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United States General Accounting Office

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Report to the Secretary of the Navy

April 1988

NAVY MAINTENANCE

Naval Aviation Depots' Asset Capitalization Program Needs Improvement

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

National Security and
International Affairs Division

B-230512

April 28, 1988

The Honorable William L. Ball
The Secretary of the Navy

Dear Mr. Secretary:

This report addresses the naval aviation depots' Asset Capitalization Program. We found that the program can be improved by providing additional management attention and emphasis, strengthening internal controls, and limiting future funding to that which can be successfully obligated each year.

The report contains recommendations to you on pages 21, 25, and 30. As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs no later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Chairmen, House Committee on Government Operations, Senate Committee on Governmental Affairs, and House and Senate Committees on Appropriations and on Armed Services; the Secretary of Defense; and the Director, Office of Management and Budget.

Sincerely yours,

Bill W. Thurman

for Frank C. Conahan
Assistant Comptroller General

Executive Summary

Purpose

Between fiscal years 1983 and 1987, the naval aviation depots were authorized $384 million for plant modernization under the Asset Capitalization Program. GAO evaluated the depots' implementation of this program, including the success achieved, the adequacy of internal controls, and the status of budget execution.

Background

Industrial fund activities, such as aircraft maintenance depots and shipyards, perform functions of an industrial or commercial nature for customers that reimburse the activities for costs incurred with appropriated funds. In 1983 the Department of Defense established the Asset Capitalization Program to modernize the plant and equipment at the industrial fund activities. The objectives of the program are to bring about more businesslike operations while realizing economies and efficiencies, increasing productivity, and strengthening the industrial base.

The program applies to almost all Department of Defense industrial fund activities. GAO focused on implementation within the naval aviation depots.

Results in Brief

The Asset Capitalization Program is a relatively new program that offers great potential as a technique for financing equipment modernization to bring about increased efficiencies and productivity. However, many equipment purchases have not achieved expected benefits. GAO found that the Navy needed to develop guidance for effective program management and to establish oversight procedures to measure program achievements within the aviation depots. In addition, generally accepted elements of an effective capital investment program such as management support, well-defined program criteria, and post investment analyses were needed.

GAO also identified specific areas of concern relative to internal controls and budget execution. For example, controls for depreciation accounting and the safeguarding of assets have not been followed, and program funding has significantly exceeded the level obligated by the end of the budget year.

Principal Findings

Projects Are Not Achieving Expected Benefits

GAO's tests showed that the program has not achieved its full potential in increasing efficiency and productivity. GAO's examination of 52 equipment modernization projects installed in fiscal years 1985, 1986, and 1987 showed that 21 had achieved fewer benefits than expected or no benefits. In addition, many projects were inadequately justified and reviewed or were slow to be acquired and installed.

Controls Need to Be Strengthened

Effective internal control systems provide reliable feedback to managers and help them to comply with applicable laws and policies, safeguard assets, and accurately account for revenues and expenditures. Because control techniques were not followed in some cases, GAO found that accounting records for depreciation expenses were inaccurate, plant property was not always safeguarded, and the status of equipment orders was not always known.

The accuracy of depreciation accounting is important because the Asset Capitalization Program is partially financed by including depreciation expense in the rates charged to customers for performing work.

Program Funding Has Exceeded Obligation Levels

The depots have been slow in executing their Asset Capitalization Program budgets. As a result, the activities collected program funds from customers long before the funds were needed to pay for program purchases. At the end of fiscal year 1987, the depots' unobligated equipment funds from the fiscal years 1986 and 1987 programs totaled about $54 million, or 37 percent of the amount authorized.

The unobligated balance would have been higher had the Navy not transferred an additional $34 million from the depots' fiscal year 1987 equipment budget to other Navy industrial fund activity groups due to the depots' inability to obligate funds in a timely manner. This raises concerns about the actual level of funding the depots needed.

Recommendations

GAO makes a number of recommendations to the Secretary of the Navy to improve the naval aviation depots' Asset Capitalization Program, including

- placing additional management emphasis on the program, such as issuing program guidance that contains the basic elements of a good capital investment strategy;
- strengthening internal controls; and
- limiting future funding to that which can be successfully obligated each year, considering actual requirements and resources assigned to execute the program.

Agency Comments

The Department of Defense agreed with GAO's findings and recommendations. (See app. I.) The Department stated that the Navy is fully committed to correcting each of the deficiencies noted and is aggressively pursuing remedial actions. Also, the Navy has reduced the aviation depots' spending authority by $26 million in fiscal year 1988 and $40.8 million in fiscal year 1989.

Contents

Abbreviations

ACP	Asset Capitalization Program
DOD	Department of Defense
GAO	General Accounting Office
NADEP	Naval Aviation Depot
NADOC	Naval Aviation Depot Operations Center
NAVAIR	Naval Air Systems Command

Introduction

Industrial fund activities, established by the Department of Defense (DOD) with the approval of the Congress in 1949, use working capital funds rather than direct appropriations to finance the cost of goods and services provided to customers. The customers use annual appropriations to reimburse these activities for work performed. Industrial fund activities include aircraft maintenance depots, shipyards, and ordnance stations that perform functions of an industrial or commercial nature.

When requesting funds for new plant equipment before fiscal year 1983, industrial fund activities such as the naval aviation depots (NADEPS) competed for the same funds used to acquire ships, aircraft, and other weapon systems. According to DOD, the industrial fund activities generally were less than successful in this competition and many equipment requirements went unfunded. Over time, much of the equipment at these activities became outdated, inefficient, and less productive than equipment in similar civilian industries.

In an attempt to correct this problem and allow for more businesslike operations, DOD initiated a program in fiscal year 1983 called the Asset Capitalization Program (ACP). The objectives of this program are to realize economies and efficiencies, increase productivity, and strengthen the industrial base. Under the ACP, the financial burden of modernizing industrial plant equipment is shifted to the appropriations of each activity's customers. The cost of capital improvement becomes a part of each activity's operating cost and is recovered from an activity's customers through depreciation charges over the useful life of the assets. While the largest portion of the ACP funds are used to purchase plant equipment, funds also are used to finance minor construction projects and management information systems.

When the program started, DOD and the Congress recognized that depreciation expense alone would not provide sufficient financial resources for the rapid modernization needed or at a level comparable with the private sector's rate of capital investment. DOD estimated the private sector's investment rate for equipment to be about 5 percent of revenues. Thus, beginning in fiscal year 1985, the ACP spending goal was set, and the industrial activities were allowed to charge their customers a surcharge to cover the difference between the spending goal and the estimated depreciation expense.

As part of the authorization process, the Congress established the ACP spending goal as a percentage of annual revenues generated by the industrial activities. The targets initially set by the Congress for fiscal years 1985, 1986, and 1987 were 3 percent, 4 percent, and 5 percent, respectively. The Congress later reduced the target for fiscal year 1987 to 4 percent.

ACP Funding

The advent of the ACP significantly increased the funding for plant modernization in the areas of equipment, minor construction, and management information systems. ACP funding since fiscal year 1985 for all DOD industrial fund activities, for all Navy industrial fund activities, and for the NADEPS — the subject of this report — is shown in table 1.1.

Table 1.1: ACP Funding Since 1985

Dollars in millions

Year	DOD	Navy	NADEPs
1985	$923.7	$602.7	$105.1
1986	990.7	644.9	104.1
1987	981.3	757.3	90.9
1988[a]	891.3	625.0	93.5
1989[a]	902.1	616.2	104.2

[a]Budgeted.

The NADEPS' $93.5 million ACP budget for fiscal year 1988 included $75.3 million for equipment, $8.2 million for minor construction, and $10.0 million for management information systems. In contrast, the NADEPS were authorized $17.5 million for equipment in fiscal year 1982, the year before the ACP began.

Management Responsibilities

The Naval Air Systems Command (NAVAIR) has overall responsibility for the NADEPS' ACP. NAVAIR has delegated most program management and oversight responsibilities to a subordinate organization—the Naval Aviation Depot Operations Center (NADOC). NADOC prepares the NADEPS' ACP budget submission, reviews project justifications that exceed $100,000, approves projects costing over $300,000 but under $1 million, and monitors NADEP execution of the program. NAVAIR approves projects costing over $1 million.

As was intended by the ACP concept of providing maximum flexibility and control to those managers who have day-to-day knowledge of the modernization needs at the activity level, the local managers at each of the six NADEPS have primary responsibility for detailed program management. Specifically, each NADEP is responsible for identifying the investment requirements; justifying, prioritizing, and submitting those requirements through the chain of command; and executing the approved program by developing procurement specifications and monitoring the procurements through installation at the activity. For the most part, the NADEPs rely upon other activities such as the Naval Supply Centers to contract for ACP purchases.

Objectives, Scope, and Methodology

Our overall objective was to evaluate how well the ACP has been implemented at the NADEPs. Our specific objectives were to

- evaluate the success achieved from the ACP,
- assess the adequacy of the internal controls used to help manage the program, and
- examine the status of the ACP budget execution.

To accomplish these objectives, we performed detailed audit work at each organization having management responsibility for the ACP and at two of the six NADEPs. At each activity, we interviewed responsible agency personnel and reviewed applicable policies, procedures, and pertinent documents. The organizations visited were the:

- Office of the Secretary of Defense, Washington, D.C.;
- Office of the Navy Comptroller, Washington, D.C.;
- Naval Air Systems Command, Washington, D.C.;
- Naval Aviation Depot Operations Center, Patuxent River, Maryland;
- Norfolk NADEP, Norfolk, Virginia; and
- North Island NADEP, San Diego, California.

The Norfolk and North Island NADEPS were selected because they had the largest ACP budgets of the six NADEPS in fiscal year 1987. In that year, the ACP budgets for the two activities represented 42 percent of the total NADEPS' ACP.

To evaluate the success achieved from implementing the ACP, we reviewed information on program accomplishments available from the Navy and from a Navy consultant, Coopers & Lybrand, which had reviewed the NADEPS' ACP as part of a larger management study. In addition, we judgmentally selected and examined 52 operational equipment projects included in Norfolk's and North Island's fiscal years 1985, 1986, and 1987 programs. This test compared the actual use and benefits achieved from each project to the expectations set forth in the original project justifications.

Additional tests were made to evaluate how well the NADEPs' ACP management procedures matched the key elements of an effective investment strategy as described in a 1973 joint Civil Service Commission (now the Office of Personnel Management), Office of Management and Budget, and General Accounting Office report, Analysis of Productivity-Enhancing Capital Investment Opportunities. These tests included an evaluation of the adequacy of project justifications and the timeliness of project acquisition and installation. Officials at the North Island and Norfolk NADEPs reviewed the results of our tests.

To assess the adequacy of internal controls for the ACP, we reviewed Norfolk's and North Island's implementation of the Federal Managers' Financial Integrity Act of 1982, which requires an agency to periodically evaluate internal control systems. We also tested the accuracy of equipment depreciation records and assessed compliance with procedures to insure that assets are safeguarded.

To examine the status of ACP budget execution, we compared the funds authorized each year with the amounts committed and obligated. We also inquired into the extent of and reasons for any redistribution of NADEP ACP funds to other Navy activity groups.

Our review was made in accordance with generally accepted government auditing standards and was performed between June 1987 and January 1988.

The ACP Has Not Achieved Its Full Potential

To assist the NADEPs' ACP in achieving its full potential, the Naval Air Systems Command needs to implement an effective capital investment management program. The NADEPs' program has suffered from inadequate guidance, ineffective procedures for identifying and acquiring beneficial investment projects, and a lack of feedback on what the program has accomplished. Our tests of installed ACP projects at two NADEPs showed that although some projects were successful, others were not used and had achieved few or no benefits. We also found that many ACP projects were inadequately justified and reviewed while others were slow to be acquired and installed.

Many Projects Are Not Achieving Anticipated Results

We reviewed 52 installed projects to compare actual use and benefits with the expectations contained in the project justifications. In choosing the projects for the test, we judgmentally selected 45 projects at the Norfolk NADEP and 45 projects at the North Island NADEP from lists of all fiscal years 1985, 1986, and 1987 projects at each activity. In those years, Norfolk had a total of 639 projects and North Island had 473. We added 3 projects to the 45 initially selected at Norfolk because of problems we identified during a test of uninstalled items from the 1985 program. For the 93 projects at Norfolk and North Island, we reviewed the justifications and determined if the projects were operational. All projects identified as operational, 25 at Norfolk and 27 at North Island, were included in our test of actual use and benefits.

For each of these projects, we inspected the equipment and interviewed shop personnel and supervisors about how the equipment was used, what benefits were obtained, and whether training, supplies, or maintenance had been a problem for the new equipment. Since actual use and savings data were maintained for only 1 of the 52 projects, we primarily based our analysis on the statements made by shop personnel and supervisors. We also asked the NADEPs' ACP managers to review our analyses. They concurred with the results.

Almost 60 percent of the projects we reviewed at Norfolk and North Island appeared to be achieving the benefits expected. For example, Norfolk purchased a $33,800 automatic measuring system as part of its fiscal year 1985 program. The equipment was used in the materials laboratory to analyze fluids. We were told that in 5 to 10 minutes the equipment automatically performs certain tests that took a chemist an hour to perform using the old method. Norfolk estimated that the labor savings from the investment should equal its cost in about 4 years. Similarly, North Island purchased a $37,900 grinding machine in fiscal year 1986 to replace a machine that had exceeded its service life. Shop personnel told us that the new equipment was about 50 percent more efficient and provided better tolerances than the old machine. As a result, the equipment should produce benefits that equal its cost in about 4 years.

The remaining 40 percent of the projects reviewed, however, had produced few or no benefits. Examples of some of these cases follow.

- A $246,000 boring/milling machine was purchased by the North Island NADEP to replace older, less efficient equipment in the shop. Although the machine was installed on April 10, 1987, shop personnel told us in September 1987 that the equipment had never functioned properly. In addition to being out of tolerance and having broken components, the instructions and schematics were written in a foreign language. The old machine, which had not been removed, continued to meet requirements.
- An ion vapor deposition machine costing $334,000 was installed at the Norfolk NADEP on May 12, 1987. According to the project justification prepared in May 1984, the machine was to achieve environmental benefits by using a new corrosion protection process on certain aircraft parts. We were told in August 1987 that the old corrosion protection process was still in use, that there was no workload requirement for the new equipment, and that no benefits had been achieved from the purchase to date. Norfolk had tasked engineering personnel to develop potential uses for the machine, but none had been identified when we visited the activity.
- North Island purchased a $93,000 gage measuring machine to be used for calibration work. This machine was to replace two slower machines and thereby produce labor savings through increased productivity. We found that the older equipment was retained in the shop and that the new gage measuring machine was not being used because calibration workload had decreased.
- Norfolk purchased two milling machines for $43,000 as part of the fiscal year 1985 ACP. Although Norfolk listed the machines as operational on March 18, 1987, shop personnel stated that the equipment had never worked correctly due to motor and digital readout problems. The old equipment in the shop was still being used to meet requirements.
- A $229,000 metal cutting saw was installed at Norfolk in January 1987. However, in August 1987 shop personnel told us the saw had not been used since February because blades were not available. Norfolk did not order the blades until after the saw had been installed. The old saw in the shop was still meeting the shop's needs.

During its consulting work for the Navy, Coopers & Lybrand also commented on ACP projects at the NADEPs that were not achieving anticipated benefits. In June 1986 Coopers & Lybrand reported that little review was performed after equipment installation to determine if predicted cost savings were being achieved, if equipment was being used, or if improvements needed to be made.

Program Management Can Be Improved

It appears that the primary reason the NADEPs' ACP has not achieved its full potential is that an effective capital investment management program has not been implemented. A 1973 joint Civil Service Commission, Office of Management and Budget, and General Accounting Office report, Analysis of Productivity-Enhancing Capital Investment Opportunities, described the basic elements of a sound capital investment program.

These elements include (1) top management involvement and support, (2) a systematic approach for identifying investment opportunities, (3) well-defined procedures for justifying, ranking, reviewing, and approving projects, (4) prompt implementation of approved items, and (5) post investment analyses to determine if anticipated benefits are being realized. These key elements were not fully developed in the NADEPs' program.

Management Involvement and Support

Top management involvement and support is one of the prerequisites for a successful investment strategy. Such support is demonstrated through clear program guidance, well-defined organizational responsibilities, and application of sufficient resources for program management. We generally found little evidence to demonstrate such management support for the NADEPs' ACP.

Although the ACP began in fiscal year 1983, as of October 1987 there still was no approved instruction providing guidance on how the program should be managed within the NADEP community. The two NADEPs we visited also had no local instructions to explain how the program should operate within their activities.

According to NADOC officials, they recognized the need for program guidance and prepared a draft ACP instruction in 1984. Although selected portions of the draft instruction were used to prepare justifications, the instruction was never finalized. Also, the draft instruction did not contain provisions requiring comprehensive planning or post investment analyses. We believe the lack of direction has contributed to some of the problems we noted.

NADOC and NAVAIR officials told us that one reason program guidance had not been issued was unclear organizational responsibilities. In particular, these officials said ACP roles and responsibilities within NAVAIR and between NAVAIR and NADOC have been a long-standing problem. A NADOC capital planning document prepared after the announcement of the reorganization of the Naval Aviation Logistics Center into NADOC stated:

> "The role of the current Capital Assets Division [includes the ACP] under NADOC is unknown and unclear particularly in respect to management and approval responsibility over the depot facility and equipment programs. If the program transitions to NAVAIR, it will lose its identity and importance due to lack of sponsorship and support."

In September 1987 NAVAIR issued a message that clarified NAVAIR's internal ACP responsibilities and reaffirmed NADOC as the primary ACP manager for the NADEPs. Navy officials stated that with responsibilities established, they plan to issue the ACP instruction in the near future.

Another indication of limited support for the program was the level of personnel resources assigned to manage and execute the program. The inception of the ACP significantly increased the funding for capital equipment within the NADEP community. Equipment funding increased from $17.5 million in fiscal year 1982, the last year before the ACP, to $84.7 million by fiscal year 1985. NADOC officials said, however, that additional people were not assigned to manage and execute the program—people who identify, justify, and review projects as well as those who prepare procurement specifications and actually procure approved projects. At the NADOC level, officials stated that the same number of people (three) were assigned to equipment management as were assigned before the ACP. Officials at both Norfolk and North Island stated that the people assigned to equipment management had decreased since the ACP was introduced.

Both NADEP and NADOC officials said that the level of resources allocated to the program had resulted in significant difficulties in executing the ACP in a timely manner.

Identifying Investment Opportunities

The identification process is one of the most important aspects of a successful investment program. A systematic approach to search for and identify investment opportunities can uncover opportunities beyond the routine replacement of worn-out equipment. These may involve labor-saving technology to replace obsolete equipment or the redesign of an entire work process. Such comprehensive planning can often identify ways that capital improvements can eliminate current bottlenecks in work flow and achieve significant gains in productivity and turnaround times. We found that such comprehensive investment planning was not occurring within the NADEP community. For the most part, identification of new equipment ideas came from the production floor and focused on replacing current equipment, not on identifying new ways of doing business. Industrial engineers were not normally used to help identify investment projects.

The Navy recognizes the need to improve planning for capital equipment. Officials at both NADEPs visited and at NADOC said better equipment planning was needed to focus on work process improvements. A February 1987 NAVAIR briefing commented that the NADEPs buy equipment based on current technology with "almost no input from industrial engineering" on future needs. Coopers & Lybrand also noted the need for better investment planning and reported in February 1987:

> "Capital asset budgeting, as currently practiced, is a bottom-up approach. The need for new equipment is often identified by shop floor personnel and pushed through the approval process... annual capital budgets represent 'wish lists' for facilities and equipment without too much regard to their overall financial impact or their strategic need.... Methods are needed to provide the groundwork for developing operations plans by identifying those areas in the production process where the greatest improvements can be made."

Procedures to Justify, Prioritize, Review, and Approve Projects

A good capital investment strategy should include standard procedures for justifying, ranking, reviewing, and approving proposed investments. This helps to ensure that capital resources are expended efficiently on those projects with the greatest potential benefit. During our review we found that each of these areas needed improvement.

Justifications

Reliable justifications based on sound economic analyses are vital to the program's credibility. Navy Comptroller officials stated that they primarily rely upon the project justification process to ensure that the ACP is meeting its objectives.

However, we found that many project justifications at the two NADEPs visited (1) were prepared after the projects had been approved, (2) did not explain why the projects were needed, (3) did not contain reasonable and accurate economic analyses, and (4) were not adequately reviewed. As a result, the justification process has not ensured that only valid, beneficial projects are purchased under the program.

To test the adequacy of NADEP justifications, we reviewed the 48 Norfolk and 45 North Island project justifications selected from the fiscal years 1985, 1986, and 1987 programs. We compared information in the justifications to the requirements in the draft ACP instruction since the NADEPs were told to follow those requirements in justification preparation. ACP managers at Norfolk and North Island reviewed and concurred with the results of our analysis.

Our analysis of individual items and discussions with ACP managers indicated that only 21 and 2 percent of the justifications at Norfolk and North Island, respectively, were adequate. The following examples illustrate some of the problems found in the justifications reviewed.

- North Island used incorrect labor rates in 36 of the justifications reviewed. In some cases, the inaccuracies significantly affected the economic analyses. Using correct labor rates would have shown that the payback period (the time required for the investment's benefits to equal its cost) exceeded the expected life of the equipment for 2 projects. To illustrate, the justification for two measuring receivers, which cost $124,612, showed a payback period of 6.15 years and a service life of 12 years. Use of the correct labor rate in the analysis showed a payback of about 22 years.
- A Norfolk justification for a horizontal boring machine costing $290,000 showed a payback of 13 years, although the expected service life of the equipment was 12 years.
- In fiscal year 1986 North Island justified the purchase of a $165,000 x-ray stress analyzer. In the following year, it learned that delivery would be delayed due to contractor problems. As a result, the activity used the same justification to purchase another x-ray stress analyzer from a different vendor as part of the fiscal year 1987 ACP. No additional workload was indicated. We were told that the contract for the original machine was to be canceled; however, at the time of our visit in September 1987, the original machine was still on order. The need for this machine appeared questionable because the analyzer purchased in 1987 had been received and was being used for only about 15 hours a week, according to shop personnel.

- The economic analysis for a replacement furnace costing $55,000 did not consider the installation cost. If this cost is included, the Norfolk project will cost $48,500 more than the total expected benefits over the life of the furnace.
- The justification for a $6,200 voltage divider stated that the project was needed because the shop required more than the one divider currently in the shop. The justification contained no workload data or economic analysis. We found that four voltage dividers actually were available. Norfolk decided to cancel the project after our inquiry because it was not needed.
- Only 13 of the 45 North Island justifications contained an approval signature.

Coopers & Lybrand also noted problems with the adequacy of NADEP ACP justifications. In February 1987 it reported that justification assumptions regarding costs and benefits were not supported by hard data and that all costs associated with the procurement and implementation of capital asset projects often were not considered.

Project Review, Ranking, and Approval

Using the justifications, projects should be evaluated, ranked, and approved on a comparable basis considering organizational goals and economic benefits. NADEP officials said that stringent review and ranking of equipment proposals were routinely performed by the NADEPs before the advent of the ACP. These officials stated that prior to the ACP far fewer equipment funds were available, and as a result, competition for these funds was keen and each proposed project was rigorously reviewed. For example, they said that before the ACP both the Norfolk and North Island NADEPs required the department heads and the commanding officer to jointly review and approve the final ranking of equipment projects in each activity's budget submittal.

Under the ACP, such detailed review and ranking of equipment proposals do not occur. NADOC, Norfolk, and North Island officials told us that ranking of projects has little importance since recent ACP funding levels have permitted nearly all projects to be approved. Also, Norfolk and North Island no longer require the department heads and the commanding officer to review and approve the equipment budget submission. In both cases, this responsibility has been delegated to a single department.

In addition, little criterion exists on how projects should be prioritized. For example, unlike the naval shipyards, which require a payback period of 7 years or less, the NADEPs had no criterion for acceptable project payback. The payback period for 6 of the 48 justifications reviewed at Norfolk exceeded 7 years.

We also noted that review of NADEP ACP proposals above the activity level was limited. For the most part, NADOC only reviewed justifications for projects that exceeded $100,000. Projects below this amount were not reviewed above the activity level. For the fiscal year 1987 program at Norfolk and North Island, 53 of 188 justifications exceeded $100,000 and were submitted to NADOC for review. In addition, submitted proposals were rarely disapproved, even when the justifications contained no local approval signatures or contained incorrect economic analyses. A January 1986 review of NADOC by the NAVAIR Inspector General included the following remark on the ACP, "In summary, the program is approved on a perfunctory basis."

Finally, in commenting on the NADEPs' ACP review and approval process, Coopers & Lybrand reported in June 1986 that the NADEPs' process did not encourage long-range planning and permitted the acquisition of equipment that was not used.

Implementation of Approved Projects

To obtain benefits as early as possible, project implementation should be well planned and prompt. Detailed plans and schedules should be developed to promote prompt implementation and the status of projects should be tracked as they go through the procurement process.

We found that significant time lapses between the start of a fiscal year for the ACP and the time projects are installed. Also, the two NADEPs visited were not always aware of the status of ACP items in the procurement system nor were they always prompt in getting projects installed after receipt.

To examine the timeliness of ACP project implementation, we reviewed the status of Norfolk's execution of its fiscal year 1986 program as of July 1, 1987, 21 months after the start of fiscal year 1986. The review showed that of 160 projects with a unit cost exceeding $10,000, only 44, or 28 percent, had been installed.

In another test to evaluate the timeliness of ACP implementation, we reviewed all projects costing over $10,000 from the fiscal year 1985 program that had not been installed when we visited the two NADEPs. Our test showed that Norfolk and North Island had 18 and 24 ACP projects, respectively, that were still uninstalled at the time of our visit in August and September 1987.

For example, North Island received five balance machines costing $333,000 in December 1985. We were told that after the items were received, North Island had difficulty obtaining information on how the machines should be anchored to the shop floor. Once the equipment was in place, North Island decided that a safety shroud around each machine was needed before they could be used. At the time of our visit in September 1987, North Island personnel stated the shrouds were on order and would be installed within 6 weeks after receipt.

Navy ACP managers have expressed concern over the lengthy time experienced by the NADEPs between project approval and installation. For example, during a November 1986 meeting of NADEP ACP managers, the managers were encouraged to more quickly procure and install approved projects.

Also, in an effort to encourage prompt installation of ACP projects, NADOC requires the NADEPs to report monthly the number of projects awaiting installation for over 30 days. However, of the fiscal year 1985 projects currently being installed, 3 of 5 projects at Norfolk and 4 of 11 projects at North Island had been awaiting installation for over 30 days but had not been included in the monthly report.

Feedback on Program Results

Obtaining feedback on how well a program is operating is an essential management function. Capital investment programs in particular require measures of program performance to develop and maintain a level of credibility. Also, follow-up evaluations on installed projects, at least on a selected basis, are needed to determine if anticipated benefits are being realized so that improvements to the investment processes can be made if needed.

The Navy does not measure benefits from the NADEPS' ACP either from a macro program-wide perspective or from an individual project basis. As a result, although the NADEPs were authorized about $384 million for the ACP from fiscal years 1983 through 1987, the Navy has not quantified what extent the program has achieved its objectives, what benefits have been obtained, or whether the equipment is even used.

We also found that, for the most part, information needed to perform post investment analyses, such as equipment utilization and operating cost data, was not maintained. Thus, even if an activity wanted to begin performing post analyses on a selected basis, the data needed to do so were not available.

The need to measure program benefits has been long recognized. For example, the House Committee on Appropriations' surveys and investigations staff reviewed the proposed ACP before its implementation and in June 1982 reported:

> "One of the benefits expected to be realized through the new policy would be increased productivity leading to lower unit costs to the customers. However, OSD [Office of the Secretary of Defense] has established no annual increased productivity targets to reflect the benefits to be derived from the planned expenditures for IF [Industrial Fund] replacement equipment ...To document the resultant savings will require that DOD establish a firm equipment modernization program based upon an identifiable baseline; be able to measure its progress in terms of investment and benefits each year; and be able to identify and justify any necessary adjustment due to other than equipment improvements, e.g., increased or decreased workload."

The Navy and Coopers & Lybrand have also recognized the need to measure program benefits. According to the minutes from an October 1985 NAVAIR conference, the NAVAIR Commander stated that:

> "... a method must be devised which would show the effects of the planned large influx of ACP dollars. Some measure of effectiveness, such as productivity increases, must be developed to determine if there is an adequate return on the large investment."

Coopers & Lybrand recommended in June 1986 that the NADEPs start reviewing equipment installations to ensure that projected productivity gains are being realized. We noted during our September 1987 visit to North Island that efforts had been started to initiate post audits in the near future.

Conclusions

We believe that the NADEPS' ACP can achieve greater success with increased management attention and emphasis to ensure that the essential elements of an effective investment strategy are incorporated into the program.

Recommendations

We recommend that the Secretary of the Navy direct the Commander, Naval Air Systems Command, to place additional management emphasis on the NADEPS' ACP. Specifically, the Commander should

- issue ACP guidance that includes well-defined procedures for justifying, ranking, reviewing, and approving projects to ensure that only valid, beneficial projects are approved;
- develop a systematic approach for identifying investment opportunities, including planning that emphasizes work process improvements;
- ensure prompt implementation of approved projects so that anticipated benefits can be obtained as quickly as possible; and
- initiate post investment analyses or other measures to determine if anticipated benefits are being realized and if changes in program management are needed.

Agency Comments

DOD agreed with our findings and recommendations and stated that the Navy is fully committed to correcting each of the deficiencies we identified. (See app. I.) DOD stated that training is being provided to personnel at all six NADEPs that will address all facets of the program from requirements articulation to post installation analyses. In addition, a comprehensive ACP instruction and a capital asset planning manual is expected to be completed in 1988. These documents will include procedures for more stringent reviews of proposed projects, guidelines for prioritizing ACP projects, and requirements for post installation analyses. Further, goals will be established and monitored to help ensure that ACP projects are installed quickly. DOD stated that these actions, along with increased industrial engineering personnel at the six depots, should minimize the potential for acquiring equipment that does not achieve desired benefits.

Internal Controls Need to Be Strengthened

Effective internal controls help managers to comply with applicable laws and policies, safeguard assets, and accurately account for revenues and expenditures. Effective internal control systems also provide management with reliable feedback that can help ensure program goals and objectives are met. Because control techniques for the ACP were not followed in some cases, we found that accounting records for depreciation expenses were inaccurate, plant property was not always safeguarded, and the status of equipment orders was not always known.

Internal Control Requirements

The Federal Managers' Financial Integrity Act of 1982 placed increased emphasis on the need for effective internal controls. The act requires that an agency's internal control systems be periodically evaluated and the results reported. These evaluations are to be made in accordance with Office of Management and Budget guidance and are to include an assessment of whether the systems meet the objectives of internal control and comply with standards we established.

These standards, contained in our 1983 Standards For Internal Controls In The Federal Government, define internal control systems as follows:

> "The plan of organization and methods and procedures adopted by management to ensure that resource use is consistent with laws, regulations, and policies; that resources are safeguarded against waste, loss, and misuse; and that reliable data are obtained, maintained, and fairly disclosed in reports."

Good internal controls are essential to achieving the proper conduct of government business with full accountability for the resources made available. They also facilitate the achievement of management objectives by serving as checks and balances against undesired actions.

Depreciation Records Are Inaccurate

The accuracy of depreciation accounting is important not only from an internal control perspective but also because it affects the activities' industrial fund rates and ultimately the customers' budget requests. To finance the ACP, depreciation expenses are included in the rates charged to each activity's customers for performing work such as aircraft depot maintenance. Because this expense alone has provided less than the desired level of ACP funding, a surcharge is added to the rate to make up the difference. Over time, as the depreciation expense increases due to the higher level of capital investment, the services plan to phase out the surcharge.

Our tests at the Norfolk and North Island NADEPs showed that equipment depreciation accounting was inaccurate. We judgmentally selected 34 Norfolk and 34 North Island ACP projects and reviewed the accounting records to see whether the equipment items were being depreciated properly. We found that 13 projects at Norfolk, costing $2.3 million, were not being depreciated. Norfolk ACP and comptroller personnel said the problem was caused by a failure to record equipment purchases during the phase in of a new management information system.

Of the 34 projects we tested at North Island, six equipment items, costing $0.8 million, were not being depreciated. For 12 projects, depreciation expenses started before the items were received or installed. For example, five balance machines, costing $333,000, had been depreciated since October 1985, although the equipment was not received until December 1985 and still was not operational when we visited the activity in September 1987. North Island personnel said the problems were caused by a failure to follow procedures, which state that items shall be placed in the depreciation data base when they become operational.

Assets Are Not Always Safeguarded

Although procedures were in place to help ensure that assets were safeguarded, such as using receipt and custody documents and assigning responsibilities for monitoring the status of equipment orders, the procedures were not always followed at the two NADEPs visited. We found that one ACP equipment item had been lost and that other assets were subject to loss. The activities also had not maintained information on the current status of some ACP items that had been on order for an extended period of time. The following examples highlight some of the problems we identified.

- Norfolk purchased two bondascopes, used to determine the condition of honeycombed aircraft sections, for $28,000 as part of its fiscal year 1985 program. Norfolk officials stated that the items were received and later lost. Two additional replacement bondascopes were purchased for $30,000 under the fiscal year 1986 program. At the time of our visit in August 1987, we were told that one of the two lost bondascopes had been found and the loss of the other was under investigation by the Naval Investigative Service.
- In its fiscal year 1985 ACP, North Island purchased two frequency converters for $32,000. During our visit in September 1987, North Island officials told us the items were defective when received and were returned to the vendor for repair. After an extended lapse of time, the location of the items could not be determined and they were reported as

lost. North Island officials later told us that an investigation found that the converters were in the proper shop at North Island and that the erroneous loss report was caused by a failure to properly record the return receipt from the vendor.

- During our visit in August 1987, Norfolk officials initially told us that two forklift trucks purchased for $23,000 under the fiscal year 1985 program had not been received. After investigating this purchase further, the officials stated that the forklifts actually had been received about 18 months before our visit but had not been recorded in the activity's property records.
- At North Island we found two installed ACP projects that did not have the property identification tags attached as required. One was a $23,000 electronic access control system and the other was a metal punching machine that cost $409,000.
- In September 1987, North Island personnel stated that a $17,000 piece of electronic test equipment ordered from the supply system in March 1985 had not been received. We were told that the status of the order had not been checked for several months and that the reason for the delay in obtaining the item was unknown.
- North Island ACP managers initially told us that 51 projects from the fiscal year 1985 program were uninstalled, according to information from the data base used by the ACP managers at North Island. However, after following up on each item, we found that 27 of the projects actually had been installed.

Conclusions

Because control procedures were not followed in some cases, accounting records for depreciation expenses were inaccurate, plant property was not always safeguarded, and the status of equipment orders was not always known.

Recommendations

We recommend that the Secretary of the Navy direct the Commander, Naval Air Systems Command, to improve internal controls for the NADEPS' ACP by ensuring accurate ACP depreciation accounting within the NADEPS and emphasizing adherence to existing controls for safeguarding assets.

Agency Comments

DOD agreed with our findings and recommendations and stated that the Navy is aggressively pursuing remedial actions. Depreciation accounting will be monitored at each depot by including this matter in Inspector General audits and incorporating procedures in the ACP instruction. With regard to the safeguarding of assets, DOD stated that the finding indicated a clear breakdown in internal controls within the depots. This issue is being pursued at all six depots and will receive extraordinary attention during Inspector General inspections.

Budget Execution Can Be Improved

The NADEPs have been slow in executing their ACP budgets. As a result, the NADEPs collected ACP funds from their customers long before the funds were needed to pay for program purchases. Since ACP equipment funds do not expire at the end of the fiscal year, unobligated equipment funds are carried forward until they are spent. At the end of fiscal year 1987, the NADEPs' actual unobligated ACP equipment funds from the fiscal years 1986 and 1987 programs totaled $54 million, or 37 percent of the amount authorized.

Slow execution appears to have been largely caused by the rapid increase in ACP equipment funding not being matched with a corresponding increase in the personnel resources needed to execute the program in a timely manner. Also, management above the NADOC level generally lacked visibility over the actual extent of the problem because obligation rates were not reported to higher management.

An additional $34 million of the NADEPs' fiscal year 1987 ACP equipment budget was transferred to other Navy activity groups. According to Navy officials, the other groups' ability to obligate the money faster than the NADEPs was the main reason the funds were shifted. In addition to raising concerns about the actual level of ACP funding needed by the NADEPs, such transfers seem to contradict the program's concept that the customers paying for the program will directly benefit from the program's purchases.

Program Execution Has Been Slow

According to Office of the Secretary of Defense and Navy Comptroller officials, one determinant of the annual ACP budget is the activity groups' ability to obligate the funds. However, we found that obligations at the end of fiscal years 1986 and 1987 were significantly less than the ACP equipment budgets for these years. For example, in fiscal year 1986 the NADEPs obligated $45.4 million, or about 53 percent, of their $85.6 million ACP equipment budget by the end of the fiscal year. One year later, at the end of fiscal year 1987, the NADEPs had not obligated about $19.5 million from the 1986 program. As shown in table 4.1, the unobligated ACP equipment funds from the 1986 and 1987 programs totaled $54 million as of September 30, 1987.

Table 4.1: Comparison of Authorizations and Obligations

Dollars in millions

Fiscal year	Authorized	Obligated	Unobligated	Percent unobligated
1986	$85.6	$66.1	$19.5	23
1987	61.8	27.3	34.5	56
Total	**$147.4**	**$93.4**	**$54.0**	**37**

Norfolk and North Island officials stated that the lack of additional personnel to manage the ACP hampered their ability to execute the program at the beginning of the fiscal year. We were told that some project justifications and most of the paperwork required to initiate procurement actions usually are not prepared until after the execution year starts. Thus, it is often late in the fiscal year or even into the next year before procurement packages are sent to a procurement activity. ACP managers at NADOC and Norfolk said that almost since the program began, required paperwork has lagged behind, instead of leading, the program.

Having the ACP ready at the beginning of the fiscal year is particularly important because of the time required by the procurement activities to contract for much of the equipment. According to NADOC and activity officials, procurement activities can require a year or even longer to contract for some plant equipment.

Norfolk and North Island officials also cited another reason for wanting to have the program ready at the beginning of the year. They stated that procurement activities occasionally appear to give less urgency to equipment purchase requests because ACP equipment funds do not expire. In other words, procurement activities, when ranking their work, give emphasis to contracting for items which funds will expire. A 1987 NAVAIR briefing noted the problem by stating "Regional Contracting Centers put ACP on the back burner as they are considered nonexpiring funds".

Actual Obligation Rates Are Not Reported

The extent of the ACP execution problem is not directly reported to managers above the NADOC level because a clarification of Navy ACP reporting procedures directed industrial fund activity groups to report ACP commitments as obligations beginning in fiscal year 1987. As a result, as soon as an activity group sends an ACP procurement request to a contracting activity, the request is reported as an obligation rather than as a commitment. Such reporting makes the activity groups appear to be executing their programs faster since actual obligations are not incurred until a procurement activity awards a contract. To illustrate, at the end of fiscal year 1987 the NADEPs officially reported that $55.3 million of the 1987 program had been obligated. However, based on detailed information reported to NADOC, the activities had actually obligated $27.3 million. NADOC officials said the $28 million difference represented funds that were committed but not obligated.

Navy Comptroller officials stated that the Navy's reporting procedures are permissable because industrial fund activities are not subject to normal appropriation accounting requirements. While this may be true, we believe such reporting does not provide DOD's management and the Congress with information that depicts the actual status of program execution. In addition, according to an Office of the Secretary of Defense official, the Navy's reporting procedures are not consistent with the other services'. In January 1988, he advised us that the inconsistency would be eliminated, starting in fiscal year 1989, by having the Navy report actual obligations.

NADEP Funds Have Been Shifted to Other Activity Groups

The Navy has been concerned about the slow execution of the NADEPs' ACP and has emphasized the importance of obligating program funds within the budget year. According to the minutes of a November 1986 meeting of NADOC and NADEP representatives, the NADEPs' abilities to execute the ACP had low credibility at the Navy headquarters level and NADOC planned to recommend cuts of 15 to 60 percent in the fiscal year 1987 program because of the slow obligation rate.

Significant cuts later were made in the 1987 program. For example, at the beginning of fiscal year 1987, the NADEPs' ACP equipment budget was $95.9 million. Of this, the Navy Comptroller initially withheld $15.6 million and authorized the NADEPs to spend $80.3 million for equipment. In June and September 1987, the Navy Comptroller revised the ACP spending authority for the Navy's industrial fund activity groups. In the June revision, the $15.6 million initially withheld from the NADEPs plus an additional $11.7 million from the NADEPs' ACP equipment spending authority was shifted to other Navy industrial fund activity groups, such as the naval shipyards and the Space and Naval Warfare Research and Development Centers.

In September 1987 another $6.8 million of the NADEPs' ACP spending authority was shifted to other Navy activity groups as a result of the Navy Comptroller's fiscal years 1988/1989 apportionment review. After these revisions, $61.8 million of the initial $95.9 million remained in the NADEPs' ACP equipment budget. Most of the funds shifted from the

NADEPs was used to develop a new management information system, the Standard Automated Financial System. We were told the primary reason funds were shifted was that the other activity groups could obligate the money by the end of the execution year.

Conclusions

Although the ability to successfully execute the program was cited as one of the determinants of the NADEPs' ACP budget, the NADEPs have been slow to obligate funds for their ACP equipment. At the end of fiscal year 1987, the NADEPs had not obligated $54 million from the fiscal years 1986 and 1987 programs. The difficulty in executing the program appears to have resulted from funds exceeding that which could be successfully obligated, given program requirements and resources available at the NADEPs.

In addition, management lacked visibility over the extent of the problem because the actual NADEP obligation levels were not routinely reported.

Because of concern over slow budget execution, the Navy shifted about $34.1 million of the NADEPs' fiscal year 1987 equipment budget to other Navy activity groups. We believe this action raises questions about the level of ACP funding needed by the NADEPs. In addition, the shifting of ACP funds seems to contradict the program's concept that the customers paying for the program will directly benefit from the program.

In view of these issues, as well as the needed ACP management and internal control improvements discussed in previous chapters, the Navy should reassess the level of funding for the NADEPs' ACP. Ways to achieve the funding reductions could include temporarily eliminating the equipment depreciation and surcharge from the overall maintenance rates charged the customers or giving them refunds.

Recommendations

We recommend that the Secretary of the Navy (1) report actual ACP obligations to the Secretary of Defense and the Congress and (2) limit future funding for the NADEPs' ACP to that which can be successfully obligated each year, considering actual requirements and resources assigned to execute the program.

Agency Comments

DOD agreed with our findings and recommendations. DOD stated that effective with the amended fiscal years 1988 and 1989 biennial budget, ACP amounts reported to the Office of the Secretary of Defense and to the Congress will be based on actual obligations rather than commitments. DOD also stated that in order to realign the NADEPs' program with the resources available to successfully obligate ACP amounts, the Navy has reduced the NADEPs' equipment obligational authority by $26 million in fiscal year 1988 and $40.8 million in fiscal year 1989.

Comments From the Assistant Secretary of Defense

ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1100

COMPTROLLER

MAR 30 1988

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office Draft Report, "NAVY MAINTENANCE: Naval Aviation Depots' Asset Capitalization Program Needs Improvement" (GAO Code 394214), OSD Case 7536. The Department generally concurs with the findings and recommendations contained in the draft report.

Detailed DoD comments on the report findings and recommendations are provided in the enclosure. The Department appreciates the opportunity to comment on this draft report.

Sincerely,

Robert W. Helm

Robert W. Helm
Assistant Secretary of Defense
(Comptroller)

Enclosure

GAO DRAFT REPORT DATED FEBRUARY 9, 1988
(GAO CODE 394214) OSD CASE 7536

"NAVY MAINTENANCE: NAVAL AVIATION DEPOTS' ASSET CAPITALIZATION PROGRAM NEEDS IMPROVEMENT"

DEPARTMENT OF DEFENSE COMMENTS

* * * * *

FINDINGS

- FINDING A: Asset Capitalization. The GAO reported that, in 1983, the Department of Defense (DoD) established the Asset Capitalization Program (ACP). According to the GAO, the objective was and still is to modernize the plant and equipment at the industrial fund activities in order to bring about more business like operations. The GAO explained that industrial fund activities, such as aircraft maintenance depots and shipyards, perform industrial functions for DoD customers, on a reimbursable basis for the costs incurred. The GAO observed that the ACP is a relatively new program, which offers great potential as a technique for financing equipment modernization to bring about efficiencies and increased productivity. The GAO noted that the program applies to almost all industrial fund activity. (The GAO, however, focused its review only on the implementation of the ACP within the Naval Aviation Depots.) (pp. 2-5,/GAO Draft Report)

  Now on pp. 2 to 4.

  DoD Response: Concur.

- FINDING B: Many ACP Projects Are Not Achieving Anticipated Results. The GAO reported that the Naval Air Systems Command (NAVAIR) has the overall responsibility for the Navy Aviation Depot (NADEP) ACP program. The GAO reviewed the operational justification for 93 selected projects at both Norfolk and North Island. The GAO found that, while 60 percent of the projects reviewed appeared to be achieving the benefits expected, the remaining 40 percent of the projects had produced few or no benefits. The GAO cited, for example, a $246,000 boring/milling machine purchased in April 1987, by North Island to replace older equipment. The GAO found that, as of September 1987, the new equipment had never functioned properly and, therefore, the old machine was never removed and is continuing to meet requirements. In another example, on May 12, 1987, an ion vapor deposition machine ($334,000) was installed at Norfolk to achieve environmental benefits by using a new corrosion protection process on certain aircraft parts. The GAO was informed in

August 1987, there was no workload requirement for the new equipment and that the old corrosion protection process was still in use. In addition to these situations, several other similar examples led the GAO to conclude that the NADEPs ACP projects were not achieving anticipated benefits.

DoD Response: Concur. The process of ensuring that appropriate equipments are acquired, and that predicted benefits are realized, results from a combination of requirements determination, preacquisition cost benefit analyses, preparation of proper procurement requests, streamlined acquisition and installation processes, and post-installation analyses. The Naval Aviation Depots' ACP budgets increased over 500 percent, from $17.5 million in FY 1982, to over $80 million in FY 1983, and thereafter. During this period, the depots were diligently pursuing efforts to reduce indirect staffing levels. This contributed to a situation in which insufficient staffing was available to meet increased demands of the ACP program.

Capital Assets Planning (CAP) and management is one of several areas addressed by the Naval Industrial Improvement Program. To address the ACP resource issue, training is being provided to personnel at all six depots. This training will include all facets of the ACP, from requirements articulation to post-installation analyses. Additionally, a comprehensive manual describing the requirement for managing the ACP is being prepared with an expected 1988 delivery date. This training and written guidance should minimize the potential for acquiring equipments which, when placed in operation, fall short for the desired benefit.

- FINDING C: Program Management Can Be Improved By Management Involvement and Support. The GAO reported that top management involvement and support is one of the prerequisites for a successful investment strategy, and noted such support is demonstrated through clear program guidance, well defined organizational responsibilities and application of sufficient resources from program management. The GAO generally found little evidence to demonstrate such management support for the NADEP Asset Capitalization Program. For example, the ACP program, which began in FY 1983, still has no approved management instruction in FY 1988. The GAO reported that, according to Naval Aviation Depot Operation Center (NADOC) officials, the need for program guidance was recognized in 1984, and a draft ACP instruction was prepared but never finalized. The GAO was told that one reason why the instruction was not issued was unclear organizational responsibilities. The GAO observed that another indication of limited support for the program was the level of personnel resources assigned to manage and execute the program. The GAO found that, although in FY 1982 the NADEPs were authorized increased funds for equipment, no additional personnel were assigned to manage the program. The GAO concluded that the level of resources allocated to the program had resulted in significant difficulties in executing the ACP program in a timely manner. (pp. 19-22/GAO Draft Report)

Now on pp. 14 and 15.

DoD Response: Concur. The depots have operated under a draft instruction, which has provided management direction governing capital equipment purchases under the ACP. A lack of industrial engineering support and capability at the depots was previously noted by a study addressing capital assets and making recommendations for acquisitions over the 10-year period FY 1985-FY 1995. Partially as a result of this study, significant efforts within the Naval Industrial Improvement Program were dedicated to capital asset planning and ACP management.

A comprehensive ACP instruction and Capital Asset Planning manual are being prepared. These planning documents along with increased industrial engineering assets at the six depots should ensure adequate ACP support for the future. Organizational responsibilities, which were unclear during a period of reorganization at the Naval Aviation Depot Operations Center, have been clarified and will be delineated in directives to be released later this year (1988).

o FINDING D: Program Management Can Be Improved By Identifying Investment Opportunities. The GAO reported that a systematic approach to identifying investment opportunities may uncover the need to replace worn out equipment and can often identify ways to eliminate bottlenecks in the work flow, thus achieving significant gains in productivity and turnaround times. The GAO found that comprehensive investment planning was not, however, occurring within the NADEP community. The GAO noted that, for the most part, identification of new equipment ideas came from the production floor and was, therefore, not focused on new ways of doing business. According to the GAO, industrial engineers were not normally used to help identify investment projects. The GAO reported that officials at both the NADEPs and the NADOC agreed better equipment planning was needed to focus on work process improvements. The GAO concluded that the identification process is one of the most important aspects of a successful investment program. (pp. 22-23/GAO Draft Report)

Now on p. 16.

DoD Response: Concur. This area has been addressed in the Navy Industrial Improvement Program. The aforementioned Capital Assets Planning manual and training programs will institutionalize investment opportunity analysis and planning at the depots.

o **FINDING E: Program Management Can Be Improved By Procedures that Justify, Prioritize, Review, and Approve Projects.** The GAO reported that the Navy relies primarily on the ACP project justification process to ensure the program is meeting its objectives. The GAO found, however, that at the two activities it visited, many ACP project justifications were prepared after the projects were approved, did not explain why the project was needed, did not contain reasonable and accurate economic analyses and were not adequately reviewed. In testing the adequacy of NADEP justifications at the Norfolk and North Island sites, the GAO found that only 21 percent at Norfolk and 2 percent at North Island were considered adequate. The GAO noted, for example, that North Island used incorrect labor rates in 36 of the justifications, while at Norfolk the justification for a horizontal boring machine costing $290,000 showed a payback of 13 years, even though the expected service life of the equipment was 12 years.

The GAO also found that stringent review and ranking of equipment proposals was routinely performed by the NADEPs before the advent of the ACP program; however, under the ACP program, a detailed review and ranking of equipment proposals does not occur. According to the GAO, NADOC officials contended that project ranking has little importance since recent ACP funding levels have permitted nearly all identified projects to be approved. The GAO also found that (1) there is little criteria available on how projects should be prioritized and (2) there was limited review of NADEP ACP proposals above the activity level. The GAO noted that, in June 1986 comments on the NADEP ACP review and approval process, Coopers & Lybrand reported the process did not encourage long-range planning and permitted the acquisition of equipment that was not used. The GAO concluded that the current justification process has not ensured that only valid, beneficial projects are purchased under the program. (pp. 3; pp. 23-28/GAO Draft Report)

Now on pp. 3 and 16 to 19.

DoD Response: Concur. As indicated in the audit, under the Coopers and Lybrand Navy Industrial Improvement Program effort, it was determined that a more stringent review of proposed projects is necessary. This review is being included in the new instruction, which governs the ACP. Guidelines for prioritizing projects will be included in both the governing instruction and manual.

o **FINDING F:** Timeliness Of Implementation Of Approved Projects. At the Navy sites it visited, the GAO found that there were significant time lapses between the start of a fiscal year ACP program and the time projects were installed. In addition, the GAO found that the Naval installations were not always aware of the status of ACP items in the procurement system, nor were they always prompt in getting projects installed after receipt. The GAO found that of 160 projects with unit costs exceeding $10,000, only 44 (or 28 percent) have actually been installed at the two Navy Sites. Another GAO test to evaluate the implementation timeliness showed that Norfolk and North Island still had 18 of 24 ACP projects from FY 1985 that were not installed in the August-September 1987 time period. The GAO concluded that, to obtain benefits as early as possible, project implementation should be well planned and prompt--i.e., detailed plans and schedules should be developed to promote prompt implementation and the status of projects should be tracked as they go through the procurement process. (pp. 28-30/GAO Draft Report)

Now on pp. 19 and 20.

DoD Response: Concur. Delayed installation of acquired equipments has been addressed aggressively at each depot with noted success. At the end of FY 1986, there were over 300 projects not installed at the depots, largely due to personnel resource limitations. By the end of FY 1987, less than 50 projects were not installed. Additionally, a goal of no more than five projects at each depot is being established for equipment which is not installed within 30 days of delivery. Further, the NADEPs are required to report each month on all projects which were not installed within 30 days. Such projects must continue to be reported until they are installed. To aid in solving the personnel resource problem, installation services are being included in procurement contracts where practical.

o **FINDING G:** Obtaining Feedback On Program Results. The GAO found that the Navy does not measure benefits from the NADEP ACP program, either from a macro program-wide perspective or from an individual project basis. The GAO observed that, as a result, the Navy has not quantified to what extent the program has achieved its objectives, what benefits have been obtained, or whether the equipment is even used. The GAO also found that information needed to perform post investment analyses, such as equipment utilization and operating cost data, was not maintained and even if an activity wanted to begin performing post analysis on a selected basis, the data would not be available. The GAO concluded that capital investment programs require measures of performance to develop and maintain a level of credibility. The GAO further concluded that project follow-up evaluations on a selected basis are needed to determine whether benefits are being realized and what improvements are needed. In addition, the GAO concluded that obtaining feedback on how well a program is operating is an essential management function. (pp. 30-33/GAO Draft Report)

Now on pp. 20 and 21.

__DoD Response__: Concur. Post-installation analyses and ACP analyses are recognized as essential to overall program management and will be required.

o __FINDING H__: __Depreciation Records Are Inaccurate__: __Lack of Internal Controls__. The GAO cited the Federal Managers' Financial Integrity Act of 1982, which placed increased emphasis on the need for effective internal controls. The GAO pointed out that effective internal controls help managers comply with applicable laws and policies, safeguard assets, and accurately account for revenues and expenditures. The GAO reported that to finance the ACP program, depreciation expense is included in the rates charged to each activity's customers for performing work, such as aircraft depot maintenance. As a result of tests conducted at Norfolk and North Island, the GAO found that equipment depreciation accounting was inaccurate. At Norfolk, the GAO found that of the 34 projects selected, 13 projects costing $2.3 million were not being depreciated. Of the 34 North Island projects, the GAO found 6 equipment items costing $0.8 million were not being depreciated. The GAO reported that, according to Norfolk Personnel, the problem was caused by a failure to accurately record equipment purchases; while at North Island, personnel claimed the problems were caused by a failure to follow procedures. The GAO concluded that because internal control procedures were not followed, the accounting records for depreciation expenses were not accurate. (pp. 35-36/GAO Draft Report)

Now on pp. 23 and 24.

__DoD Response__: Concur. This finding has resulted in a reassessment of depreciation accounting procedures, as well as the issue of compliance with appropriate internal control requirements. Depreciation accounting will be monitored at each depot by the inclusion of this item in Inspector General audits and by procedures to be incorporated in the program governing directive. The internal control issue will likewise be pursued at each depot.

o **FINDING I:** **Assets Were Not Always Safeguarded And The Status Of Equipment Was Unknown:** **Lack of Internal Controls.** The GAO reported that, although procedures were in place to help ensure that assets were safeguarded, procedures were not always followed at the two Navy activities it visited. The GAO found that one ACP equipment item has been lost and other assets were subject to loss. Furthermore, the GAO found that the activities have not maintained information on the current status of some ACP items, which have been on order for an extended period of time. For example, during its visit to Norfolk, the GAO found that, in FY 1985, two bondascopes (used to determine the condition of honeycombed aircraft sections) were purchased for $28,000. Norfolk officials stated that the items were received and subsequently lost and in FY 1986 two replacements were purchased for $30,000. The GAO later learned that one of the two bondascopes had been found and the other was under investigation by the Naval Investigative Service. In another example at North Island, the GAO found that two frequency converters costing $32,000 were found to be defective when received and were sent back for repair. After an extended period of time, the items were reported as lost. Later the GAO was told that an investigation found that the converters were in the proper shop and that the lost report was erroneous. The GAO concluded that because internal control procedures were not followed, in some cases plant property was not always safeguarded, and the status of equipment orders was not always known. (pp. 3-4, pp. 36-38/GAO Draft Report)

Now on pp. 3, 24, and 25.

DoD Response: Concur. This finding indicates a clear breakdown in internal controls within the depots. This issue is being pursued at all six depots and will receive extraordinary attention at command Inspector General inspections.

o **FINDING J:** **Program Execution Has Been Slow.** The GAO found that, at the end of FY 1986 and FY 1987, obligations were significantly less than the ACP equipment budgets for those years and noted that, as of September 30, 1987, about $54 million was unobligated. The GAO was informed by Navy officials that the lack of additional personnel to manage the ACP program hampered execution of the program and that this caused some project justifications and most of the paperwork required to initiate procurement actions to be delayed. The GAO was also told that, almost since the program began, required paperwork has lagged behind. The GAO concluded that, although the ability to successfully execute the program was cited as one of the NADEP ACP budget determinants, the NADEPs have been slow to obligate funds

Now on pp. 3, 27, 28, and 30.

for their ACP equipment. (pp. 4-5; pp. 41-41, p. 45/GAO Draft Report)

DoD Response: Concur. Despite funding increases in excess of 500 percent from FY 1982-1983, the depots have had significant success providing procurement requests to the servicing contract activities. A significant portion of ACP annual program amounts were committed within the first quarter of each fiscal year. There have been increasing delays, however, in getting contracts signed and getting funds obligated. This results largely from personnel reductions at the Supply Centers and Regional Contracting Centers that provide contract services, as well as delays associated with competitive contracting initiatives and related contract dispute and protest procedures.

The depot and contract activities are striving to streamline the paperwork process and to reduce the time between the initial procurement request and contract award.

- FINDING K: Actual Obligation Rates Are Not Reported. The GAO found that the extent of the ACP execution problem is not directly reported to managers above the NADOC level because Navy ACP reporting procedures direct industrial fund activity groups to report ACP commitments as obligations. According to the GAO, current procedures call for an activity group to report amounts as an obligation, rather than as a commitment, when an activity group sends an ACP procurement request to a contracting activity. The GAO concluded that such reporting is misleading and makes the activity groups appear to be executing their programs faster than they really are. Navy Comptroller officials informed the GAO that the procedures are permissible because industrial fund activities are not subject to normal appropriation accounting requirements. The GAO further concluded, however, that such reporting does not provide the DoD management and the Congress with information depicting the actual status of program execution and is not consistent with other Services procedures. (pp. 4-5; pp. 43-44, p. 46/GAO Draft Report)

Now on pp. 3, 28, 29, and 30.

DoD Response: Concur. The DoD agrees that ACP funds committed at a contracting activity have been reported to the Office of the Secretary of Defense and the Congress as if they had been obligated. There has been, however, a clear distinction at the local accounting level between committed and obligated funds. At the depots, funds have not, and are not, considered obligated until contracts for procurement are in place. All reports by the depots to higher Navy headquarters clearly delineated between committed and obligated funds. Thus, although Navy accounting procedures permit reporting commitments as obligations, ACP managers have full visibility as to the true obligation rate and can manage the program accordingly.

Obligations are not a normal part of industrial fund reporting. Therefore, obligations traditionally have been a derived figure based on costs incurred. The reporting procedures adopted by the Navy are entirely consistent with industrial fund procedures. Nevertheless, effective with the amended FY 1988/FY 1989 biennial budget, ACP amounts reported in budget documents submitted to the Office of the Secretary of Defense and to the Congress will reflect actual obligations rather than commitments.

o FINDING L: NADEP Funds Have Been Shifted To Other Activity Groups. The GAO found that the Navy has been concerned about the slow execution of the NADEP ACP program and has emphasized the importance of obligating program funds within the budget year. The GAO cited minutes of a November 1986 meeting of NADOC AND NADEP representatives, which indicated that the ACP program has a low credibility at the Navy headquarters level, resulting in NADOC planned cuts of between 15 to 60 percent in the FY 1987 program. The GAO found that, at the beginning of FY 1987, the NADEP ACP equipment budget was $95.9 million, of which $15.6 million was withheld. A June revision withheld an additional $11.7 million and in September another $6.8 million, for a total of $34.1 million being shifted to other Navy activities. The Navy informed the GAO that the primary reason the funds were shifted was that the other activities could obligate the money by the end of the execution year. The GAO concluded that the Navy action in shifting the ACP funds raises questions about needed NADEP ACP funding levels. The GAO also concluded that such shifting of ACP funds seems to contradict the program concept that the customers paying for the program will directly benefit from the program. (pp. 4-5; pp. 44-46/GAO Draft Report)

Now on pp. 3, 29, and 30.

o DoD Response: Concur. In FY 1987, a conscious decision was made to reduce ACP expenditures. This decision recognized that the depots were falling behind in obligation of ACP funds, installation of equipments, and post-installation analyses, all of which resulted from a drive to reduce indirect labor personnel levels, as noted previously. A reduced effort for one year, it was believed, would afford the depots and contracting agencies an opportunity to regain lost ground, receive the training noted above and correct many of the deficiencies noted in this GAO audit.

RECOMMENDATIONS

- RECOMMENDATION 1: The GAO recommended that the Secretary of the Navy direct the Commander, Naval Air Systems Command, to place additional management emphasis on the NADEP ACP program, including:

  - issuing ACP program guidance, including well defined procedures for justifying, ranking, reviewing, and approving projects to ensure that only valid, beneficial projects are approved;

  - developing a systematic approach for identifying investment opportunities, including planning that emphasizes work process improvements;

  - ensuring prompt implementation of approved items so that anticipated benefits can be obtained as quickly as possible; and

  - initiating post investment analyses or other measures to determine if anticipated benefits are being realized and whether changes in program management are needed. (p. 33/GAO Draft Report)

Now on p. 21.

  DoD Response: Concur. The Navy is fully committed to addressing each of the ACP deficiencies noted within this GAO report. Aggressive remedial actions are underway and will be monitored within the Navy Industrial Improvement Program. (Remedial actions to be taken are discussed in detail in the DoD response to findings B, C, D, E, F, and G.)

- RECOMMENDATION 2: The GAO recommended that the Secretary of the Navy direct the Commander, Naval Air Systems Command, to improve internal controls for the NADEP ACP program by ensuring accurate ACP depreciation accounting within the NADEPs and emphasizing adherence to existing controls for safeguarding assets. (p. 39/GAO Draft Report)

Now on p. 25.

  DoD Response: Concur. As indicated above, the Navy is committed to correcting those ACP deficiencies noted within this report and is aggressively pursuing remedial actions. (Also see DoD response to findings H and I.)

- RECOMMENDATION 3: The GAO recommended that the Secretary of the Navy report actual ACP obligations to the Secretary of Defense and the Congress.

DoD Response: Concur. Effective with the amended FY 1988/FY 1989 biennial budget, ACP amounts reported to the Office of the Secretary of Defense and to the Congress will be based on actual obligations, rather than commitments. (Remedial actions to be taken are discussed in detail in the DoD responses to findings K and L.)

o **RECOMMENDATION 4**: The GAO recommended that the Secretary of the Navy limit future funding for the NADEP ACP program to a level that can be successfully obligated each year, considering actual requirements and resources assigned to execute the program. (p. 46/GAO Draft Report)

Now on p 30

DoD Response: Concur. In order to realign the NADEP ACP program with the resources available to successfully obligate program amounts, the Navy has significantly reduced the NADEP equipment obligational authority by $26 million (28%) in FY 1988 and $40.8 million (39%) in FY 1989. (Also see the DoD response to finding L.)

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