to activities being performed by 10 or fewer DOD civilian employees. The Conference Committee report accompanying the act, however, directed that "simplified" cost comparisons be conducted on these smaller functions to ensure that cost data were fully considered in the conversion decisions.

During hearings on the fiscal year 1984 Department of Defense Authorization Bill, conducted in March and April 1983, members of the House Committee on Armed Services expressed continuing concern that DOD was moving too fast in contracting out. As a result, the Assistant Secretary of Defense (Manpower, Installations and Logistics) informed the Committee that no DOD activities would be converted from in-house to

contractor performance without benefit of the full cost studies. This commitment preceded the conversion of any systems to contract under the COMS program and was communicated to the military services.

Navy's Actions Did Not Adhere to Commitment

The Navy originally planned to convert 35 aviation simulator systems to contractor or in-house civilian operation and maintenance support. Of these, 26 systems were being maintained entirely by military personnel and 9 systems were being operated and maintained, at least in part, by DOD civilian employees. Only three of the nine systems involved more than 10 civilian employees. The Navy scheduled these three systems for full cost comparison studies.

COMS program management officials stated that they decided to convert the other six systems involving civilian personnel to contract based on "simplified" cost studies prepared by the Naval Air Systems Command. These officials said that when they approved the initial conversions, they were not aware of the Assistant Secretary of Defense's commitment to continue full cost studies for all conversions. They believe, however, that the simplified studies meet the requirements of the Fiscal Year 1983 DOD Authorization Conference Committee report.

The conference report did not define simplified cost studies or provide guidance for conducting them. A Chief of Naval Operations message, dated October 15, 1982, however, stated that the Office of Management and Budget had determined that alternative cost comparison procedures approved for use within DOD would meet the congressional intent for simplified cost studies. However, the Naval Air Systems Command studies did not meet the requirements of the alternative procedures because the studies did not base cost projections on the most efficient in-house work force as required by the alternative procedures.

The October 15 message from the Office of the Chief of Naval Operations also advised Navy officials that Office of Management and Budget Circular A-76 had not yet been revised to incorporate the exemptions in the law. Until the circular was revised, only activities manned totally by military personnel or with an annual cost under \$100,000 (the threshold provided in the circular) could be converted without cost studies, according to this message.

However, the Navy converted the operation and maintenance of four simulator systems from in-house to contractor performance in May and June 1983, before the circular was revised in August 1983. All of the

systems had annual operating costs in excess of \$100,000 and three had previously been maintained in part by a civilian work force of 10 or fewer employees.

The August 4, 1983, revisions to Circular A-76 eliminated the requirement for cost comparisons before converting activities involving 10 or fewer in-house civilian personnel. By that time, however, the Assistant Secretary had committed DOD to continue the full cost studies for potential conversions concerning both military and civilian personnel.

On September 15, 1983, the Chief of Naval Operations advised all affected activities of the Assistant Secretary's commitment to the Congress and directed that cost studies continue to be performed before converting any function from in-house performance to contract, without regard to the size or composition of the in-house work force.

On September 29, 1983, however, the Chief of Naval Operations released another message informing the Naval Training Equipment Center (later renamed the Naval Training Systems Center) that the September 15 message did not apply to the COMS program. Another Chief of Naval Operations message, dated November 16, 1983, stated that functions under the COMS program could be contracted out without formal cost comparison studies because approved studies showing that contracting out was cost-effective had been done at the headquarters level. The reference was to the simplified cost studies performed by the Naval Air Systems Command.

In March 1984, the Office of the Assistant Secretary of Defense (Manpower, Installations and Logistics) advised the military services that functions performed exclusively by military personnel could be converted to contract without a cost study when adequate competition was available and reasonable prices could be obtained from qualified commercial sources. Activities involving any civilian employees would continue to require full cost comparisons unless the Assistant Secretary's office granted a waiver.

COMS program management officials stated that they verbally requested and obtained a waiver to continue the COMS conversions when the Navy received the March 1984 memorandum from the Assistant Secretary. It was not until July 31, 1984, however, that the Chief of Naval Operations requested the waiver in writing. The Assistant Secretary granted the waiver on August 6, 1984, subject to the findings of a DOD Inspector General investigation into the COMS program. At about the same time, the

Assistant Secretary notified the Chairman of the Subcommittee on Readiness, House Committee on Armed Services, that the Navy had already converted some activities without full cost studies. DOD civilian employees had previously been involved in maintaining six of these and seven others involved only military personnel.

Inspector General's Review of COMS Program

In November 1984, the DOD Inspector General completed a review of the COMS program. The Inspector General concluded that the Navy had not adhered to DOD's commitment to perform full cost studies before making the conversions or to the provisions of DOD Instruction 4100.33. Without the full cost studies, there was no valid basis for concluding that a contractor could perform the simulator maintenance work at less cost than a well organized, in-house work force, according to the Inspector General's report. The Inspector General recommended that the Assistant Secretary direct the Navy to perform full cost studies on those simulators that had not been contracted out and that had civilian employees permanently assigned. The Inspector General also recommended that the Assistant Secretary decide if full cost studies should be performed for those systems that had already been contracted without the benefit of the studies.

The Assistant Secretary concurred with the Inspector General's findings and recommendations. On October 22, 1984, he withdrew the waiver permitting the Navy to make conversions without full cost studies and directed that full A-76 cost studies be performed on all COMS activities involving civilian personnel not under contract. By that time, however, the Navy had already awarded contracts for six systems involving civilians and had initiated the required studies for the remaining three activities. The Assistant Secretary said he would determine if cost studies for those systems already under contract would be required after reviewing the results of studies on three other systems.

The Navy scheduled the three systems involving more than 10 civilian employees for full cost studies. These were the S-3A system at Naval Air Station, North Island, California; the P-3C at Moffett Field, California; and the A-7E at Naval Air Station, Lemoore, California. The S-3A study was completed in November 1985 and a contract was awarded in January 1986. The P-3C study is expected to be completed in November 1986 and the A-7E study in May 1987.

The Navy plans to contract for the operation and maintenance of any future simulators and training devices as the equipment is introduced.

These contracts, however, will be new starts, not conversions, and thus will not require cost comparison studies. Appendix II contains a chronology of events surrounding the conversion decisions.

Initial Conversions Did Not Adhere to Circular A-76

At the time the Navy converted the first four simulator systems to contractor support, Circular A-76 required cost comparison studies before conversions of any activity with an annual operating cost of over \$100,000. All of the Navy's simulator support activities had annual operating costs in excess of that amount. Circular A-76 was reissued in August 1983, and the revised circular exempted activities involving 10 or fewer civilians from the cost study requirement. COMS program management officials stated that they made the initial conversions without full cost studies in anticipation of the pending revision in the circular. The revision was required to bring the circular into conformance with Public Law 97-252, dated October 1982, which eliminated the requirement to perform cost studies before converting activities performed by 10 or fewer DOD civilian employees.

Conclusion

The Chief of Naval Operations believed that the COMS program could be contracted out without a full cost comparison because approved studies showed that contracting out was less costly than existing in-house operations. However, the Navy's action to contract out did not adhere to a DOD commitment to the Congress when it converted the operation and maintenance of simulators from in-house to contractor performance without making full cost comparisons between a contracting out and a most efficient in-house operation. While in compliance with Public Law 97-252, the Navy, in converting the first four simulators, did not adhere to the provisions of Circular A-76 and DOD Instruction 4100.33, which had not been revised to recognize the provision of the new law. For future conversions involving DOD civilian employees, the Navy plans to make full cost studies.

Claims of Decreased Costs and Increased Availability

Navy studies showed that contracting out decreased Navy costs over costs incurred under the existing civilian/military staffing organization. However, there has been no conclusive determination whether contractor operation and maintenance of simulators is more or less costly than performance by a well-organized, efficient, in-house work force. Studies we reviewed reached different conclusions about the least costly method of performance. Only one of these studies was based on a direct comparison of the costs, including the projection of an efficient in-house work force; that study addressed only one system at a single location.

Budget analyses prepared in early 1983 by the Navy, although incomplete, showed that contractor operation would be less costly than continued performance with the existing military and civilian work force. These analyses, however, did not apply the same work performance standards to in-house and contractor operations since no adjustments were made to compensate for the other duties required of military personnel. Also, the analyses did not consider economies that could be achieved by reorganizing the in-house operation to a civilian work force even though overstaffing of the mostly military in-house maintenance detachments had previously been identified. The one cost study performed using Circular A-76 procedures concluded that contractor operation and maintenance of S-3A simulators at the Naval Air Station, North Island, California, would be less expensive than an efficient in-house work force.

We found no evidence with which we could conclusively determine whether simulators are more or less available after their operation and maintenance was converted to contract. The Navy based its claims that simulators are more available after COMS on a study of limited scope, which was compared with noncomparable data. Users, however, were generally satisfied with the contractors' performance.

Evidence About Least Costly Method of Performance Is Inconclusive

The Navy has considered abolishing the training device maintenanceman military career field since about 1977. Navy organizations conducted several studies to determine the most cost-effective method of providing simulator support. These studies, none of which was a direct comparison of the most efficient in-house and contractor work forces on a site-by-site basis, reached differing conclusions. The differences appear to result primarily from different estimates of the staff year costs of a contractor employee and the relative number of in-house and contractor employees needed to perform the work.

A Naval Air Systems Command study, completed in September 1977, concluded that a civil service work force consisting of general schedule personnel represented the lowest economic cost method of operating and maintaining the Navy's simulators. This study did find, however, that in specific cases, such as an activity requiring a high ratio of support personnel to technicians, contracting would be less costly. The study was based on the assumption that an equal number of contractor and in-house personnel would be needed. The added cost for the government to award and monitor contracts made the contractor option more costly than in-house performance.

The Navy's Bureau of Personnel (now the Naval Military Personnel Command) also studied alternative methods of operating and maintaining training devices. The study, published in October 1978, concluded that while civilian employees could perform the functions at a lower cost than military personnel, contracting was the least expensive option.

An analysis conducted by the Office of the Deputy Chief of Naval Operations for Manpower, Personnel, and Training in March 1982 also concluded that use of contractors was the preferred option. The analysis was not based on a direct comparison between an in-house civilian work force and contractor performance. Rather, the analysis identified examples where contractors performed the operation and maintenance function with fewer personnel than the in-house military work force did. For the examples cited, the average substitution ratio of contractor employees for military technicians was about one-half (i.e., one contractor employee for every two military technicians). The analysis did not calculate a substitution ratio of in-house civilians to military technicians, but concluded that the ratio would have to be close to one-half for the cost of in-house civilians to even approach that of private contractors.

**Budget Analyses Were
Incomplete and Did Not
Apply Consistent Work
Performance Standards**

In November 1984, the Navy's Inspector General informed Congressman Charles Pashayan, Jr., that the COMS program was less costly than performing the work with an in-house civilian work force. An official in the Office of the Inspector General told us that the information provided to Congressman Pashayan was based on cost estimates performed by the Naval Air Systems Command in 1983.

According to officials in the Naval Air Systems Command, the 1983 estimates were prepared for budgetary purposes. The estimates compared

the cost of the Navy's existing work force, which was comprised of either military technicians or a combination of military and civilian technicians, with a projected cost for contractors to perform the same functions. The estimate for 18 planned contracts projected that 386 contract technicians could replace 772 military and 45 civilian personnel at a savings of about 41 percent over the Navy's actual cost. After the contracts were awarded, a Naval Air Systems Command analysis showed that actual contract costs were even lower than projected, yielding a savings of about 60 percent over the cost of the existing in-house work force.

The Naval Air Systems Command cost studies did not demonstrate that contractors could operate and maintain the simulators at less cost than an efficient civilian work force could. The studies did not apply the same performance work standard for both in-house and contractor personnel since the military personnel included in the work force had other duties such as watch standing and housekeeping type duties. Moreover, an activity staffed with military personnel will have more people assigned than if the organization were staffed with either civilian personnel or contractor employees. This is because of rotation policy, duties unrelated to the military personnel's primary occupation, and constraints imposed on the use of personnel because of rank.

The studies also did not make any adjustment to compensate for inefficiencies in the existing work force even though overstaffing had previously been identified in the military maintenance detachments. For example, a 1978 Navy Manpower and Material Analysis Center study concluded that only 74 of 137 authorized military technicians were needed to operate and maintain the simulators at North Island, California. Moreover, officials at the Jacksonville Naval Air Station told us that only about one-third of the 78 military technicians assigned at that location were needed to operate and maintain the simulators.

The savings projected in the Naval Air Systems Command studies were due primarily to the assumption that fewer contractor personnel would be required than the existing organization. We know of no reason why this same assumption could not be made for a civil service work force.² If the Navy had made such an assumption and calculated the costs (salaries and benefits) for a civil service work force at the wage grade 12, step 3 rate, and included all appropriate contract administration costs,

²A 1977 study by the Naval Air Systems Command concluded that an equal number of civil service and contractor personnel would be required to perform the operation and maintenance.

the cost would have been about \$5 million a year less than the cost projected for contractor operation and maintenance.³

In addition, the Navy studies did not include all costs associated with contracting out. For example, they did not consider the salaries of the COMS management group at the Naval Training Systems Center. At the completion of our field work, total annual salary, including benefits, of this group, which consisted of 32 personnel, was about \$1.1 million.⁴ The COMS program manager said he excluded these costs from the studies because he believed that this group was temporary. In retrospect, however, the program manager agreed the costs should have been included. On the other hand, the studies did not consider possible reduction in the field engineering work force, which included 98 civilian employees at the time of our field work. The opportunity to reduce this work force is discussed in chapter 5.

**One Cost Comparison
Showed Contractor
Performance to Be Less
Expensive**

The cost studies required by Circular A-76 should provide a valid basis for concluding whether it is less expensive to perform the work in-house or to contract for it. At the completion of our review, the Navy had completed only one such study. This study, completed in November 1985, was for support of the 2F92A simulators for the S-3A aircraft at North Island, California. The study concluded that a private contractor could perform the work at a lower cost—\$262,568, or about 10 percent less—than the cost of the most efficient in-house organization projected by the Navy. Our analysis of this study showed that the Navy followed Circular A-76 procedures, including developing the most efficient in-house organization and comparing it to contractor cost estimates.

**Improved Simulator
Availability Not
Demonstrated**

We found that the Navy's claim of improved simulator availability could not be substantiated. In a July 1984 memorandum to the Deputy Assistant Secretary of Defense (Installations), the Office of the Chief of Naval Operations reported that simulator availability had increased from 60 to 70 percent under in-house operation to over 95 percent under COMS.

Navy officials told us the claimed increase in availability was based on a preliminary analysis the Navy's Pacific Air Command made in July

³Wage grade 12, step 3, is the journeyman level for maintenance technicians; it was used in all the Navy's comparison studies.

⁴At the time the cost studies were done, the number of personnel in the COMS management group was less than 32. However, the size of this group has increased steadily through the years.

1984. The analysis, however, was limited in scope and compared inconsistent sets of data. It included only those simulators controlled by the Pacific Air Command. Neither the time periods nor the numbers of training devices were the same for both in-house and contractor performance. The data for in-house performance included 11 devices and covered a 1-year period whereas the data for contractor performance included 6 simulators and covered a 9-month period.

More importantly, data used for the contractor portion of the analysis was based on the condition of the simulators only at the start of each training day; it did not include downtime, which occurred later in a work day or which was caused by factors outside the control of maintenance personnel, such as delays resulting from the nonavailability of repair parts. The data used to compute the availability rate for the period of in-house performance, on the other hand, included all downtime without regard to when it occurred or why. When we brought this to the attention of Navy officials, they agreed that the analysis was not sufficient for a valid comparison of simulator availability under contractor and in-house performance.

We were unable to make a valid and direct comparison of simulator availability during periods of both in-house and contractor performance because data reporting systems were not the same for both periods. We did, however, analyze availability data for the Pacific Air Command's simulators when they were being maintained by in-house staff.

After analyzing utilization and availability reports for fiscal years 1972 through 1982 and excluding downtime for factors beyond the control of maintenance technicians, we found that the availability rate for these devices was much higher than the 60 to 70 percent the Navy cited. The average availability rate for the Pacific Air Command devices was 90 percent. The average annual availability rate ranged between 84 and 99 percent; in 1982, it was 92 percent.

We were unable to assess the reliability of data used in our analysis because supporting documentation was not available due to the age of the data. We also were unable to assess the reliability of the data used by the Navy in computing availability under in-house maintenance or to reconcile the differences between the two analyses. The official who prepared the Navy's analysis was no longer attached to the Command and other officials did not maintain detailed records of the computations. Both analyses were limited to devices controlled by the Navy

Pacific Air Command, and availability rates may not be representative of the Navy's total inventory of simulators.

**Users Generally Satisfied
With Contractor
Performance**

We discussed simulator availability under the COMS program with training device users in the field. None of the activities had compared simulator availability before and after award of the contracts, but with the exception of a few start-up problems, the users we talked to were generally satisfied with the contractors' performance.

We learned of three specific instances of problems with contractor maintenance. All three resulted because the contractors' technicians were not adequately trained.

Naval Air Training Command officials told us that, initially, the contractor was unable to maintain the required availability on TA-4/T-2 aircraft simulators. According to the Navy, personnel employed by the contractor did not have the technical proficiency needed to properly operate and maintain the simulators' computers. To alleviate the problem, the Navy conducted a training course at the contractor's expense to familiarize contractor employees with proper maintenance procedures on the computers. Simulator use was not adversely affected by the maintenance problems since the Navy had excess capacity on these simulators.

Navy officials also told us that the contractor maintaining the F-14 aircraft simulators at the Naval Air Station, Miramar, California, was unable to provide the required availability early in the contract period. The Navy, after determining that most of the problems were the result of contractor personnel using incorrect maintenance procedures, advised the contractor to correct the problems or face termination for default. A Naval Training Systems Center contracting official advised us that the problems appear to have been resolved—recent reports showed the contractor was meeting availability requirements.

The Navy terminated its contract for the operation and maintenance of F/A-18 aircraft simulators at the Naval Air Station, Lemoore, California, and at the Marine Corps Air Station, El Toro, California, because the contractor could not maintain the required availability rate on the weapons tactics trainers. According to a Naval Training Systems Center investigating team, the situation was due to the low experience level of the contractor's personnel. The Navy selected a new contractor and its performance has been acceptable.

Conclusions

The Navy based its claim that COMS had resulted in cost savings on incomplete cost studies. The studies compared an efficient contractor work force with the Navy's maintenance force without regard to the unit's most efficient organization. The Navy's work force was comprised primarily of military personnel who also had duties unrelated to simulator operation and maintenance.

The Navy's claim that simulator availability had increased significantly under COMS was based on a limited analysis, which was not based on comparable data for both in-house and contractor performance. Our analysis of Pacific Air Command simulators showed a much higher availability rate for the in-house option than was used in the Navy's study.

Overstated Availability Requirements Increase Contract Costs

The Navy is not accurately projecting its requirements for simulator training. The planned training time contractors used to prepare bids for the operation and maintenance work is based on keeping the total capacity of simulators available for training during a specified time period or "window." However, the simulators are actually scheduled for use much less than the planned window of time. Actual simulator use was even lower than the scheduled time in most instances. In some cases, the low utilization may be the result of excess simulator capacity.

Training Requirements for Simulators Are Overstated

Training device users determine the time period that they want simulators available for training when plans are being developed to contract. For example, a user may determine that a particular simulator must be available at all times between 6:00 a.m. and 6:00 p.m. The Naval Training Systems Center then prepares a work scope for potential bidders based on this planned training time or "time window." The work scope requires contractors to propose sufficient staffing to assure 95-percent availability of the simulator during the specified time window. However, contractors are actually required to maintain availability only during the time the simulators are scheduled for use.

Scheduled training time is based on emerging training requirements. Scheduled time was usually much less than the time window. Further, the actual time the simulator was used was, more often than not, substantially less than even the scheduled time.

We analyzed utilization and availability reports prepared by the Naval Training Systems Center for all simulators under the COMS program for fiscal year 1985 (the only year for which data were available) to determine the relationship between the time window, scheduled time, and actual usage. Our analysis showed that over one-half of the training devices were scheduled for training less than 75 percent of the time window. This number might have been higher except some users told us they scheduled training for the total time window to avoid measuring the COMS contractor against a lower standard than the Navy contracted for. Further, over one-half of the devices (61 of 126 aviation simulators and 37 of 64 surface simulators) were used for actual training less than 75 percent of the scheduled time. Some training devices were not used at all during fiscal year 1985, even though contractors were being paid to maintain them at a 95-percent availability rate.

We found that in 18 of the 41 COMS contracts, the contractors employed fewer people than they had proposed in their bids. Overall, the contractors employed 42, or 6 percent, fewer personnel than they had proposed in the bidding process.

We realize that many factors, such as uneven training pipelines, weather, and uncertainties in predicting fleet movements, make simulator scheduling difficult. We also realize that the Navy needs to have a degree of flexibility in its scheduling process for these unpredictable factors. We believe, however, that the Navy could more accurately project its requirements for simulator use and, in so doing, lower the costs of contracting out for operation and maintenance. We found, for example, that the Naval Training Systems Center does not challenge the users' statement of availability requirements or provide users with information on actual historical simulator usage. Training center officials agreed that they need to improve the projection of availability requirements before soliciting proposals and awarding contracts. Naval Air Systems Command officials also agreed and are in the process of drafting an instruction to address this problem.

Excess Simulator Capacity

The time window used in the contracting process assumes that the total capacity of the Navy's simulators is needed to satisfy training requirements. In some cases, that is not true. Although we did not assess the extent of excess simulator capacity throughout the Navy, we did identify two cases of excess capacity at training locations.

Training device users in the Naval Air Training Command told us that excess capacity exists in the TA-4J and T-2C aircraft simulators because the capacity of these simulators was calculated for the surge requirements of the Viet Nam Conflict. As a result, actual utilization rates ranged from just over 20 percent of the time window to a little under 58 percent, depending on the particular device and location. By analyzing current requirements and contracting only for the capacity actually needed, the Navy should be able to effect savings in operation and maintenance costs for these simulators.

The Navy Electronic Warfare System trainer at Corry Station, Florida, also has significant excess capacity. This training device has 60 student stations, but class sizes are often as few as 15, leaving 45 stations vacant. Actual utilization of the trainer has been averaging only about 20 percent of the time that the device is scheduled for use.

After we questioned the low usage rate for this trainer, the Chief of Naval Technical Training directed the Corry Station Training Center to study the impact of removing 20 of the 60 student stations. The study concluded that training requirements could be accommodated with a 40-station configuration. Moreover, removing the 20 stations would save 1 to 2 staff years on the maintenance contract and about 30 percent on spare parts and electrical power consumption. Naval Education and Training Command officials advised us that they plan to deactivate and remove 20 student stations from the COMS contract requirement. The 20-station unit will be retained in a deactivated state to protect against future increases in training requirements.

Conclusion

The Navy could more accurately project its requirements for simulator use. Overcapacity of some training devices is increasing the costs of contracting out their operation and maintenance.

Recommendations

We recommend that the Secretary of the Navy take steps to ensure that the Naval Training Systems Center in conjunction with simulator device users (1) develop more realistic availability requirements for simulators and (2) identify those simulators with excess capacity and reduce the capacity in line with actual training needs.

The Navy May Be Using an Excessive Number of Personnel to Monitor Contractor Performance

The Navy may be using an excessive number of personnel to monitor and support COMS contractors. These include civilian field engineering representatives of the Naval Training Systems Center, contracting officers' technical representatives, assistants to the technical representatives, and additional members of maintenance monitoring teams established within the Air Training Command.

The decision to contract out simulator maintenance has obviated the need for field engineering representatives to perform many of their traditional functions. In our opinion, the Navy has not adequately demonstrated a continuing need for these employees. To continue to retain these personnel represents an additional cost to the Navy.

The large number of personnel used to monitor and support the contractors may result from the fact that the Naval Training Systems Center has not adequately evaluated the qualifications of personnel appointed as its contracting officers' technical representatives. Some of these technical representatives have no expertise in the operation and maintenance of simulators.

Duties of Field Engineering Representatives Not Adequately Defined

The Naval Training Systems Center established its onsite field engineering work force at a time when in-house personnel operated and maintained the simulators and training devices. These engineering representatives were responsible for assisting in training the in-house maintenance personnel, providing advice on difficult maintenance problems, assisting with configuration management, and identifying and performing minor modifications to training devices.

When the COMS program was established and contractors assumed responsibility for operating and maintaining the simulators, many of these duties devolved to either the contractor or the contracting officers' technical representatives. The need for field engineers to perform their traditional role no longer existed.

At the time of our review, the Training Systems Center employed 98 onsite field engineering representatives at locations where COMS had been implemented. While our work was in progress, the Training Systems Center initiated a study to redefine the role of field engineering representatives. The Center had drafted a revised work statement listing tasks to be performed by the field engineers and had circulated a listing of revised work tasks to training device users for comment.

In our opinion, some of these tasks could be more appropriately performed by the maintenance contractors, the contracting officers' technical representatives, or other Navy activities. For example, one of the tasks listed in the revised work statement was to "resolve unique or difficult trainer problems," a duty of the contracting officers' representatives. Another task was to "provide trainer system operations assistance," which is the responsibility of COMS contractors. Other tasks included in the revised work statement could probably be performed by other, centralized, Navy support groups. For example, providing technical advice to develop scope of work statements and evaluating contractor proposals were included as potential duties of the field engineers. Since contracts are nominally awarded for a 5-year period, engineers at the Training Systems Center or at the field engineering regional offices could probably provide this support on an ad hoc basis. Another potential duty was to verify automatic test equipment software programs, software documentation, and other software package items. These verifications could probably be performed by personnel in the regional software support activities being established by the Training Systems Center.

Some of the work tasks were not sufficiently defined to evaluate. For example, one task was to "provide engineering and technical services." The draft work task statement, however, did not show what services were to be provided or to whom the assistance would be rendered.

Representatives of the Pacific Air Command who reviewed the draft work statement also questioned the continuing need for onsite field engineering representatives. They concluded that most of the tasks should be performed by other Navy personnel or the contractors themselves. In October 1985, the Commander of Pacific Naval Air Forces wrote the Training Systems Center and stated that it was the consensus of management personnel at training device sites that the COMS contractors and contracting officers' technical representatives have assumed many of the tasks traditionally assigned to the field engineering representatives. The Air Command recommended that the Training Systems Center drastically reduce the number of onsite field engineering representatives and simultaneously increase the Center's regional office staff slightly to provide "on-call" services.

Training Systems Center representatives provided us with comments from other simulator users briefed on the draft work statement. Although in some cases these users believed onsite engineering representatives were still needed, none of these comments were accompanied

by a detailed assessment of the draft work statement justifying the continued use of field engineering representatives.

Naval Air Training Command Has Additional Contract Monitors

The Naval Air Training Command has established teams to monitor the COMS contractors. Air Training Command Instruction 4330.2, dated November 7, 1983, states that:

“Under the COMS program, adequate Navy monitoring of contract maintenance is even more critical due to the scope of the program, its impact on the Navy’s maintenance budget, and the lack of organic qualified maintenance personnel to monitor the efforts.”

The instruction directed simulator users to establish maintenance monitoring teams for each contract. As a minimum, the teams were to consist of five people, including a contracting officer’s technical representative, a Training Systems Center field engineering representative, a quality assurance representative, a material support representative, and an administrative person.

The Air Training Command locations we contacted each had monitoring teams in place. The team established to monitor the TA-4/T-2 support contractor at Pensacola, Florida, consisted of five personnel; at Kingsville, Texas, the team consisted of four personnel; at Chase Field, Texas, a total of five positions had been authorized but only two were filled; and at Meridian, Mississippi, the monitoring team consisted of four people.

At some of the locations we visited, the number of people used to monitor the contractors’ performance seemed excessive. For example, four people were monitoring the TA-4/T-2 support contractor at Kingsville, Texas, where only nine technicians were employed.

Training Systems Center Has Not Assured the Qualifications of Contracting Officers' Representatives

The need for additional personnel to monitor contractor performance may result, in part, because the Training Systems Center did not systematically evaluate the technical qualifications of its contracting officers' technical representatives. In an October 1982 report on the COMS program, the Training Systems Center delineated the duties of the technical representatives. Duties included quality assurance reviews; technical instruction to contractors concerning specific details and milestones to be met; ensuring contractor adherence to technical documentation, configuration management, and proper trainer operations; and administrative oversight of contractor performance. The Center's guidelines for technical representatives stipulated that only individuals who have received training and who possess the requisite technical skills may be appointed as technical representatives.

At the time of our review, however, the Training Systems Center was not exercising control over the appointment and assignment of onsite technical representatives. This function was performed by the various simulator user organizations, such as the Naval Air Training Command. As a result, in some cases, the positions were filled by personnel who had no technical skills in operating and maintaining simulators. Technical representatives at four Air Training Command installations told us, for example, that they lacked the requisite technical skills to serve as the contracting officers' technical representatives. These personnel were flight officers rather than engineers or maintenance specialists. Some training device users told us that, if technically qualified, the technical representatives with a good quality assurance plan could effectively monitor and support the contractors.

Naval Training Systems Center officials agreed that they had not adequately evaluated the qualifications of personnel appointed as contracting officers' technical representatives in the past. Center management stated that in the future the qualifications of all nominees will be reviewed by Center staff.

Conclusions

The Navy appears to have used an excessive number of personnel to monitor the performance of COMS contractors. Personnel include the Training Systems Center field engineers, contracting officers' onsite technical representatives, assistant technical representatives, and other members of the Naval Air Training Command's maintenance monitoring teams. The continuing need for some of these personnel has not been established.

Duties traditionally performed by Training Systems Center field engineering representatives are not valid in an environment where contractors operate and maintain training devices. The Center has drafted a new charter, redefining the duties of these representatives. However, many of the duties appear to be more appropriate for other Navy personnel or the COMS contractors to perform.

The large number of personnel used to monitor the contractor performance may be due to the fact that the Center did not adequately evaluate the technical qualifications of personnel nominated as its contracting officers' onsite representatives. Some of the technical representatives have no expertise in the operation and maintenance of simulators. Training Systems Center officials have recognized the need to better evaluate the qualifications of people nominated as contracting officers' technical representatives.

Recommendations

We recommend that the Secretary of the Navy instruct the Deputy Chief of Naval Operations for Air Warfare to evaluate the need for personnel used to monitor COMS contractor performance with a particular view toward determining the continuing need for Training Systems Center field engineering representatives at each site.

We also recommend that the Secretary of the Navy instruct the Training Systems Center to develop and implement procedures to assure that contracting officers' technical representatives possess sufficient technical qualifications to adequately perform their duties.

Organizations Contacted

Organization	Location
Deputy Chief of Naval Operations for Air Warfare	Washington, D.C.
Deputy Chief of Naval Operations for Logistics	Washington, D.C.
Naval Air Systems Command	Washington, D.C.
Space and Naval Warfare Command	Washington, D.C.
Naval Sea Systems Command	Washington, D.C.
Office of the Navy Inspector General	Washington, D.C.
Commander, Naval Air Forces, Atlantic Fleet	Norfolk, Va.
Commander, Naval Air Forces, Pacific Fleet	San Diego, Calif.
Commander Naval Training, Pacific Fleet	San Diego, Calif.
Fleet Aviation Specialized Operational Training Group, Pacific Fleet	North Island, Calif.
Naval Air Station, North Island	North Island, Calif.
Naval Air Station, Miramar	Miramar, Calif.
Naval Air Station, Lemoore	Lemoore, Calif.
Marine Corps Air Station, El Toro	El Toro, Calif.
Fleet Antisubmarine Warfare Training Center	San Diego, Calif.
Chief of Naval Air Training	Corpus Christi, Tex.
Naval Air Station, Corpus Christi	Corpus Christi, Tex.
Naval Air Station, Chase Field	Beeville, Tex.
Naval Air Station, Kingsville	Kingsville, Tex.
Chief of Naval Education and Training	Pensacola, Fla.
Naval Air Station, Pensacola	Pensacola, Fla.
Naval Air Station, Whiting Field	Milton, Fla.
Saufley Field	Pensacola, Fla.
Naval Technical Training Center, Corry Station	Pensacola, Fla.
Naval Air Station, Jacksonville	Jacksonville, Fla.
Naval Air Station, Cecil Field	Jacksonville, Fla.
Fleet Training Center, Mayport	Mayport, Fla.
Service Schools Command	Orlando, Fla.
Naval Training Systems Center	Orlando, Fla.
Chief of Naval Reserves	New Orleans, La.
Office of the Assistant Secretary of Defense (Manpower, Installations and Logistics)	Washington, D.C.
Naval Audit Service	Orlando, Fla.
Naval Audit Service	Pensacola, Fla.
Department of Defense Inspector General	Washington, D.C.
U.S. Air Force Logistics Command	Dayton, Ohio
Army Program Manager for Training Devices	Orlando, Fla.
Office of Management and Budget, Office of Federal Procurement Policy	Washington, D.C.

Chronology of Events Surrounding Conversion Decisions

March 1979	Circular A-76 revised to require full cost studies before converting any in-house activity with an annual operating cost of \$100,000 or more to contract.
February 1980	DOD Instruction 4100.33 issued to implement Circular A-76 requirements for DOD.
October 1980	Section 502 of Public Law 96-342 requires a detailed cost comparison before converting any function performed by DOD personnel on October 1, 1980. Comparison must be based on most efficient in-house operation and summary of comparison must be provided to the Congress before the conversion.
June 18, 1982	Secretary of Navy abolished training device maintenanceman as an occupational specialty.
September 1982	Naval Air Systems Command tasked to develop a plan for civilian support of aviation simulators.
October 1982	Section 1112, Public Law 97-252, eliminates requirement to perform cost studies before converting activities performed by 10 or fewer DOD civilian employees. Authorization Conference report directs that "simplified" cost studies continue to be performed before converting the small activities.
October 15, 1982	Chief of Naval Operations message stated that only functions being performed entirely by military personnel could be contracted out without cost studies until Circular A-76 is revised; alternative study procedures approved for use by DOD would satisfy requirement for "simplified" cost studies.
January 24, 1983	Chief of Naval Operations requested the Secretary of the Navy to determine that contractor operation and maintenance of simulators was a "new start" under Circular A-76 and could be contracted out without conducting a cost comparison. According to this memorandum, elimination of the training device maintenanceman rating created a new requirement within the Navy for performance of their work. Where civilian personnel were involved, they were commingled with military personnel and, according to the request, it was not possible to contract out the work performed by military personnel without contracting out that performed by the civilian personnel as well.
March to April 1983	In hearings before the House Committee on Armed Services on the fiscal year 1984 Department of Defense Authorizations Bill, the Deputy Assistant Secretary of Defense (Manpower, Installations and Logistics) made a formal commitment to the Congress to continue performance of cost studies at all DOD activities.
May to June 1983	Four COMS contracts awarded without full cost comparison studies. Three of these involved 10 or fewer civilian employees.
August 4, 1983	Office of Management and Budget Circular A-76 revised to eliminate the cost studies for conversions involving 10 or fewer government employees. Office of Management and Budget personnel subsequently advised the DOD Inspector General's representatives that military personnel were not to be considered in determining whether an activity involved more than 10 employees.
September 15, 1983	Chief of Naval Operation message advised that Navy activities should continue to perform cost studies for all functions even though Circular A-76 had been revised to eliminate the requirement for studies on conversions involving 10 or fewer employees.

**Appendix II
Chronology of Events Surrounding
Conversion Decisions**

September 29, 1983	Chief of Naval Operations informed Naval Training Equipment Center that the September 15, 1983, message reaffirming the requirement to perform full cost studies did not apply to the COMS program.
September 30, 1983	Secretary of the Navy directed the Chief of Naval Material in coordination with the Assistant Secretary of the Navy (Shipbuilding and Logistics) to review Navy simulator maintenance planning and execution. The review was to focus on costs of services provided and comparison of system performance under contractor support and in-house operation where data existed.
November 12, 1983	Vice Chief of Naval Operations reported the results of review by the Chief of Naval Material and the Assistant Secretary of the Navy (Shipbuilding and Logistics). These officials had concluded that the COMS program was structured in consonance with the Secretary's policy of maximum competition and was in full compliance with Circular A-76.
November 16, 1983	Chief of Naval Operations message advised that the functions under the COMS program could be contracted out without formal cost comparison studies since approved studies showing that contracting out was cost effective had been done at the headquarters level.
December 15, 1983	Contract for operation and maintenance of TA-4/T-2 simulators, involving 10 or fewer civilian employees, awarded without full cost study.
February 10, 1984	Contract for EA-6B simulator support at Whidbey Island, Washington, awarded without full cost study. Ten or fewer civilian employees involved.
February 17, 1984	Director, Office of Management and Budget, advised Congressman Pashayan that Circular A-76 allows conversion to contract of activities with 10 or fewer civilian employees without a full cost comparison. The Director stated, however, that the agency should have some documentation to indicate that the cost of contracting will be less than the cost of government performance.
February 22, 1984	Office of Federal Procurement Policy advised the Director, Defense Installation Management, that the Secretary of Defense has the prerogative to contract with qualified commercial sources when an activity is operated totally by military personnel and if there are competitive and reasonable prices.
February 24, 1984	Chief of Naval Operations directed full cost studies for possible conversion of A-7E devices at Naval Air Station, Lemoore, California, because 12 civilian employees were involved in performing maintenance on these devices.
March 1, 1984	Contract for EA-6A support at Whidbey Island, Washington, awarded without full cost study. Ten or fewer civilian employees involved.
March 6, 1984	Office of Assistant Secretary of Defense (Manpower, Installations and Logistics) advised the military services that functions performed exclusively by military personnel could be converted to contract without a cost study when adequate competition is available and reasonable prices can be obtained from qualified commercial sources. Activities involving civilian employees would continue to require cost comparisons unless the Assistant Secretary granted a waiver.
April 6, 1984	Contract awarded for SH-3/CH-46D support at North Island, California, and Jacksonville, Florida, without cost study.

**Appendix II
Chronology of Events Surrounding
Conversion Decisions**

May 23, 1984	Office of Federal Procurement Policy asked the Deputy Assistant Secretary of Defense (Installations) to respond to a request by Congressman Pashayan to evaluate the COMS program for compliance with Circular A-76.
July 27, 1984	Assistant Secretary of Defense (Manpower, Installations and Logistics) requested the DOD Inspector General to investigate allegations of irregularities in the COMS program.
August 1, 1984	Three additional aviation simulator systems converted to contractor support without full cost studies.
August 3, 1984	Office of the Assistant Secretary of Defense (Manpower, Installations and Logistics) advised the Chairman, Subcommittee on Readiness, House Committee on Armed Services, that the Navy had converted some of its aircraft simulator operations directly to contract without a full A-76 cost comparison. The letter states that the contracts involved fewer than 10 civilian employees; that before awarding the contracts, the Navy conducted a cost analysis and concluded that contractor operation would yield significant savings and could also increase performance; and that early experience showed that contract operation and maintenance of the simulators averaged a 60-percent savings over previous in-house costs.
August 6, 1984	Office of the Assistant Secretary of Defense (Manpower, Installations and Logistics) granted Chief of Naval Operations request for a waiver to continue direct contracting of COMS systems involving 10 or fewer civilian employees. The waiver was subject to the results of the ongoing DOD Inspector General investigation.
October-November 1984	Three more aviation simulator systems converted to contract without full cost studies.
October 22, 1984	Assistant Secretary of Defense concurred with Inspector General's findings and recommendations. He withdrew waiver for COMS program.
November 2, 1984	DOD Inspector General report, <u>Audit of Alleged Irregularities in the Navy's COMS Program</u> , concluded that the Navy did not adhere to the requirements of DOD Instruction 4100.33 or a DOD commitment to the Congress when it contracted for simulator maintenance without performing full cost studies. The Inspector General further concluded that without full cost studies, there was no valid basis to conclude that a contractor could perform the simulator maintenance work at less cost than a well-organized, in-house work force. The Inspector General recommended that the Assistant Secretary of Defense (Manpower, Installations and Logistics) direct the Navy to perform full cost studies on all simulators that have not been contracted and which have civilian employees permanently assigned. The Inspector General also recommended that the Assistant Secretary decide if full cost studies should be performed for those systems that had already been contracted without benefit of the studies and which had civilian employees assigned.
November 27, 1984	Navy Inspector General advised Congressman Pashayan that the COMS program was more cost effective than using civil service personnel.

**Appendix II
Chronology of Events Surrounding
Conversion Decisions**

February 7, 1985	GAO staff advised Congressman Pashayan that the Navy was not required to perform a comparative cost study before contracting for maintenance of the F/A-18 simulators at Naval Air Station, Lemoore, California. Evidence indicated that this effort was a new work requirement rather than a true conversion from in-house to contractor performance even though there was a period of interim in-house performance.
November 13, 1985	Navy announced that a comparative cost study for S-3A simulators at North Island, California, favored contractor performance. Including the conversion differential, cost of contractor performance was \$262,568 less than the cost of in-house performance on about a \$2.3 million contract.

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