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**REPORT TO THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES**

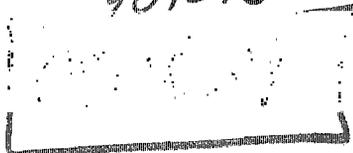
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**Significant Audit Findings
In The Department Of Defense** B-706190

**BY THE COMPTROLLER GENERAL
OF THE UNITED STATES**

904343



FEB. 9, 1973



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-106190

Dear Mr. Chairman:

This is our annual report of ~~significant audit findings in the~~ Department of Defense. A similar report on Federal civil departments and agencies was submitted separately.

We have included items which we believe should be of interest and use to the Committee during the appropriations hearings for fiscal year 1974. Audit reports have previously brought these findings and recommendations to the attention of departmental officials. Some matters commented on in this report are those on which the Department has indicated that corrective action either has been or will be taken. The items have been included, however, in view of their significance and of the fact that we have not had an opportunity to evaluate the adequacy of corrective actions taken.

We shall be pleased to furnish any additional information you may desire.

We are sending copies of this report to the Department of Defense and to the military departments so that they may be in a position to answer any inquiries that may be made during the appropriations hearings with respect to these findings and recommendations.

Sincerely yours,

A handwritten signature in black ink that reads "James B. Stacks".

Comptroller General
of the United States

cl The Honorable George H. Mahon
Chairman, Committee on Appropriations H 380
House of Representatives

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PROCUREMENT PRACTICES AND CONTRACT ADMINISTRATION

PROBLEMS IN AVOIDING CONTRACTORS' CLAIMS
UNDER SHIP CONSTRUCTION CONTRACTS

Department of the Navy

Although contractors' claims for price increases have recurred in Navy shipbuilding programs, this problem has become more significant in the last few years because such claims have increased in both size and percentage of shipbuilding contracts. In the past few years, the Navy has received shipbuilders' claims for price increases totaling about \$1 billion. The shipbuilders claimed that the Government owed them more than the contract prices because the Navy failed to fulfill its part of the contract terms. In their claims, shipbuilders contended that the Navy:

- Did not provide adequate specifications.
- Was late in furnishing equipment and information it agreed to provide or did not provide them in a usable condition.
- Imposed more rigid quality controls than had been traditionally required.
- Made verbal requests for changes in ships without adjustment of contract prices.

Certain shipbuilders (follow yards that built additional ships of a given class) also claimed that plans purchased from the lead yard--the shipbuilder that built the first ship of the class--were defective and/or not available when needed and that, since the Navy intended that such plans be purchased and used, the Navy shared responsibility for problems created by these plans.

To improve its ship procurement processes, the Navy has undertaken the Shipbuilding and Conversion Improvement Program, which includes several tasks intended to eliminate or minimize claims for price increases under future shipbuilding contracts. GAO reviewed these tasks and evaluated their potential to eliminate or minimize claims. Of the 167 tasks, 26 relate to the causes of claims. At least one task concerns each of the major causes of claims mentioned above.

The Navy has also initiated actions intended to improve its overall acquisition management. These improvements are categorized as organization, procurement, and personnel related, and most of them have been implemented. These actions hold considerable promise for minimizing claims.

GAO recommended that the Secretary of the Navy direct that specific plans be devised whenever the lead-yard/follow-yard procurement method is used, to insure that the follow yard is given sufficient time to review the lead yard's plans and to insure that both make every effort possible to promptly correct any deficiencies. The Navy agreed.

GAO suggested that the Congress, in considering requests for shipbuilding authorizations and funds, inquire about the specific claims prevention measures the Navy plans to apply to the ship construction programs. (B-133170, Feb. 28, 1972.)

VALIDITY OF PAYMENTS TO THE CONTRACTOR
FOR PRODUCTION OF THE C-5A AIRCRAFT

Department of Defense

Public Law 91-441 authorized \$200 million for the C-5A aircraft program for fiscal year 1971; Public Law 92-156 authorized \$325.1 million for the program for fiscal year 1972. Both laws provided that (1) payments be made to the contractor--Lockheed Aircraft Corporation--through a special bank account, (2) funds be expended only for reasonable and allocable direct and indirect costs of the C-5A aircraft program, and (3) funds not be used to reimburse Lockheed for intercompany profits, bid and proposal costs, independent research and development costs, similar unsponsored technical effort costs, and depreciation and amortization costs. These laws required that GAO audit payments from the special bank account and submit quarterly reports to the Congress.

GAO submitted five reports to the Congress on its audits of the payments, totaling \$386 million, made since the special bank account was set up in June 1971 through June 30, 1972. GAO found no payments that were contrary to these laws. However, GAO questioned certain practices concerning the contractor's manpower use, overhead allocation, and withdrawal of retirement funds before they were needed.

GAO's study of labor involved in assembly operations showed that costs could be reduced through more efficient use of manpower. GAO notified the contractor and the Air Force of this. The contractor advised that it was establishing new control systems; the Air Force said that it was improving its capability to measure productivity of the contractor's manpower.

Public Laws 91-441 and 92-156 provide that the contractor not be reimbursed for bid and proposal costs. The contractor excluded the direct bid and proposal costs (material and labor) but included, and received reimbursement for, about \$500,000 of overhead costs which appeared to be allocable to bid and proposal operations. GAO asked the Air Force to state its rationale for paying such costs. The Air Force and the contractor replied, and GAO is further considering this matter.

Eight banks and trust companies serve as trustees for the contractor's 10 employee retirement plans. In 1971 an average of 14 months elapsed between the contractor's receipt of funds from the Government and payment to the trustees. Costs incurred but not yet paid are reimbursable if otherwise valid. However, GAO questioned the propriety of reimbursing retirement costs well before the contractor pays the trustees. GAO recommended that the Department of Defense establish a consistent policy on this matter. The Department of Defense has not yet advised what action it might take. (B-162578, Aug. 9, 1971, Nov. 17, 1971, Feb. 18, 1972, May 30, 1972, and Aug. 11, 1972.)

NEED FOR A GOVERNMENT-WIDE POLICY
ON FEES ALLOWABLE UNDER CONTRACTS
WITH NOT-FOR-PROFIT ORGANIZATIONS

Department of Defense and
other Government agencies

In a report issued in February 1969, GAO advised the Congress that Federal agencies' guidelines for contracting research work with Government-sponsored not-for-profit organizations should be improved. The sponsoring agencies provide sufficient work and revenues to insure retention of capabilities acquired to meet Government needs.

In addition, Government agencies obligated about \$260 million during fiscal year 1969 for basic and applied research by nonsponsored not-for-profit institutions other than colleges and universities. GAO examined agency policies and practices in the rates of fees allowed to these organizations at six Department of Defense offices and at eight civil agency offices that award significant amounts of cost-plus-fixed-fee research contracts to not-for-profit organizations.

GAO also obtained information from three of the larger nonsponsored not-for-profit organizations on the Government fees they received. GAO selected these three organizations because their clients included nearly all Government agencies and because they generally competed with universities and other not-for-profit organizations--both sponsored and nonsponsored--and with commercial organizations for Government research contracts.

GAO did not review the reasonableness of profit ranges prescribed in Government regulations for payment to either commercial or not-for-profit organizations or the profits or fees paid. But GAO compared fee rates allowed nonsponsored not-for-profit organizations with profit rates allowed commercial organizations.

In many instances, nonsponsored not-for-profit organizations, which pay no Federal income taxes on fees earned on Government work, were allowed approximately the same fee rate on estimated costs that commercial profitmaking organizations received for doing similar work. The composite

weighted average fee rate allowed by six civil agency procurement offices to the three nonsponsored not-for-profit organizations was only 0.6 of a percentage point less than the average fee rate paid commercial organizations; the rate paid by Department of Defense procurement offices was only 1.2 percentage points less than the average fee rate paid commercial organizations.

Most Government agencies have not sufficiently recognized the tax-exempt status of not-for-profit organizations or the need for adjusting fees to place the organizations on an equitable basis with their commercial competitors. The nonsponsored not-for-profit research organizations included in GAO's review did not agree that their fees should be adjusted. They contended that the Congress, in granting tax exemption, recognized the need for, and encouraged the development of, independent not-for-profit organizations as being in the public interest and that fee adjustments based on this tax exemption would defeat congressional policy and intent. GAO's review of the legislative background concerning the tax exemption revealed no consideration of the fee structure other than the stipulation by the Congress that none of the net earnings of the not-for-profit organizations should benefit any private individual.

GAO suggested that the Director, Office of Management and Budget (OMB), head an interagency study to develop a Government-wide policy which would govern negotiation of fees to not-for-profit and commercial organizations and which would consider each organization's tax status. GAO also suggested that, pending development of the Government-wide policy, each agency reevaluate its current policy and insure that fee payments are adjusted to adequately recognize the tax-free status of not-for-profit organizations.

OMB believed that the legislative charter of the Commission on Government Procurement included a study of contractor fees. Although OMB would work with the Commission and the affected agencies, OMB felt it would be premature to assume leadership. Several of the agencies were reevaluating their current policies, pending development of a Government-wide policy. (B-146810, Nov. 26, 1971.)

PROBLEMS IN ACQUIRING, INSTALLING,
AND OPERATING A COMMUNICATIONS SYSTEM
IN A THEATER OF OPERATIONS

Department of Defense

GAO reviewed the acquisition, installation, and operation of the Integrated Wideband Communications System in Vietnam and Thailand. The system, which cost more than \$315 million, appeared to be providing the services required. The program, however, could have been handled more economically in the following areas.

- The Government procured from the prime contractors significant quantities of equipment which could have been purchased directly from the manufacturers. The prime contractor in Vietnam was allowed an estimated \$6.9 million in fixed fees, profits, and overhead expenses for its procurement services. The Government could have saved a large part of this amount by directly purchasing the equipment. Similar savings, of lesser amounts, could have been realized on the prime contracts for Thailand.
- Costs of \$5.6 million were incurred for contingency equipment for which the need was questionable. A planned expenditure of \$600,000 for rehabilitation of transportable troposcatter terminals was canceled after GAO questioned the need for these terminals.

Although the Department of Defense (DOD) directed the Army in 1965 to develop an in-house capability to operate and maintain the communications system, independent of contractor assistance, the following problems affected the accomplishment of this objective.

- Many graduates of special Army Signal School training for this system were not assigned to duty with this system.
- Initiation of Army Engineer School training on the power-generating and air-conditioning equipment was delayed by more than 3 years.

DOD agreed with GAO's findings, except as follows:

--DOD stated that the procurement of components by the Government directly from component manufacturers had been considered and decided against because of the urgent requirement to install the communications system and because of the lack of engineering and procurement resources when the Army was writing the technical specifications for the system. In GAO's opinion, after the contractor had identified the needed standard types of equipment, the Government could have readily procured such equipment at less cost.

Because guidance on component breakout and advance procurement planning was added to the Armed Services Procurement Regulation after the technical specifications for this system had been written, GAO had no recommendation. This addition placed greater emphasis on direct procurement of components and established certain guidelines to assist project managers in making breakout decisions.

--DOD did not acknowledge that the need for communications equipment for contingency reserve was questionable, although it terminated the reserve shortly after GAO brought this matter to its attention.

--DOD did not agree that more effective management of available resources could have appreciably reduced the transition period from contractor to Government or the degree of contractor participation during the transition. DOD stated that the real problem in assigning personnel with specialized training to Vietnam or Thailand was the short duration (1 year) of assignment to those countries and that experience gained over the years dictated that it would not be feasible, under the conditions existing in Vietnam, to completely separate contractor efforts from the operation and maintenance of the communications system.

This review identified problems that occurred in the program in Southeast Asia, and the report suggested ways to avoid such problems in future programs of this type. With regard to the specific problems in this particular program, DOD had taken appropriate actions. (B-168097, June 5, 1972.)

PROCUREMENT OF DEFECTIVE
AMMUNITION COMPONENTS

Department of the Army

GAO reviewed the procurement of ammunition components at five Government-owned, contractor-operated Army ammunition plants; the Army Ammunition Procurement and Supply Agency; Defense Contract Administration Services offices; and selected plants furnishing parts and components. The five plants received Government-furnished material which had been inspected and accepted at origin. The Armed Services Procurement Regulation provides that such inspection and acceptance is conclusive except for latent defects and fraud.

GAO reviewed 15 ammunition components worth \$96.3 million which had been received at the five plants as Government-furnished material after inspection and acceptance at origin. About \$8.8 million worth of the components had been reported as defective when received. According to a detailed GAO examination of seven of the items, the Government had incurred additional costs of about \$3 million for reinspection and rework, replacement, etc.

The operating contractors inspected and accepted material at destination, rather than origin, when they purchased parts directly from suppliers. This is a practice widely followed by industry.

The Assistant Secretary of Defense (Installations and Logistics) generally concurred in the findings and agreed that the problem of rejecting previously accepted material was great enough to warrant study and that the Army was undertaking a study.

Subsequently, the Army Materiel Command issued an interim report entitled "A Study of the Cost Effectiveness of Three Methods of Product Acceptance" (the three methods being inspection and acceptance at origin, inspection and acceptance at origin with warranty clauses, and inspection and acceptance at destination) and generally found that for simple items inspection and acceptance at destination appears to be most cost effective. The study stated that final results would not be known until February 1973. (B-157535, Oct. 4, 1971.)

PROBLEMS IN ACQUISITION OF MAJOR WEAPON SYSTEMS

SUMMARY APPRAISAL OF THE ACQUISITION PROCESS

Department of Defense

GAO is continuing to appraise those factors most closely related to effectively procuring major weapon systems by the military services. In its most recent such appraisal, on which a report was issued to the Congress in July 1972, GAO considered programs that the Office of the Secretary of Defense and the military services instituted to improve management of the acquisition process. GAO's overall assessment was that, since its prior report, improvements had been made in the process. Observations included in the report follow.

- Weapon system development programs had been revised considerably. This could be traced to early requirements planning and to inconsistent program direction caused by internal and external influences. There was a question as to whether, in the conceptual stage, sufficient consideration had been given to establishing the impact of one weapon system proposal on other programs, on the total force structure of a service or the Department of Defense (DOD), or on the possible ceiling on dollar resources. Some weapon systems appeared to have been conceived and justified as independent systems. Once initiated, programs changed because their costs increased or because funds were needed for a more urgent program.
- The cumbersome organizational structure often aggravated weapon system acquisition problems. Decisions related to systems selected for program management appeared to be based primarily on the total expected cost rather than on degree of technical risk, a need for aggressive management for that system, or the desirability of grouping equipment into systems classed as major acquisitions because of system interfaces and integration.
- Managers differed in how they organized and operated their projects. The most significant difference was the extent of their actual authority and decisionmaking powers. There was evidence of improvement in the project managers' status and training; they now can progress further in their operating environments.

Although it is impracticable to create a model project manager structure that will automatically fit every major acquisition, the management structure for each acquisition should be tailored to that particular program.

- Considerable cost growth in acquiring weapon systems was attributable to unrealistic early cost estimates.
- The services varied greatly in their testing and evaluation procedures and associated terminology. Test programs contained many approved deviations, substitutions, waivers, and examples of special circumstances. There was a need for better understanding of the basic principles and for better DOD testing.
- The estimated cost of 77 weapon systems increased by about \$28.7 billion (31 percent). This increase represented the difference between the original estimates and the current estimates of total program cost. This increase was down from last year's 40-percent increase reported on 61 systems and could be attributed primarily to (1) the addition of several new systems to GAO's review, which reduced the program-planning base on which the percentage computation was made, and (2) the significant number of quantity decreases on many of the 77 systems, which was of much more concern to GAO. The effect of that kind of change is obvious; program costs decrease while unit costs increase. But perhaps far more significant is the impact of these quantity reductions on interrelated weapon programs, all of which are part of an overall plan.

GAO recommended that the Secretary of Defense:

- Emphasize (1) a continuing rigorous analysis of the need for new weapon systems, (2) a careful analysis of the impact of proposed needs on the manpower and dollar resources of the total defense force and on the usefulness of the equipment already in inventory, and (3) the inclusion throughout of a properly structured process which makes trade-offs between various ways of fulfilling a function.

- Reexamine the weapon systems selected for, and retained under, project management and spell out, case-by-case, a project manager's duties.
- Develop and implement DOD-wide guidance for consistent and effective cost-estimating procedures and practices, particularly (1) an adequate data base of readily retrievable cost data, (2) a uniform treatment of inflation, (3) an effective independent review of cost estimates, (4) more complete documentation of cost estimates, and (5) dependable program definitions.
- Develop and implement DOD-wide guidance to provide that (1) appropriate testing and evaluation are completed before key decisions are made and (2) adequate controls are set over granting any waivers from required testing and evaluation.
- Reassess the criteria for designating weapon systems for selected acquisition reporting, to expand the system.

DOD agreed in general with GAO's findings, conclusions, and recommendations and stated it was taking corrective actions. (B-163058, July 17, 1972.)

COST-EFFECTIVENESS STUDIES OF PROPOSED
MAJOR WEAPON SYSTEMS

Department of Defense

In the past decade the Department of Defense (DOD) has relied greatly on cost-effectiveness studies in selecting and acquiring new weapon systems costing billions of dollars. DOD has used these studies to analyze the cost and effectiveness of weapons proposed to satisfy a predetermined military requirement by providing alternatives so that the most suitable weapon might be chosen from competing weapons.

GAO made a detailed review of cost-effectiveness studies on 16 major weapon systems--five Department of the Army systems, six Department of the Navy systems, and five Department of the Air Force systems. Notwithstanding weaknesses found in many of these studies, the cost-effectiveness technique is an essential tool in decisionmaking.

--It forces advocates of a proposed weapon system to examine and record the real need, the alternatives, the related costs, and the assumptions considered in making a proposal.

--It provides the DOD decisionmaker with a substantial amount of information which is helpful in reaching a decision at a very early phase of acquisition.

Like all methods of analyzing data, cost-effectiveness studies are subject to abuse or misuse. The limitations of such studies may not be fully realized and undue reliance may be placed on them. In some instances limitations or questions may be resolved only through such procedures as prototyping or parallel weapons development. DOD is advancing these procedures. But, regardless of the acquisition procedures selected, cost-effectiveness studies can aid in decisionmaking. Procedures DOD is now advancing provide a basis for adding needed realism to cost-effectiveness studies at each phase of acquisition.

Under the directives in force when the cost-effectiveness studies were prepared for the 16 weapon systems, the studies were required just once, in the early conceptual phase. Some of the studies were updated, but

it was not the normal practice. There is a definite need for conducting cost-effectiveness studies as early in the acquisition process as practical and for updating these studies as important developments occur. Studies for some weapons were not updated to consider changes such as:

- Availability of actual performance data which varied with predicted performance data.
- Major cost or quantity changes.
- Important changes in initial study assumptions.

Cost-effectiveness studies can be strengthened if (1) the services are more objective in analyses presented and (2) impartial parties participate in the studies. Having an impartial party participate is particularly necessary when common mission areas generate excessive interservice rivalry which, if unchecked, could result in costly duplication of weapons. Many of the cost-effectiveness studies in the 16 weapon systems appeared to be designed to support the position of the advocating service in that:

- Known alternatives were excluded.
- Stated assumptions were too restrictive or were not completely valid.
- Available data on alternatives had not been considered, and, as a result, incomplete studies amounting to misleading information were furnished for decisionmaking.

GAO recommended that the Secretary of Defense:

- Emphasize the need for cost-effectiveness studies and clarify the studies' roles as formal documents which support development concept papers at each stage of decisionmaking.
- Act to attain objectivity in cost-effectiveness determinations, particularly in mission areas in which two or more services are competing for a weapon system. This could require that the Secretary of Defense arrange for independent cost-effectiveness studies or identify an impartial party

to review service studies. In particular mission areas, it may require joint participation with the service in planning and/or conducting the study.

- Make sure that the services, in implementing DOD Directive 5000.1, make cost-effectiveness studies at the earliest practical point and update them throughout acquisition as major changes occur.

DOD commented on these recommendations, as follows:

- Guidance would be issued which would require cost-effectiveness analyses to be available to support the findings summarized in development concept papers and for presentation to the Defense Systems Acquisition Review Council.
- DOD agreed that there was a need for objectivity in cost-effectiveness determinations, particularly in mission areas in which two or more services were competing for a weapon system. DOD planned to insure that, when such a situation arose, an impartial cost-effectiveness study would be prepared and reviewed by either (1) the Office of the Secretary of Defense, (2) a multiservice review group, or (3) a Federal contract research center.
- The procedures for updating studies established by the development concept papers and the Defense Systems Acquisition Review Council and those needed to support the objectives of DOD Directive 5000.1 necessitated the preparation of cost-effectiveness studies to support the three major decision milestones: (1) program initiation, (2) full-scale development, and (3) full-scale production. (B-163058, Aug. 21, 1972.)

TESTS OF MAJOR WEAPON SYSTEMS AND
EVALUATION OF TEST RESULTS

Department of Defense

Testing new weapons is one of the Department of Defense's (DOD's) key controls in the complex process of acquiring today's multi-billion-dollar systems. Testing shows where problems exist and helps military managers make sounder decisions affecting future production and purchase of weapons than would otherwise be possible. Therefore GAO reviewed the military services' policies and practices in testing and evaluating weapon systems.

There are three basic categories of testing and evaluation:

1. Engineering testing to demonstrate physically, before a weapon system is accepted for production, that it will perform as intended.
2. Acceptance testing to demonstrate that the state and quality of the system can fulfill the legal and/or commercial requirements agreed to by the seller and the buyer.
3. Operational suitability testing to demonstrate that the weapon system, the operating personnel, and the tactical operations can work together to accomplish an established combat mission.

Tests, properly performed, assess risks and provide test results to the decisionmaker at key points in the acquisition cycle when final decisions must be made. A breakdown in performing any of the testing steps would lead to a lack of timely, accurate, or complete information, which undoubtedly would handicap the decisionmaker.

GAO reviewed 13 weapon systems with estimated total costs of more than \$46 billion. Systems for which substantial testing history was available were selected. Immediately prior to this review, DOD was changing its acquisition policies. These new policies, which are basically sound and in various stages of implementation, were being applied primarily to new systems entering the acquisition process. Test cases

cited in GAO's report therefore were not fully representative of current policies.

In DOD:

- Practices used to establish testing objectives generally were adequate.
- Most weapon systems did not have adequate plans for conducting tests.
- Most weapon systems were not tested and evaluated on a timely basis.
- Most test reports were adequate, but their value was diminished because of inadequate test planning and actual testing. Some reporting improvements could be made.
- Complete and valid test and evaluation data was not available prior to those times in the acquisition cycle when decisions had to be made.

Each of the three services has a longstanding policy that essentially requires the completion of engineering testing before production begins. The policy has been waived frequently. For instance, the Army has such a policy but waives it and begins limited production when the need is urgent, when the risk is low, and when no other system satisfies the requirement. Most, if not all, major weapons the Army has procured recently have been procured under this waiver. Similarly, the Mark 48, the F-111, and a number of other weapon systems for the Navy and Air Force have entered production under waivers.

GAO recommended that, in implementing its new testing and evaluation policies, DOD continue to emphasize the need for:

- Completion of appropriate testing and evaluation prior to key decision points in the acquisition cycle.
- Adequate controls over waivers.

--Succinct summary reports prepared by the testing agency for all management levels. (Interested management levels may wish to comment on these summary reports; however, they should not be permitted to change the basic summaries.)

According to the Director of Defense Research and Engineering, the implementation of policies on weapon system acquisition issued by the Office of the Secretary of Defense since May 1970 would correct the deficiencies in testing and evaluation discussed in this report. The Director stated that these policies are being implemented but cautioned that change takes time. (GAO is reviewing the new policies.) He also mentioned that there are many programs which are well advanced and which cannot be completely transferred to the new testing policies at this time due to contracts or other binding agreements; however, these programs are being modified to the extent practical. (B-163058, Aug. 7, 1972.)

COST ESTIMATES OF MAJOR WEAPON SYSTEMS

Department of Defense

Realistic cost estimating is indispensable to decision-making by both the Congress and the military services' management when acquiring a new weapon system. Data available on 47 weapon systems showed cost increases of \$15.6 billion from early development estimates. The Department of Defense (DOD) attributed 43 percent of this amount, or \$6.7 billion, to estimating changes. GAO attempted to identify those cost-estimating factors that were causing the problem and to suggest how the problem might be solved or abated.

Uniform guidance on cost-estimating practices and procedures which would be the basis for formulating valid, consistent, and comparable estimates throughout the services was lacking. Each service issued its own guidance, which ranged from a detailed estimating manual to a few general statements. Estimators often ignored guidance.

Cost estimates for a specific system frequently were a succession of revisions. Accurate revision of both the original and updated cost estimates requires documentation showing data sources, assumptions, methods, and decisions basic to the estimate. In virtually every system GAO reviewed, documentation supplying such information was inaccurate or was lacking. Among the resulting difficulties were:

- Known costs had been excluded without adequate or valid justification.
- Historical cost data used as a basis for computing estimates was sometimes invalid, unreliable, or unrepresentative.
- Inflation was not always included or uniformly treated when it was included.
- Understanding and proper use of the estimates was hindered.

Readily retrievable cost data which could serve as a base for computing cost estimates for new weapon systems

generally was lacking. According to officials within the Office of the Secretary of Defense, there was little organized effort to gather actual cost information systematically, to insure consistent treatment of costs in the data collected on various weapon systems, or to see whether the cost data the contractors reported was accurate and consistent.

Without realism and objectivity in cost estimating, estimates prepared by advocates of weapon systems tend to be low. Therefore persons who are not influenced by the military organization's determination to field a weapon system or by the contractor's desire to produce the system should review every weapon system at major decision points in the acquisition cycle.

GAO recommended that the Secretary of Defense develop and implement guidance for consistent and effective DOD cost-estimating procedures and practices and that, in developing this guidance, he consider the criteria for cost estimating GAO set out in its report, particularly:

- An adequate data base of readily retrievable cost data.
- Treatment of inflation.
- An effective independent review of cost estimates, including judgment by top officials as to the realism of the cost estimates on which decisions are based.
- More complete documentation of cost estimates, coupled with a requirement for an adequate feedback of results, to provide a basis for comparing costs achieved with those estimated.

DOD stated that it agreed with GAO's conclusions. DOD plans:

**** to provide the necessary guidance to the DOD components. This would include criteria to guide those charged with making estimates and would establish

procedures to have cost estimates, which were prepared within this guidance, available for use by the Services and the Secretary of Defense. In addition, it would provide guidance necessary for the creation and maintenance of data systems for cost estimates."

The military departments, DOD advised, had taken steps to improve cost estimating. (B-163058, July 24, 1972.)

FAULTY POTTING COMPOUNDS IN
MAJOR WEAPON SYSTEMS

Department of Defense

Potting compounds protect electrical connections and other components from contaminants, moisture, and corrosion. These compounds, which are installed as liquids, harden around the connections or components to be protected. After prolonged exposure to high heat and humidity, some potting compounds revert to liquids and leave potted components unprotected.

Reversion caused a potting compound used in about 775 active F-4 aircraft to be replaced at a cost of about \$39 million. In addition, 1,575 other active F-4s contained another potting compound also susceptible to reversion. General failure of this compound is not expected to occur until 1976, and costs for partial repair may be limited to a few million dollars. GAO estimated that, if reversion occurs earlier and if total replacement is required, the cost to replace this compound could reach \$85 million.

Additional millions have been or may be incurred to replace compounds used in other weapon systems. For example, submarines built by the Mare Island Naval Shipyard in California during 1961-66 contained a considerable amount of a reversion-prone potting compound. The Department of Defense (DOD) estimated that it would cost \$6 million to replace it.

GAO attributed the use of these faulty potting compounds to a lack of Government testing and evaluation. The compounds were newly developed and were not covered by military specifications. Government personnel approved their use solely on the basis of recommendations and test data from the equipment and compound manufacturers. The data did not identify the reversion characteristics of the compounds. One military laboratory, however, which already was aware that a similar compound was reversion prone, was not asked to evaluate these compounds. The use of military laboratories to evaluate the acceptability of materials and components not covered by military specifications was not required.

Furthermore, DOD was unable to quickly disseminate information on reversion-prone compounds to all users. After field experience and Government testing confirmed that these

compounds would revert, they were still used in the F-4 aircraft for several months. The Air Force is using a reversion-prone compound in the F-111 aircraft. This aircraft's system project office (which had been notified by Air Force laboratory personnel of the potential failure with this compound) decided to continue its use.

Because the services did not effectively coordinate efforts to develop repair techniques to remove and replace one kind of potting compound in the F-4 aircraft, repair costs may have increased. After recognizing the compound's reversion problem, Air Force and Navy activities concurrently developed different repair techniques. In fact, two Navy activities used different techniques.

Concerning the F-4 aircraft's difficulties, which are inherent in the approved material rather than in its use by the contractor, the Navy concluded, and GAO agreed, that there was no basis for a Government claim against the F-4 contractor. The Navy, however, was pressing a claim against the F-4 contractor concerning the improper mixing of some of the compound and subsequently settled the claim for about \$25,000.

GAO recommended to the Secretary of Defense that he insure that:

- New, untried materials not covered by military specifications are tested adequately and that a military laboratory approves such newly developed materials.
- The services disseminate information on deficiencies in materials and equipment having DOD-wide application obtained through test, evaluation, or experience to other DOD users.

DOD agreed that faulty potting compounds resulted in considerable expense but stated that GAO's estimate of this cost in the F-4 aircraft was too high. After discussing this matter with DOD officials, GAO concluded that the estimate of \$39 million to replace one of the compounds was reasonable. GAO agreed that the estimate of \$85 million to replace another potting compound in 1,575 additional F-4 aircraft could be reduced if less than total replacement was required, but the exact amount of replacement will not be known for several years. DOD did not provide an alternative estimate of this cost.

According to DOD, several existing procedures provided sufficient guidance for testing and evaluating newly developed materials and components and that military program and project offices had access to DOD laboratories for assistance. These procedures basically were directed toward testing by contractors and did not include criteria to determine when the services should request independent test and evaluation assistance from DOD laboratories.

DOD agreed that better communication among the services was needed and that it was revitalizing an existing Government-Industry Data Exchange Program which provided for exchanging test data. GAO believes this program's usefulness is limited because both contractor and military participation is voluntary. (B-163058, Jan. 5, 1972.)

FEASIBILITY OF CONSTRUCTING PRICE INDEXES
FOR WEAPON SYSTEMS

Department of Defense

As a result of recommendations made by the Joint Economic Committee, the General Accounting Office (GAO) reviewed the feasibility of constructing price indexes for weapon systems. The primary need for indexes is for use in evaluating the effect of inflation on cost overruns. Inability to measure inflation accurately makes it difficult for the Congress to evaluate the effectiveness of Government's management in procuring weapon systems and to identify appropriate remedial action.

Available price indexes are unsuitable because they are based on purchases other than military items or because they do not include a sufficient cross section of military items. Therefore, GAO studied what would be needed to construct price indexes for military weapon systems. Two types of indexes were considered: end-item indexes which show trends in the prices of entire systems such as ships or aircraft and input indexes which show the prices of labor and materials used in production.

Specification change is a fundamental characteristic of weapon systems, so much so that it is not practicable to construct end-item indexes. This is not the case for such items as Army trucks that do not involve the rapid or numerous changes characteristic of complex aircraft and ships.

Sufficient data was available to construct meaningful input price indexes for labor and materials. GAO constructed demonstration indexes for aircraft, ships, and electronics and determined that:

- Labor price indexes for direct pay could be constructed for virtually all types of labor, direct or indirect (overhead).
- Material price indexes could be developed at the prime contractor level for only part of the material used because of the specification change problem.

--To identify the extent of the price change and the component of change due to general inflation, both contractor and marketwide price indexes are necessary.

Contractors participate in private areawide and salary surveys, and the Bureau of Labor Statistics (BLS) conducts various wage and salary surveys as part of its regular programs. It appears that the BLS surveys could be extended to defense industries. The Department of Defense (DOD) and BLS could best construct price indexes of the types described.

According to BLS and DOD, additional resources would be required to carry out a program for constructing the desired indexes. Neither agency stated the estimated cost. (B-159896, Apr. 10, 1972.)

RESEARCH AND DEVELOPMENT

POSSIBLE DUPLICATION IN THE SEPARATE DEVELOPMENT BY THE SERVICES OF AIRCRAFT TO PROVIDE CLOSE AIR SUPPORT OF GROUND TROOPS

Department of Defense

The Army, Navy, Marine Corps, and Air Force all participate in close air support or reinforcement of ground troops by close-in delivery of ordnance from aircraft. The services have differed over the best equipment to employ, the tactics to use, and the priority of this type of mission. Congressional committees have reviewed these differences and related problems from time to time, but the issues have been exceedingly difficult to resolve. The Congress was concerned that three different aircraft being considered for close air support--the Army's AH-56A Cheyenne, the Marine Corps' Harrier, and the Air Force's A-X--might duplicate or overlap in capabilities.

All three proposed aircraft are designed to defeat tactical targets, such as tanks, field fortifications, and enemy troops, but the aircraft differ markedly.

- The Cheyenne has rotary blades; wings for lift, like a fixed-wing plane; and a pusher-propeller in the tail.
- The Harrier is the first vertical-takeoff airplane, after nearly 25 years of experimentation with this concept.
- The A-X is to be a conventional fixed-winged aircraft, the first fixed-wing aircraft in more than a generation to be designed specifically for close air support.

A unified plan covering total Department of Defense (DOD) requirements for close air support had not been prepared. Ordinarily such a plan would be the basis for determining the total number of aircraft and the capabilities they would need for close air support. Instead each service had independently planned and proposed the sizes and the tactical

concepts of close-air-support fleets, without considering each other's plans, the quantities and capabilities of existing aircraft, or the resources of U.S. allies.

A justification for a new close-air-support aircraft would be more convincing if the services agreed on available inventory aircraft (their numbers, accuracy, payloads, response times, and other properties) and if it could be shown that there was a gap between these resources and the combined services' needs.

Some factors hampering effective management of the mission and the development of an overall plan were:

- Constraints on the choice among weapon systems that each service can develop. For example, an agreement with the Air Force limits the Army to helicopters.
- Lack of joint military policy on how to conduct the mission and on which equipment to use.
- Lack of adequate data on whether the weapons now being considered will perform effectively under combat conditions and on certain human abilities needed to operate the weapons.
- Equipping, staffing, and training for support missions usually are underfinanced in peacetime in favor of a service's priority mission. The more complex support missions--such as close air support--which require very close coordination between air and ground troops are difficult to mobilize effectively when hostilities break out.

It is not known whether the three aircraft will be more effective than existing aircraft. The following capabilities of the three aircraft were not tested in a combatlike environment employing the tactics planned for each of them:

- Ability to find and identify enemy targets in time to launch weapons before the enemy can fire at the aircraft.
- Survivability against a well-equipped enemy.

- Effectiveness against typical close-air-support targets.
- Capability for a high, sustained rate of attack (sortie surge rate) in the battle area.

Data on proposed target-kill capabilities and survivability was inconclusive and incomplete. Cost-effectiveness studies on those aircraft (none had been made on the Harrier) were:

- Optimistic in their assumptions about environments, tactics, and the severity of enemy defenses.
- Incomplete in comparing these aircraft with similar aircraft.
- Out of date with current cost estimates, which rose markedly in the past 2 years.

Another cost-effectiveness study on the Cheyenne was underway.

DOD completed an interim study of the three aircraft in June 1971. According to the Deputy Secretary of Defense in summarizing the study, the proposed aircraft would complement rather than duplicate other aircraft because each was expected to have exclusive capabilities for certain battle situations not possessed by existing aircraft. He recommended that all three aircraft programs be continued until operational testing could be completed to resolve certain specified uncertainties about each. The list of uncertainties seemed to apply to each aircraft, but the summary did not indicate that each aircraft would be evaluated against the list. Although the proposed aircraft would be tested further, it was not clear whether they would be compared with each other and with existing aircraft when the operational test data was available.

The Office of Defense Research and Engineering recently established a deputy directorship with direct access to the Deputy Secretary of Defense at certain critical milestones in the acquisition process of these aircraft. The Deputy Director would do no actual testing but would advise and monitor inservice testing by the services and would evaluate

the results. GAO did not attempt to determine whether the current testing and evaluation procedures would provide the necessary independence to insure that there was prompt and realistic testing of weapon systems before large-scale-production commitments were made. However, a powerful test and evaluation authority was needed in the weapon acquisition cycle.

In its report GAO suggested that DOD:

- Establish the total DOD requirement for close-air-support aircraft within the resources provided in the budget.
- Delineate the single- and joint-service tasks and sub-tasks in conducting close air support and assign authority and responsibility for specific tasks to the individual services.
- Develop and implement, within some realistic deadlines, joint close-air-support policy which would spell out how military actions are to be conducted and coordinated.

The report also summarized major issues concerning the three aircraft which the House and Senate Committees on Appropriations and Committees on Armed Services might wish to pursue further with DOD. (B-173850, Dec. 8, 1971.)

PREMATURE FULL-SCALE DEVELOPMENT
OF MINOR WEAPON SYSTEMS

Department of Defense

In recent years congressional attention has focused on problems in meeting cost, schedule, and performance targets established for major weapons. The Department of Defense (DOD) has responded by emphasizing the importance of testing hardware and other controls during development. As noted by the Blue Ribbon Defense Panel, more money is committed to the far more numerous minor weapon systems. These systems involve less than \$50 million of research and development funds or less than \$200 million of procurement funds. Therefore GAO was particularly interested in seeing how well DOD was managing decisions to start full-scale development on these systems. The decision to enter full-scale, or engineering, development is considered crucial because it is that final step before a system enters production and the decision leads inevitably to large commitments of money.

GAO reviewed 15 Navy programs, mainly those not categorized as major, which had passed through the crucial decision points and which are now in varying stages of development, production, or use. Insufficient experimental work had been performed for most of the 15 programs before full-scale development was started. As a result, serious technical problems frequently occurred during full-scale development and caused cost growth, schedule slippage, or shortfalls in performance. This forced the Navy to compromise its plans for meeting its equipment needs. Although premature full-scale development was not the only cause of later problems, it appeared to be the most prevalent cause and the one having the most far-reaching effect.

The premature initiation of full-scale development had the following impact on cost, schedule, and performance targets.

- Development cost increased 50 percent or more for six of 10 programs and ranged from 16 to 213 percent.
- In nine of 12 programs, completion of full-scale development had to be extended more than 1 year. Program slippage for these systems ranged from 4 to 51 months.

- Serious technical problems were evident in nine of 15 programs. Redesign or modifications had taken place or were planned for six of the nine because of technical problems in areas which had not been proved feasible through experimental testing.
- When cost or schedule limits were exceeded or when performance was significantly below expectations, decisionmakers often were forced into undesirable compromises--e.g., redesigning or modifying equipment at additional cost, diverting funds from lower priority programs, taking risky shortcuts, or canceling or cutting back development programs.

In addition, when program delays occur during full-scale development, risky shortcuts--e.g., starting production while development is in process--are sometimes taken to bring completion dates back in line. Often, these shortcuts not only fail to speed up the program but also usually add to the development-production cost. Pressures to resort to shortcuts would be lessened if exposing technical problems through experimental work before full-scale development is begun were emphasized more.

Following are some of the circumstances under which full-scale development was approved prematurely.

- Navy decisionmakers approved full-scale development in some instances even though development plans indicated that experimental work had not been completed. This premature approval was attributed either to unwarranted confidence that the equipment would perform as required or to an expressed urgent need for the equipment.
- Development plans for other programs might have misled the decisionmakers in that the plans indicated that no significant technical risks were expected.
- For still other programs, development plans rationalized erroneously that risks were low on the assumption that technical concepts had been proved on systems in use.

According to the Director, Defense Research and Engineering, recent changes in DOD and Navy policies and procedures had been designed to correct such defects as those revealed in GAO's report by:

- Establishing the Defense Systems Acquisition Review Council to review major programs at key decision points.
- Introducing the development concept paper.
- Increasing attention throughout DOD to test and evaluation responsibilities.
- Paying additional attention to reducing risks, before approval for full-scale development is granted, through more emphasis on prototyping and hardware development and through testing.

The first two actions apply only to major systems and, if implemented properly, should lead to improved management of such systems. GAO noted that a proposed new directive--DOD Directive 5000.2--would require these actions and Secretary of Defense approval earlier in the development process for major systems. Most systems discussed in GAO's report, however, did not meet the DOD dollar requirement for such actions. With respect to increased emphasis on testing and evaluation responsibilities and other efforts to reduce risk, provided by new DOD Directive 5000.1, the former DOD Directive 3200.9 appeared to be even stronger in its emphasis on, and more specific in its requirements for, justifying full-scale development. Yet sufficient experimental work was not always performed.

DOD Directive 3200.9--in effect when full-scale development decisions were made for 14 of the 15 systems reviewed--specified prerequisites for starting full-scale development and required that experimental work be performed to a degree sufficient to demonstrate that technical risks did not exist or had been reasonably reduced. In contrast, new DOD Directive 5000.1 provides merely that "development risks have been identified and solutions are in hand." The recent actions should lead to improved management of major weapons systems; however, this emphasis provided by the new policies will not in itself overcome the problems cited for minor systems.

GAO recommended that the Secretary of Defense require key decisionmakers to verify and certify that sufficient experimental work has been completed before they approve full-scale development of minor systems or justify in writing any exceptions. GAO also has recommended that the Secretary of Defense apply spot checks and other techniques to insure that the principles specifically applicable to major systems are applied also to the far more numerous and, in total, more costly minor systems.

Recent legislation requires the Secretary of Defense to annually report, beginning in 1973, on operational testing and evaluation for each weapon system for which procurement funds are requested. This should assist in identifying new systems entering production prematurely. The decision to begin full-scale development, however, is even more fundamental because it "opens the door" and leads to large commitments of funds.

GAO suggested that the Congress require from the Secretary of Defense--along with his initial request for full-scale development funds for new systems--a statement to the effect that

- all necessary experimental work has been performed and the proposed system is ready for full-scale development or
- authorization of full-scale development is essential even though all prescribed conditions have not been met, in which case the statement should give the reasons for the decision and identify the areas where experimental work has not been completed. (B-163058, Oct. 6, 1972.)

NEED FOR LONG-RANGE PLANNING
FOR AVIONICS REQUIREMENTS

Department of the Army

Because development problems with the standard light-weight avionics equipment (SLAE) package affected airframe programs, GAO reviewed the SLAE program, which was committed for use in several new Army aircraft systems, to determine the underlying causes for such program shortcomings.

Military requirements established in May 1960 for the light observation helicopter limited the weight of the avionics to 100 pounds. However, Army officials decided in October 1960 to use existing equipment which was about 55 percent heavier. The Army did not contract for developing light-weight avionics until 1966, about 4 years after contracting for the helicopter development. This delay forced the SLAE development cycle to be accelerated and, in GAO's opinion, was the primary cause of development and production problems. The inadequate planning was caused by the Army's lack of a long-range avionics planning system to promptly identify the avionics subsystems needed for its aircraft.

The Army had to push the avionics package into production 9 months before preliminary design testing was completed to meet aircraft delivery schedules. Because SLAE was not available, older, larger, and heavier avionics ultimately was installed in 2,013 helicopters. The substitution reduced the effectiveness of all 2,013 helicopters. The schedule slippages and design changes to overcome deficiencies in the avionics cost about an additional \$2.4 million.

In December 1966 the Assistant Chief of Staff for Force Development directed that SLAE be installed in seven additional Army aircraft systems and in all Army aircraft produced after fiscal year 1969, even though SLAE had never been successfully tested in the light observation helicopter for which it was designed. A SLAE component also was to be installed in five aircraft systems as second frequency modulation (FM) transceivers. These actions were taken without determining whether the expected benefits would outweigh the expected cost and before testing SLAE to determine its suitability for Army use.

SLAE was not installed in two of the aircraft systems because the Army later determined that SLAE was not cost effective. Installing SLAE in three other aircraft systems was canceled because it was unavailable, but modifications to one of these aircraft systems to prepare for installing SLAE cost about \$185,000.

The Army solicited bids on a second FM transceiver for SLAE at an estimated cost of more than \$20 million without determining whether the need justified the cost. The Army did not consider using FM transceivers already being used in other Army aircraft. GAO notified Army officials of this, and they promptly reevaluated the requirement and reduced the planned procurement about \$7 million.

In August 1969 the Commanding General, Army Materiel Command, decided to transfer program and fund control of the Avionics Laboratory from the Electronics Command to the Aviation Systems Command, but this decision had not been implemented at the time of GAO's review. If the Aviation Systems Command is given program and fund control, it should also be given command control over the Avionics Laboratory to avoid the problem of dual control.

GAO recommended that the Secretary of the Army:

- Place additional emphasis on promptly preparing long-range avionics requirements plans.
- Prepare a regulation which prohibits committing incompletely tested subsystems to additional systems, except under extraordinary conditions.
- Establish additional controls to insure that cost-effectiveness determinations and analyses of economic alternatives are made before program approval, as required by Army regulations.
- Initiate actions clarifying responsibility within the Army Materiel Command for preparing an economic analysis when more than one of its subordinate commands are directly involved.

GAO also recommended that the Secretary of Defense:

- Require, before approving engineering development of an aircraft, that all subsystems needed to fulfill critical requirements of the aircraft are being developed and have sufficient leadtime to insure proper interface.
- Establish procedures whereby his authorization is required before committing a critical developmental subsystem to additional systems unless it is proved acceptable by suitable tests.

The Army agreed that improved long-range planning was needed but did not agree with GAO's conclusions as to what caused the SLAE developmental problems. It contended that changing requirements and unforeseen technical difficulties had caused these problems. GAO believes these problems could have been minimized or avoided had the Army initiated plans to develop lightweight avionics in 1960.

Although the Army commented that GAO's recommendations were sound management practices, it cited only that it was preparing a long-range avionics plan. With respect to GAO's other recommendations, it stated that:

- Suitable regulations were in effect to control committing untested subsystems to additional systems. (The regulations apply to type classification of materiel; however, they do not preclude committing incompletely tested subsystems to additional systems.)
- Cost-effectiveness determinations and economic analyses were required, and cost analyses had been conducted to the appropriate degree. (These determinations and analyses had not been prepared and additional controls were needed to insure their preparation, GAO found.)
- The regulation requiring economic analyses was clear regarding which activity prepared these analyses, in this case, the Army Materiel Command. (The command's implementing regulation does not clearly indicate which subordinate command should prepare the analyses when more than one subordinate command is involved.)

The Office of the Secretary of Defense disagreed with GAO's recommendation that engineering development not be approved unless all critical subsystems were under development with sufficient leadtime to insure proper interface. According to the Office, SLAE was not committed to additional systems before testing and that therefore the recommendation was not appropriate. GAO disagreed. The plan to install SLAE in additional aircraft was included in the Five Year Avionics Requirements Plan used as the basis for procuring avionics and for modifying aircraft to accept new avionics.

GAO suggested that the Congress be informed by the Secretary of Defense when critical subsystems still being developed are committed to additional systems, because such commitments could adversely affect the performance of such systems and the combat effectiveness of the Armed Forces. (B-174248, Dec. 28, 1971.)

NEED FOR COORDINATED EFFORTS OF DEFENSE AND
CIVIL AGENCIES TO CONVERT TO CIVIL USES
DEFENSE RESEARCH FACILITIES NO LONGER NEEDED
FOR DEFENSE PURPOSES

Department of Defense

Because attempts to convert military facilities from defense and space use to civil uses have been only partially successful, GAO reviewed the Army's efforts to transfer research facilities at Fort Detrick, Maryland, to Federal civil agencies. These unique and valuable facilities became available when the President decided to eliminate the country's biological warfare program.

The Army made a substantial effort to convert the research facilities to civil, scientific, or medical purposes, but it encountered problems which one agency acting alone could not control. Problems encountered, often interrelated, included.

- Size of the research facility and its work force.
- Finding an agency willing to be landlord for the facility.
- Lack of plans and available funds by prospective users.
- Reluctance of prospective users to be associated with a former biological warfare center.

The availability of the facilities and its personnel was made known in January 1970. Recognized scientific authorities reported that the specialized facilities and the scientific personnel, while still intact as a group, be given a national mission commensurate with their potential, such as finding a cure for cancer.

In June 1970 the Deputy Secretary of Defense reported an apparent accord that the facilities would be transferred to the Department of Health, Education, and Welfare (HEW), as HEW had requested; however, actual agreement was not reached. HEW was still considering using some of the facilities 10 months later but had no firm plan. Part of HEW's interest depended on the Army's acting as landlord. The Army Surgeon

General was interested in some of the facilities and was willing to be a host, but at the time he had not indicated the extent of his needs. Finally, in October 1971, the President announced that Fort Detrick would become the focal point for the National Cancer Institute's crusade against cancer.

The Army attempted to retain as many of the 1,800 persons employed at Fort Detrick as possible. Despite the Army's efforts, however, fewer than 600--primarily support personnel--remained at the time of GAO's review. The Department of Agriculture took over one research facility employing 20 people, and plans are for the Army Surgeon General to retain some of the remaining personnel. Most of the unique scientific and professional staff formerly employed at Fort Detrick, however, are no longer available.

It would benefit the Government to have a coordination point such as Office of Management and Budget (OMB), with assistance from the Office of Science and Technology and the General Services Administration (GSA), between the prospective users and the offerors.

Prompt action should be taken to close facilities no longer needed. When a facility has unique features valuable to the Nation, the Director, OMB, should:

- Coordinate the efforts of defense and civil agencies in converting and transferring national resources.
- Consider favorably requests for additional funds which enable an existing facility to remain operational. This would keep the work force intact until potential users' plans are more fully developed.
- Designate a host agency, such as GSA, when several agencies would use a large facility but no single agency would be willing to assume responsibility.

According to OMB, which coordinated the response for the executive branch, matters to be decided in the succeeding months made it impossible to comment definitively on GAO's positions and recommendations.

The President's Advisory Council on Management Improvement agreed that it would be advantageous to coordinate planning and timely decisions between the prospective users of surplus facilities and the offerors. It further stated that OMB, with advice from the Office of Science and Technology, GSA, and the Civil Service Commission, could certainly serve that function. (B-160140, Feb. 16, 1972.)

SUPPLY MANAGEMENT

UNNECESSARY PROCUREMENT OF SPARE PARTS FOR INITIAL SUPPORT OF NEW AIRCRAFT

Department of the Air Force

The Air Force spends hundreds of millions of dollars annually to obtain spare parts needed to support new aircraft during initial operation. This support, known as initial provisioning, includes spares and repair parts ranging from bolts and resistors costing pennies to wing assemblies and electronic modules costing thousands of dollars. GAO selected the F-111 aircraft for evaluating the policies and procedures under which initial provisioning was carried out because the program was well underway at the time the review began.

The Air Force spent too much too soon to buy many F-111 spare parts which were not needed during the initial support and which may never be needed and may subsequently be scrapped. This occurred because of a management system which assumed deliveries of the aircraft would be made on schedule and which was not sufficiently flexible to permit timely changes in the program for initial provisioning. The system committed the Air Force to buy large quantities of spare parts for aircraft which may not be delivered or which may be delivered long after originally scheduled. Furthermore, because of numerous changes in design which invariably occur in developing and producing military aircraft, many spare parts rapidly become obsolete. The lack of flexibility in the initial provisioning program for the F-111 aircraft resulted in:

- Buying about \$116 million worth of spare parts before they were needed. Spare parts worth \$9.6 million had already been declared excess.
- Buying substantial quantities of spare parts several times even though data available to the Air Force showed that there was no current need for these parts.

These problems were compounded because the Air Force had committed itself early in the program to buy all the spares

at a markup from the prime contractor rather than directly from the manufacturers. The Air Force had not evaluated the trade-off between the markup and the value of the service provided by the prime contractor. According to a GAO estimate, the markup was about \$56 million on \$291 million worth of spare parts manufactured by subcontractors.

In response to GAO's recommendations, in which it generally concurred, the Air Force said:

- It would revise its policies and guidelines for determining materiel requirements to emphasize that initial provisioning applied to short-term deliveries.
- It would provide a schedule showing realistic projected aircraft deliveries to the user when slippages were forecast.
- Air Force activities which computed requirements had been instructed to adjust estimated demand rates as appropriate for new items and the Department of Defense had studied this matter.
- Actions were currently being evaluated which should permit expanding competitive procurements from other than the prime contractor and a new system would be developed and tested.
- Current weapon systems audits and those planned by the Air Force Audit Agency would evaluate basic provisioning concepts, policies, and practices.

(B-133396, Jan. 31, 1972.)

NEED TO IMPROVE ACCURACY OF REQUIREMENTS
SYSTEM FOR REPARABLE PARTS

Department of the Air Force

The Air Force has a highly complex computerized system for determining requirements for reparable parts. The system furnishes data on about 150,000 items--primarily aeronautical parts--with an inventory value of \$7.1 billion. Costs for procurements and repair programs for these items exceeded \$900 million in fiscal year 1970.

According to GAO's review of requirements computations for 110 items selected on a statistical-sampling basis, widespread errors in key data elements had caused inaccurate requirements in 59 percent of the computations. Requirements for some items were misstated by \$2.5 million, and availability of assets was misstated by \$2.2 million.

Using statistical sampling GAO estimated that, of the 73,000 computations for items showing such requirements as a need to buy or repair, 43,000 were inaccurate. GAO could not accurately estimate the total dollar effect of these inaccurate requirements but the extent of errors and the amount of funds involved for the items sampled indicated that it could be substantial.

Errors occurred because

- data is not checked for accuracy before it is used due to managers' heavy workloads,
- good sources are not readily available for some of the data needed,
- policies and procedures are ambiguous or unclear, and
- personnel are not trained thoroughly in the system's operations.

The requirements system is scheduled to be absorbed into a new highly sophisticated logistics system called the Advanced Logistics System. GAO is concerned that invalid data will be carried into the new system and will minimize expected benefits.

GAO recommended that, to improve the reliability of data for the present requirements system, the Air Force

- strengthen procedures for finding and correcting errors,
- provide reliable sources of information for requirements workers so that they can check data more easily,
- accelerate training programs,
- reduce the amount of invalid data transferred into the Advanced Logistics System data banks, and
- consider reducing the number of items managed under this requirements system by eliminating those items having low use.

Also, because of the large number of errors in the system reviewed, the Air Force Audit Agency should test the reliability of data in other systems which the Advanced Logistics System will use and should report the results of such tests to management for correction.

The Air Force agreed, in general, with these recommendations and cited corrective actions were underway or planned. (B-146874, Sept. 13, 1972.)

PROBLEMS IN PROPERTY DISPOSAL OPERATIONS
IN VIETNAM

Department of the Army

During fiscal years 1969-71, property disposal activities in Vietnam processed \$1.7 billion worth of materiel, of which \$300 million worth was usable and the remainder was scrap. The volume for fiscal year 1971 was \$117 million worth of usable property and \$194 million worth of scrap.

The Army has had difficulty safeguarding and accounting for the materiel being turned in for disposal, and large quantities of usable materiel have been written off the records because they could not be located. In fiscal year 1971, the three disposal activities wrote off about \$18.3 million worth of such materiel. Substantial additional materiel was missing, according to GAO tests. There were two principal reasons for the control problems in the disposal yards--divided program management and lack of qualified personnel.

Also, disposal activities have not always reported materiel to the Defense Logistics Service Center (DLSC), though required, for worldwide screening. Such screening has resulted in significant redistributions.

Materiel which has been screened is offered for sale to a wide range of potential purchasers. Despite restrictions imposed by the Vietnamese Government, reasonable efforts were being made to market property competitively; however, at one disposal activity, revenue from the sale of scrap could be increased by \$1.2 million annually if scrap was segregated before being sold.

GAO discussed these problems with local management and Army staff officials who agreed, in general, with the findings and with the need for some correction.

GAO recommended to the Secretary of Defense that (1) emphasis be given to improving the control over materiel in disposal yards, (2) plans be developed to insure that qualified property disposal personnel are available for any future needs, (3) action be taken to insure that all property

disposal activities report usable property to DLSC, and (4) procedures be implemented to require all units to segregate scrap before it is turned in to property disposal yards.

The Army concurred in GAO's recommendations and reported various responsive actions. (B-163746, June 13, 1972.)

OTHER PROPERTY MANAGEMENT

NEED FOR FURTHER IMPROVEMENTS IN CONTROLS OVER GOVERNMENT-OWNED PLANT EQUIPMENT IN CUSTODY OF CONTRACTORS

Department of Defense

In a report to the Congress in November 1967, GAO pointed out that there was a need for improved controls over Government-owned property in contractors' plants. Subsequent internal reviews by the Department of Defense (DOD) have shown this situation still exists.

GAO's latest review was directed chiefly toward DOD management of a major part of such property--plant equipment--to examine the causes of the problems. Some progress has been made toward the DOD goal of generally requiring contractors to furnish all equipment needed for Government contracts. DOD-furnished plant equipment in the possession of contractors had decreased from \$4.6 billion worth in December 1967 to \$4.1 billion worth in June 1971.

In March 1970 the military services and the Defense Supply Agency were directed by the Office of the Secretary of Defense to require contractors to submit plans to phase out their use of Government-owned facilities. The Deputy Secretary of Defense, however, has permitted deferment of these plans at contractor plants where mobilization base requirements are being developed and where the phaseout would be contrary to the Government's interest or would create an economic hardship for the contractor. DOD expects to receive plans from about 647 contractors by March 1973. As of December 31, 1971, 187 plans had been approved.

As a result of a GAO review, the results of which were reported to the Congress in April 1971, DOD had stated in October 1970 that the Armed Services Procurement Regulation (ASPR) would be revised to stop the practice of furnishing general-purpose test equipment--i.e., plant equipment--as special test equipment to contractors. But on March 15, 1972, DOD informed GAO that it had decided not to implement the proposed revision.

In its latest review GAO also found that:

- DOD is rebuilding existing equipment at contractors' plants without a need evaluation. The Air Force has spent about \$200,000 to refurbish equipment for which future use is questionable.
- The reuse potential of Government-owned industrial plant equipment has not been fully realized because of weaknesses in the procedures for reporting unneeded equipment to the Defense Industrial Plant Equipment Center for screening and redistribution. At 13 contractors' plants visited, 327 equipment items costing \$11.4 million had not been reported to the Center but were idle, had little use, or were used mostly for commercial work. The Center identified 78 of these items, costing \$1.7 million, which, had they been reported, might have been used to fill equipment requirements at other locations.
- Some contractors use Government equipment for commercial work without obtaining the approval required in advance of actual use.
- The use of available machine time rather than actual machine time is not always appropriate for measuring commercial use because it is possible for machines to be used solely or predominantly for commercial work without exceeding the 25-percent limitation normally permitted when such use is approved.
- DOD regulations permit considerable flexibility in computing rent for commercial use of equipment. The lack of a uniform method of computing the credit for Government use has resulted in inequities to the Government and to the contractors.
- Under the Air Force heavy-hammer program, five contractors have been permitted to use about \$20 million worth of Government-owned plant equipment under non-standard leases which permit unlimited commercial use at rental rates significantly lower than the rates provided in ASPR for the same classes of equipment. These terms were granted because it was thought there was only a small commercial market for the

items produced with the equipment. At one contractor's plant, however, 80 percent of recorded sales of items produced using such equipment were not under Government contract.

GAO recommended that the Secretary of Defense:

- Reemphasize the DOD program for phasing out the use of Government-owned facilities by contractors.
- Revise the definition of special test equipment to exclude general-purpose equipment.
- Strictly apply to the rebuilding of existing equipment the criteria for furnishing equipment to contractors.
- Revise the regulations to require contractors to maintain use records for individual machines making up some minimum portion, for instance 75 percent, of the acquisition cost of Government-owned industrial plant equipment. GAO estimated that including only those items having the highest acquisition cost might require such records for only 25 percent of the machines. The records should show the amount of Government use and commercial use.
- Revise the regulations to require that the commercial-use factor be based on actual machine time rather than on available time.
- Remind contract administrators of the need to (1) monitor use of Government-owned plant equipment, (2) identify unauthorized use of equipment, and (3) incorporate regulation changes promptly into facilities contracts to insure contractual coverage of DOD policies concerning industrial plant equipment.
- Revise ASPR to provide clear criteria for identifying and reporting unneeded equipment.
- Revise ASPR to establish a uniform and equitable method of computing rent. To the extent practicable, this should be done on a machine-by-machine basis with the credit for rent-free (Government) use applied to each

machine in its ratio of Government use to total machine hours of use.

According to the Assistant Secretary of Defense (Installations and Logistics), DOD had progressed significantly both in phasing out the use of Government-owned equipment by contractors and in managing the remaining such equipment. In his view, increased emphasis on enforcing existing policies rather than on issuing new or revised regulations will provide the necessary improvements.

As a matter for consideration by the Congress, existing legislation does not permit the direct sale of equipment through negotiation with holding contractors unless certain conditions are met. DOD officials feel that enactment of House bill 13792, which permits the direct sale of equipment to holding contractors, would help DOD phase out the use of Government-owned equipment at contractors' plants. GAO endorsed similar legislation, proposed in previous years, and agreed with the intent of House bill 13792. (B-140389, Aug. 29, 1972.)

NAVAL PETROLEUM AND OIL SHALE RESERVES NOT
CAPABLE OF MEETING EMERGENCY OIL NEEDS

Department of the Navy and
Department of the Interior

Executive orders issued between 1912 and 1924 established four Naval Petroleum Reserves and three Naval Oil Shale Reserves to provide oil for Navy ships. The purpose of the Reserves, as later stated by law, is to maintain petroleum resources in a standby production until needed for national defense. The Office of Naval Petroleum and Oil Shale Reserves (ONPR) has defined an event requiring oil for national defense as any crisis determined by the Congress, such as an armed conflict, which would reduce or eliminate oil imports or overseas military fuel purchases. According to ONPR officials, the usefulness of the Reserves depends on their ability to substitute for such losses. Therefore, the Navy must be able to:

- Produce significant quantities of oil from the Reserves on short notice.

- Preserve the oil in the ground until needed by restricting production to the minimum necessary to maintain the fields in a state of readiness.

The Naval Petroleum Reserves capability of producing oil for emergency needs has not been fully developed. Petroleum Reserve No. 1, the only Reserve for which an operational readiness requirement has been established, does not have adequate facilities to meet this requirement due to lack of funds. The ability of the other Petroleum Reserves to produce oil for emergency needs on short notice is negligible. Without additional development, which could take up to 10 years and could cost more than \$2 billion, the Reserves could supply only a very small portion of the oil that the Navy believes might be needed in an emergency. In addition, oil imports are expected to increase sharply by the mid-1980s and it does not appear that the Reserves could substitute totally for them, even if developed fully.

The Navy has had to produce oil from Petroleum Reserves Nos. 1, 2, and 3 in excess of the minimum amount considered necessary to maintain the fields in a state of readiness.

Excess production has been necessary, in part, to prevent drainage of oil from the Reserves by adjacent commercial wells, many of which are on Federal land administered by the Department of the Interior. Also lands adjacent to Petroleum Reserve No. 4 on the Alaskan North Slope have been leased commercially, and development of commercial wells may force the Navy into offset production to prevent drainage.

Legislation the Congress is considering could directly affect the mission and usefulness of the Naval Petroleum Reserves. For example, one bill proposes production and sale of oil from Petroleum Reserve No. 1 to cover the costs of terminating certain offshore oil leases in the Santa Barbara Channel and of exploring Petroleum Reserve No. 4. Such production would reduce substantially the recoverable resources in one of Reserve No. 1's major oil deposits, whose production facilities comprise the bulk of the Reserve's operational readiness capability.

The present state of the Reserves and the extensive oil production which would be required to comply with the proposed legislation was not consistent with the intent of the legislation which established the Reserves (10 U.S.C. 7421-7438). GAO therefore recommended that the Secretary of the Navy, with the approval of the President

- determine how much oil the Reserves should be able to produce and how soon the oil should be available to meet national defense needs and

- submit to the Congress a plan for adequately developing and conserving the Reserves.

The Navy concurred in GAO's findings and stated it would submit to the Congress a proposal for developing the Reserves. However, according to the Navy, the current Five Year Defense Plan contains no provision for such a program. The Navy also said it would work jointly with Interior to resolve any potential leasing and drainage problems at Petroleum Reserve No. 4.

Interior agreed that the extent to which the Reserves should be explored should be determined but suggested that such exploration be limited to Petroleum Reserves Nos. 1 and 4. (B-66927, Oct. 5, 1972.)

MAINTENANCE, REPAIR, AND OVERHAUL

NEED FOR BALANCED REPAIR AND PROCUREMENT PROGRAMS

Department of Defense

GAO reviewed certain repair programs in each of the military services to determine whether the most economical mix of buying and repairing was used. In the Navy, the Air Force, and the Marine Corps there were only a few insignificant instances when materiel was procured while similar items were not repaired. In the Army, there also were only a few instances but some involved substantial amounts.

In April 1971 there were about 980 armored personnel carriers (M113A1s) to be repaired at Army depots in the United States. The Army Tank Automotive Command (TACOM) originally scheduled 454 vehicles for repair in fiscal year 1971 but only 42 were actually approved for repair because TACOM had not been provided enough operation and maintenance funds. During fiscal year 1971, however, TACOM spent about \$34 million to buy 1,125 armored personnel carriers.

It costs about \$12,000 to overhaul an M113A1 and about \$31,000 to buy a new vehicle. Thus, while the 412 vehicles not included in the fiscal year 1971 repair program could have been repaired for about \$4.9 million, it cost about \$12.8 million to buy new ones.

A similar condition existed in the Army Mobility Equipment Command for five items of equipment GAO reviewed.

GAO recommended that the Army establish procedures to identify situations in which repair programs are not sufficiently funded but procurements of new items are scheduled. In those cases, funds should be transferred from the procurement to the operations and maintenance appropriation to create balanced repair and procurement programs.

The Army generally agreed with GAO's recommendations and published guidelines which restrict procurement of principal items when an unfunded repair requirement exists. The Army applied these guidelines when it prepared its fiscal year 1973 budget and reduced planned procurements by \$159.9 million with a corresponding increase in overhaul programs of only \$28.7 million. (B-146888, Jan. 6, 1972.)

NEED TO INCREASE REPAIR OF
AIR-TO-AIR MISSILES

Department of the Navy

The Navy placed too little emphasis on repairing Sparrow and Sidewinder missiles in fiscal year 1971. New ones were ordered and funds were requested to procure additional missiles in fiscal year 1972 while the number needing repair increased. The Navy's readiness goal was not met and the Navy's capability for air-to-air combat was impaired.

Since repair takes less time and costs less, GAO suggested that additional funds be provided to repair Sparrow and Sidewinder missiles in fiscal year 1972 by transferring funds from other repair programs or reprogramming new missile procurement funds.

The Navy replied that it would consider this in its midyear budget review but, because of contract commitments and other factors, it was undesirable to curtail production of new missiles programmed for procurement in fiscal year 1972.

GAO accepted the Navy's position but recommended that, if a similar situation occurs in fiscal year 1973, the Navy act earlier to transfer procurement funds to the operation and maintenance appropriation to fund a larger repair program. (B-132995, Apr. 25, 1972.)

ADMINISTRATION OF MANPOWER MATTERS

PROBLEMS OF ESTABLISHING REQUIREMENTS FOR AND OBTAINING MAXIMUM UTILIZATION OF THE PROFESSIONAL MEDICAL PERSONNEL IN THE MILITARY SERVICES

Department of Defense

The services spend more than \$2 billion annually for health care for servicemen and their dependents. More than 200,000 medical personnel, of whom more than 33,000 are professionals, provide this care. Because of congressional concern with the national shortage of physicians, dentists, and nurses, GAO reviewed the services' use of their professional medical resources. Many medical officers were being used to fill staff and administrative positions in the various Washington headquarters and intermediate commands where, in many cases, their professional abilities were being used only part time.

Also there was no uniform method of establishing manpower requirements for medical personnel in the services. Imbalances existed in the number of medical professionals authorized and assigned in each service and in certain medical specialties. Although the military departments said that retention rates of medical personnel were a serious problem, they had not set goals for the numbers and types of experienced professionals that should be retained. The services had independently studied these and other health care problems but, in most cases, no coordinated effort had been made to solve mutual problems.

GAO recommendations to the Secretary of Defense concerning use of medical personnel as administrators included:

- Assigning nonmedical personnel to staff administrative and management positions at the headquarters levels and using professionals as consultants for making medical decisions.
- Placing Medical Service Corps officers with master's degrees in hospital administration in positions as hospital administrators.

- Expanding the paraprofessional programs for physician assistants and ancillary and support personnel.

Regarding manpower requirements, GAO recommended that the Department of Defense:

- Develop and direct the use of uniform staffing criteria for fixed medical facilities, supported by workload-related standards consistently applied by all the services.
- Develop a system for assigning medical specialists on a regional or an area basis.
- Direct the services to identify and justify professional medical personnel requirements and to develop retention goals and career programs.

Other recommendations to the Department of Defense included implementing recent contractors' recommendations to improve productivity of dental health personnel and instituting controls over studies of medical problems shared by all the services to minimize overlapping and duplication.

DOD generally agreed with GAO's findings, conclusions, and recommendations. To implement these recommendations DOD is:

- Studying alternate arrangements, including the one GAO recommended, for medical staff organization at the departmental level.
- Proceeding with a 2-year test under which Medical Service Corps officers trained as health service administrators will serve as commanders of four small treatment facilities.
- Training military corpsmen as physician assistants and training nurses in certain clinical specialties to increase the physician productivity.
- Considering establishing a system under which military medical specialists, regardless of service affiliation, will be used on a regional or an area basis.

--Developing a plan to establish effective controls for in-house or contract studies of medical problems shared by the military departments.

DOD also recognizes the need to develop and use uniform staffing criteria for fixed medical facilities. (B-169556, Dec. 16, 1971.)

EXTENSIVE USE OF MILITARY PERSONNEL
IN CIVILIAN-TYPE POSITIONS

Department of Defense

Department of Defense (DOD) policy requires that civilians will be used to fill all positions not requiring military personnel for reasons of law, training, security, discipline, rotation, combat readiness, or a need for a military background to successfully perform assigned duties. If this policy is followed, the military departments should be able to maximize the use of military personnel in military positions and thereby hold military manpower requirements to the minimum needed to safeguard the national security. This, in turn, would aid in achieving an all-volunteer force. GAO reviewed assignment practices within the services to determine whether this policy was being implemented.

At the military installations where GAO made the review, military personnel were being used extensively in civilian-type positions, contrary to DOD policy. Although the services recognized the benefits and importance of carrying out the policy, it had not been followed consistently because, according to installation commanders, of budgetary restrictions and civilian personnel ceilings. In GAO's opinion a major contributing cause was the military departments' failure to determine the type and number of positions which should be filled by military personnel and which by civilians. Until military department headquarters make these determinations and provide implementing guidelines to subordinate commands

- it is likely that installation commanders will continue to make subjective decisions concerning assignments and
- realistic estimates of the numbers of military and civilian personnel required to fulfill the departments' missions cannot be included in future budget requests.

Since military and civilian personnel costs are funded in separate appropriations, it is not reasonable to expect the Congress to appropriate funds for these personnel on a basis consistent with DOD's policy unless the budget requests are based on estimates prepared within the framework of that

policy. Moreover, since the Office of Management and Budget usually establishes civilian personnel ceilings, DOD must provide that agency with realistic estimates of the number of military positions that can be converted to civilian positions and with convincing justification of the number of positions needed to accomplish its mission.

GAO recommended to the Secretary of Defense that he require the military departments to review personnel requirements and to determine whether the positions should be filled by military or civilian personnel. Review findings should be formalized in specific guidelines for subordinate commands and installations. Personnel survey teams, which periodically evaluate the management and use of personnel at military installations, should review compliance with the DOD policy and guidelines.

GAO also recommended that, if the Congress wished to permit early action on the substitution of civilians for an equivalent or greater number of military personnel, DOD be authorized to transfer funds from fiscal year 1973 military personnel appropriations to the appropriation from which civilians are compensated. Such transfer authority was subsequently included in Public Law 92-570, which made available, without prior reprogramming approval, \$25 million for the specific purpose of converting military positions to civilian positions. The act also provided that additional amounts of the general transfer authority could be used for this purpose, if required.

DOD did not agree that lack of staffing guidance at the installation level was a major restriction to full application of the policy on the use of civilians. DOD did agree that authority for a transfer of funds between appropriations would facilitate initiation of a civilianization program in fiscal year 1973 but stated that approval for such a program was contingent upon the results of a civilianization study, substantially along the lines recommended in GAO's report, which was then underway. (B-146890, Mar. 20, 1972.)

ESTABLISHMENT OF DUPLICATE
TRAINING CAPABILITIES

Department of the Air Force

Department of Defense (DOD) directives provide that (1) the training facilities of a military department be used to the maximum extent in meeting the requirements of the other military services and (2) duplication be eliminated or avoided when practicable and when economically and efficiently warranted. The Air Force recently discontinued using six common-skills training courses offered by other services and had established similar courses of its own. This was done even though the Air Force considered the training provided by the other services to be adequate and the one-time costs of establishing the new courses would be nearly \$2 million and annual recurring costs would be at least \$23,000. In addition to those six courses, the Air Force established three other courses formerly conducted by other services, approved the establishment of eight others, and was considering three more.

In the report to the Secretary of Defense on this matter, GAO stated that the costs versus the benefits expected to be received by DOD as a whole should be weighed fully before establishing the new training courses, since they duplicated training available from other services. GAO recommended, therefore, that the Secretary of Defense direct the Air Force to advise him, on a priority basis, of the specifics and rationale for establishing any new training courses being provided by other services.

DOD, commenting on the report, stated that the Air Force had been required to do this. According to DOD, a selective review of common training would be undertaken during fiscal year 1973 which would cover not only cost effectiveness but quality of instruction, the relationship of instruction to new tasks to be performed as a result of changing job structures, the facilities necessary to accommodate fluctuating training requirements, and the effect of new equipment upon the curriculum. The military departments would be requested to scrutinize carefully any major contemplated deviations from the common-training concept and to reach more frequent accords among themselves in accommodating new instructional and student management requirements. (B-175773, May 23, 1972.)

INEFFECTIVE REVIEW OF IN-HOUSE
PERFORMANCE VERSUS CONTRACTOR
PERFORMANCE OF SUPPORT ACTIVITIES

Department of Defense

The Department of Defense (DOD) spends about \$6.3 billion annually to provide military installations with commercial and industrial services and products, such as grounds and building maintenance, food service, transportation, and ammunition. About 82 percent of these expenditures are for products and services produced by Government employees. The Office of Management and Budget requires that these products and services be obtained from private contractors unless an in-house source of supply is necessitated by economy, military readiness, or certain other exceptions. An agency review of each in-house commercial or industrial activity is required at least once every 3 years to insure that its continuance is justified. The reviews should include cost studies when in-house performance is based on economy.

GAO reported to the Congress that the reviews by the military departments of in-house commercial and industrial activities were not effective because they were not performed in the manner required. Except in a few cases where cost studies had been made, there were no factual explanations included in the review reports supporting local recommendations that in-house performance of activities be continued. The few cost studies made showed that savings could be realized by converting activities from existing in-house performance to contract performance or vice versa. These studies, GAO believes, indicate significant potential savings in activities not yet reviewed. Although the services should have completed the first 3-year cycle of reviews by June 30, 1968, they were all far behind schedule. As of June 1971 many activities had not been reviewed at all. Although it is required that all activities subject to review be included on an inventory list, certain activities subject to review were not on the lists, while others, for which reviews were not mandatory, were included. In addition, Army installations had begun new in-house activities without first obtaining required department-level approval.

GAO recommended to the Secretary of Defense a number of improvements for managing the activities discussed in the

report. DOD has advised GAO that it has implemented most of the recommendations by revising pertinent directives and instructions which will recognize

- unsupported in-house justifications,
- the need for guidelines to insure complete inventories, and
- the requirement for new start approval.

DOD also advised GAO that it had conducted a special training course for top officials throughout the country to increase management awareness and improve technical know-how in reviewing the activities as required. (B-158685, Mar. 17, 1972.)

IMPROVEMENTS NEEDED IN TRAINING AND
EQUIPPING THE ARMY NATIONAL GUARD FOR
MAINTAINING ORDER DURING CIVIL DISTURBANCES

Department of the Army

Between January 1965 and October 1971, Army National Guard units were used in 260 instances to assist local and State police in maintaining order during urban riots and campus demonstrations. Two Presidential commissions established during this period (Kerner and Scranton Commissions) criticized the Guard's performance during certain disorders and recommended that riot control training of guardsmen be improved and expanded. GAO reviewed the program of training for civil disturbance control given to guardsmen to determine the effectiveness of changes made in response to lessons learned from the disorders and the suggestions made by the Commissions.

Since the 1967 Detroit riot, the Army and the Guard have acted to improve civil disturbance control training and to more adequately equip personnel. The amount of training compared favorably with that given local police civil disturbance units. Guard officials and most guardsmen GAO questioned believed themselves adequately trained. A recent policy change, however, discontinued the requirement for mandatory refresher training and permits unit commanders to determine how much refresher training, if any, will be given their guardsmen. Consequently, some units may not receive adequate training. Regarding equipment, guardsmen now have better physical protection than before, but equipment options are needed to bridge the gap between riot batons and rifles.

GAO recommended that the Secretary of Defense

- require appropriate refresher training for all National Guard units with a civil disturbance control mission,
- establish an evaluation system to insure that units maintain disorder control capabilities, and
- require the Army to continue research on, and provide field training in the use of, special equipment and munitions.

Department of Defense and National Guard Bureau officials advised that consideration would be given to GAO's recommendations. (B-160779, Sept. 8, 1972.)

PROBLEMS IN ADMINISTERING THE
DRUG ABUSE CONTROL ACTIVITIES
AFFECTING MILITARY PERSONNEL

Department of Defense

The Congress and the President have identified drug abuse as one of the most serious problems facing both the civilian and military segments of American society. Recognizing the high level of concern by Government and the American people, GAO reviewed the programs of the Department of Defense (DOD) and individual military services to control and reduce drug abuse by military personnel.

DOD has actively cooperated with other Federal and local Government agencies primarily responsible for enforcing laws against illegal trafficking and use of drugs, both in the United States and abroad. Intensification of enforcement activities, however, may have contributed significantly to the replacement of marihuana use by use of more dangerous drugs which are not as easily detected.

The military services were conducting a wide variety of educational activities to combat drug abuse; however, without a good definition of the nature and extent of the problem and having no valid means of measuring the benefits accruing from the various activities, DOD had no assurance that the services' drug education programs were effective.

Urinalysis has been a highly successful technique in identifying heroin, barbiturate, and amphetamine users. However, because of technological limitations of tests being used, the incidence rates being reported did not accurately indicate the overall extent of drug use.

Implementation of DOD exemption programs, offering assistance to servicemen who volunteered for treatment of their drug problems, was relatively complex and confusing. Frequent changes in these programs contributed to this confusion, engendered considerable distrust, and adversely affected the programs' credibility, GAO found.

There were indications that DOD experienced greater success in medical detoxification and treatment of drug abusers than in their rehabilitation. Rehabilitation

programs had very limited success, if the number of servicemen returned to normal duty is used as a criterion.

GAO recommended that DOD develop a system to provide a basis for evaluating its educational, treatment, and rehabilitation activities relating to the drug abuse control program. DOD generally agreed with GAO's observations and concurred in the recommendation. In commenting on the report, however, DOD noted that the Drug Abuse Control Program had been in its initial stages at the time of GAO's review. Significant progress has been made since the time frame covered by the report, DOD stated, with positive programs being implemented to control the drug abuse problem. (B-164031(2), Aug. 11, 1972.)

ACCOUNTING AND INFORMATION SYSTEMS

BETTER FINANCIAL INVENTORY ACCOUNTING NEEDED

Department of Defense

The Congress, in numerous laws, and the Comptroller General, in prescribing accounting principles and standards, have long required that all Federal agencies have adequate property accounting records in both quantities and dollars. However, none of the Department of Defense (DOD) operational financial inventory accounting systems GAO reviewed had the financial controls necessary to improve the accuracy of inventory data used for making management decisions.

In all systems reviewed, the financial records merely reflected inventory transaction data--receipt and issuance of items--as recorded in quantity records. Consequently, incorrect quantity data resulted in incorrect financial data. There was no comparison of quantity record data and related financial data before the data was recorded in the financial record. Thus, there was no assurance that the quantities paid for agreed with the quantities entered in the detailed stock records and, subsequently, in the financial record.

All the military services and the Defense Supply Agency (DSA) have plans in various stages of implementation that will change their logistics and accounting systems. Although the proposed system changes do promise varying degrees of improved inventory control, only DSA's and the Army's changes appear to include the types of financial controls GAO believes necessary.

Both the Navy and Air Force have indicated that their new systems will not incorporate such financial controls. The Navy maintains that such controls can be added after the new systems are implemented. The Air Force believes that its new system should be implemented and evaluated before it considers using such financial controls.

DOD agreed generally with GAO that both financial and item inventory controls can and should be improved. The DSA system and the one the Army is developing will have such financial controls, DOD believes.

GAO recommended that the Secretary of Defense evaluate the controls incorporated in the DSA system and insure that similar controls are built into the proposed systems of the other services, preferably during the design stages. Such techniques should include:

- The comparison of quantity record data and related financial data.
- System controls and procedures to insure the timely research and correction of discrepancies occurring in the comparison process.
- Periodic comparison of financial and quantitative record totals as an overall test of reliability.

(B-146828, May 17, 1972.)

INCREASED USE OF FINANCIAL DATA AND
AN IMPROVED TARIFF SYSTEM NEEDED BY
THE MILITARY AIRLIFT COMMAND

Department of the Air Force

The Military Airlift Command (MAC), Department of the Air Force, provides air transportation for all military and certain civilian agencies. An industrial fund system is used whereby MAC is paid by its customers for a significant part of the expenses it incurs.

The tariff rates established (one for passengers and one for cargo) to reimburse the fund did not differentiate between high- and low-cost services and decisions regarding the initiation, expansion, and continuation of services were made without considering financial data.

GAO concluded that the Air Force should:

- Establish a tariff system in which the rates charged more closely approximate the cost of providing the services.
- Consider costs and associated revenues, as well as military requirements, in deciding whether services should be initiated, expanded, or continued.
- Use the industrial fund to disclose the cost consequences of decisions, rather than merely as a financing device.

GAO recommended that (1) available financial data be compiled by identifiable operational segments for use in airlift services management, (2) the Air Force make a study to determine the feasibility of devising and implementing a tariff system in which rates more closely approximate the cost of services, and (3) the DOD directive governing industrial funds be revised to show more clearly the objectives of industrial funds to achieve better management.

On August 2, 1972, the Subcommittee on Transportation, Armed Services Committee, House of Representatives, held

hearings at which a GAO official testified, to insure that MAC was taking effective and timely action to correct the shortcomings pointed out in the GAO report. At the hearings DOD officials outlined the action initiated to revise the MAC tariff system so that rates more closely approximate the cost of providing the service and other corrective action taken pursuant to GAO recommendations. (B-133025, Jan. 5, 1972.)

INCOMPLETE INSTALLATION OF THE MANAGEMENT
ACCOUNTING SYSTEM FOR PROCUREMENT OF
EQUIPMENT AND MISSILES

Department of the Army

The Army's management accounting system for the procurement of equipment and missiles is potentially a valuable management tool but, after 7 years of effort, the system had not been fully implemented. Moreover, data produced by the partially installed system was not reliable and management had to use data produced by complementary systems. The inability to implement the system on a timely basis was due to:

- Failure by the Army to make an adequate study to determine the size and complexity of the task of implementing the system at each location.
- Lack of sufficient manpower and automatic data processing equipment.
- Delays by the contractor in completing the contract work to the satisfaction of the Army.
- Lack of adequate supervision and control over the system implementation.

GAO proposed that the Army provide the resources and controls needed to insure that the system is implemented and operable at the earliest practicable date and strengthen its control over future system implementations. The Army has taken action to comply with the GAO proposals. (B-163074, Feb. 18, 1972.)

DEFENSE INTERNATIONAL ACTIVITIES

CONTINUED INTENSIFIED EFFORTS NEEDED TO STRENGTHEN U.S. GOVERNMENT FOREIGN TAX RELIEF ON DEFENSE EXPENDITURES OVERSEAS

Department of Defense and Department of State

In January 1970 GAO issued a report to the Congress entitled "Questionable Payment of Taxes to Other Governments on U.S. Defense Activities Overseas" in which GAO recommended that the Secretaries of State and Defense jointly develop and promulgate specific guidelines that will define the U.S. tax exemption policy, clearly establish the responsibilities of the concerned U.S. agencies, and provide for an adequate management system to operate an effective tax relief program.

GAO issued a followup report in January 1972, informing the Congress of the progress being made to strengthen the U.S. Government foreign tax relief program on defense expenditures overseas. GAO noted that the Departments of State and Defense had taken commendable steps to strengthen the management and administrative procedures concerning the U.S. foreign tax relief program and were pursuing a unified course of action to minimize the payment of foreign taxes on U.S. defense expenditures overseas.

Despite these improvements, GAO noted that three countries in particular, Thailand, Vietnam, and Italy, presented continuing problems in the foreign tax relief program on defense expenditures overseas.

The United States did not have satisfactory tax relief agreements with the Governments of Thailand or Vietnam.

Although the Thai Government in 1972 granted a 1-year exemption from customs duties and taxes for milk ingredients imported by the U.S. Government, estimated to save \$250,000, these were not permanent measures and tax relief on bakery products remained to be considered in the light of a needed overall tax relief agreement with Thailand.

State advised that the U.S. Government had not yet negotiated with Thailand an overall formal or informal agreement for exemption from customs duties, taxes, and other

charges of U.S. defense expenditures in that country. It also advised that the American Embassy was continuing informal talks with Thai officials and, if satisfactory results were not obtained in the near future, State might need to press for formal diplomatic negotiations. As of August 1972, negotiation results had been disappointing.

With regard to Vietnam, State commented that, until the future pattern of U.S. Government expenditures had been assessed, any effort to enter into negotiations would be counterproductive.

In its January 1970 report, GAO discussed instances in which contractors had excluded taxes from their contract prices but, because of a breakdown in administrative procedures, had been unable to obtain tax relief from the Italian Government despite the fact that the United States had an agreement with it (Dunn-Vanoni Agreement) which stipulated that the Italian Government would assume the burden of taxes on U.S. defense expenditures in Italy. In January 1972 GAO reported that two contractors had filed appeals with the Armed Services Contract Appeal Board for reimbursement of the foreign taxes paid by them. In the event of an adverse judgment by the Board, these contractors will be free to bring suit against the U.S. Government. The exact amount of potential contractor claims is unknown, but it has been estimated in excess of \$1,000,000.

State noted that the validity of the agreement on reimbursing Italian contractors for registration and certain taxes had been confirmed to the American Embassy in Rome by the Italian Ministry of Foreign Affairs. The agreement was being tested in the Italian courts. Legislation was pending in the Chamber of Deputies to permit implementation of the agreement. The American Ambassador had personally interceded with the Italian Government to bring about a prompt solution.

GAO recognizes that this is a very complex problem which, in some cases, involves negotiations with foreign governments. However, GAO believes that efforts to reach satisfactory tax agreements and administrative arrangements with foreign governments should be intensified to eliminate as rapidly as possible the continued U.S. payment of foreign taxes on defense activities overseas. (B-133267, Jan. 6, 1972.)

NEED FOR CHANGES IN FUNDING
AND MANAGEMENT OF PACIFICATION
AND DEVELOPMENT PROGRAM IN VIETNAM

Department of Defense, Department of State,
and Agency for International Development

GAO reported to the Congress suggestions for changes in U.S. funding and management of pacification and development programs in Vietnam. The U.S. Government, to coordinate management of these programs, established in 1967 the Civil Operations for Rural Development Support (CORDS) organization to administer these programs. GAO found that CORDS had not established financial control nor had it been given responsibility for financial stewardship over more than \$2.1 billion provided by the U.S. in direct support of these programs.

CORDS receives funds from the Department of Defense (DOD), the Agency for International Development (AID), and other U.S. agencies. The contributing agencies procure most of the equipment and commodities used in CORDS programs and provide the U.S. personnel to oversee the programs.

Neither CORDS nor DOD had developed a system for CORDS programs that would provide sufficient data to budget the assistance required by these programs or to measure the amounts of assistance already provided. GAO believed that this information was not known partly because of the use of the military assistance service funded system which also provided funding for assistance to the Vietnamese Armed Forces. GAO concluded that the justification presented to Congress in 1966, based on conditions at that time, for merging military assistance appropriations for Vietnam into the regular appropriations of DOD might no longer be valid.

Financial controls over other programs administered by CORDS were loose. GAO found that (1) about \$360 million in U.S. owned or controlled local currency had been obligated for CORDS programs with limited U.S. say over how the money would be spent and (2) controls over the commodities provided for war victims were not established; large quantities of food had spoiled, unneeded items had been purchased but not used for long periods, and items had been diverted to ineligible recipients.

GAO concluded that, in view of these observations and with the emphases on Vietnamization and withdrawal of U.S. military personnel who make up the majority of U.S. personnel assigned to CORDS, it might be appropriate to reexamine the justification and rationale for continuing CORDS.

GAO recommended that Defense, State, and AID review the need to retain CORDS. GAO also recommended that improvements be made in the management and financial controls of the pacification and development programs.

GAO suggested that the Congress might wish to reexamine the need to continue funding the major portion of the pacification and development programs in Vietnam from regular DOD appropriations. By appropriating these funds as military assistance under the Foreign Assistance Act, the Congress would have more meaningful program and cost data on aid to Vietnam and could exercise more control over the amounts of assistance to be provided and the purposes for which the aid will be used.

GAO did not obtain formal agency comments; however, it discussed the substance of the report with appropriate officials of Defense, State, and AID. Those officials agreed generally with the facts in the report but they believed it to be overly critical in tone. They believed that the report failed to recognize sufficiently the war environment or that CORDS activities were Vietnamese programs administered by the Vietnam Government. (B-159451, July 18, 1972.)

OPPORTUNITY FOR SAVINGS IN
PROVIDING WAR-RISK INSURANCE FOR
CONTRACTOR PROPERTY AND EMPLOYEES

Department of Defense, Department of State,
and Agency for International Development

The Department of Defense (DOD) and the Agency for International Development (AID) generally reimbursed Government contractors for the cost of insurance purchased to provide protection against war hazards to their property and employees.

The General Accounting Office (GAO) found that the cost of this war-risk insurance to the U.S. Government substantially exceeded the losses experienced by its contractors. This was true for insurance purchased for contractor-owned vessels, contractor employees, and third-country nationals.

GAO observed that the Military Sealift Command and the Defense Fuel Supply Center, a unit in the Defense Supply Agency, had followed a practice of reimbursing contractors for premiums paid for commercial war-risk coverage on vessels and crews. Savings (excess of cost over losses) of \$16.2 million could have been realized over the 3-year period covered by the report if these DOD agencies had followed the Government's long-standing policy of self-insurance. It was GAO's opinion that significant savings could be expected if these agencies adopted a self-insurance policy for future years.

GAO also found that DOD and AID had reimbursed contractors for commercial war-risk insurance to provide contractor employees with supplemental coverage for war-hazard death or injury. The coverage provided lump-sum benefits in addition to the workmen's compensation type of benefits provided under the Defense Base Act and the War Hazards Compensation Act. The cost of such insurance exceeded the losses incurred by \$2.7 million over the 3-year period reviewed.

AID and two military commands have continued to reimburse contractors in Vietnam for war-risk insurance coverage of third-country nationals (citizens of countries other than the United States and Vietnam) employed by the contractors even though a program of self-insurance generally adopted by DOD for such employees has offered substantial savings.

GAO therefore recommended that the Secretary of State and/or the Secretary of Defense:

- Establish a plan of self-insurance for contractor-owned vessels.
- Seek legislation to authorize lump-sum benefit payments to contractor employees for war-hazard death or injury.
- Discontinue reimbursing contractors for the cost of supplemental war-risk insurance and, in the interim, reopen negotiations on the present policy to bring the administrative costs, brokers' commissions, and profit under Government audit.
- Seek authority from the Congress to self-insure for war-risk losses incurred by third-country nationals under AID contracts and issue instructions to all DOD procurement activities to provide for self-insurance of third-country nationals as authorized by Defense Procurement Circular 64.

Except for the matter of third-country nationals, DOD generally disagreed with those recommendations directed toward promoting the concept of Government self-insurance. DOD advised that their studies of these matters concluded that it would be impractical to implement an exclusive self-insurance program and that the financial problems involved in self-insurance were such that adoption of self-insurance was not recommended. Also, since contractor recruitment in Southeast Asia was past its peak, it did not appear feasible to pursue legislation to permit the payment of lump-sum benefits.

AID, in responding for the Secretary of State, agreed that savings might be available through self-insurance but stated that administrative cost and other administrative problems would preclude it from undertaking a self-insurance program.

GAO believes that savings from a self-insurance program warrant the additional administrative burden. In GAO's opinion, the policy of self-insurance by the Government should be broadened to cover all programs, even when in a period of decline, because the self-insurance concept offers an inherent savings to the U.S. Government in all but the most unique situations. (B-172699, Nov. 9, 1971.)

PROBLEMS IN ADMINISTRATION OF THE
DEPENDENT SHELTER PROGRAM IN THE
REPUBLIC OF VIETNAM

Department of Defense

Under a program designated as the Dependent Shelter Program, housing for the families of personnel in the Republic of Vietnam Armed Forces is being constructed at or near Vietnamese military installations to raise troop morale and reduce desertion rates. The program was begun jointly by the United States Government and the Vietnamese Government in 1966. U.S. participation in the program is expected to continue until 1975 and to cost about \$37 million. GAO reviewed this high-priority Department of Defense (DOD) undertaking to determine the progress made in achieving program objectives and the manner in which the program was being managed.

DOD was unable to provide GAO with definitive data showing whether progress was being made in achieving program objectives. Program implementation was inadequately planned and management was fragmented and ineffective. These circumstances had contributed, and, unless corrected, would continue to contribute, to a number of problems affecting overall program performance. These problems related to

- improper computation of housing requirements,
- poor construction quality,
- construction delays,
- inadequate controls over program costs and materials,
and
- insufficient use and inadequate maintenance of completed housing.

During GAO's visits to various installations throughout Vietnam, U.S. officials stated that a major difficulty they had encountered had been a lack of Vietnamese interest in the program. Also, GAO found no evidence that any DOD or military department internal review group had reviewed

the program. In GAO's opinion, had such reviews been made, problems could have been identified and corrected much earlier.

GAO recommended that the Secretary of Defense have data developed that could be used in evaluating progress made in achieving program objectives and that, upon receipt of this data, he determine the need to continue or redirect the program before substantial additional U.S. funds were expended. If he decided that the program should continue, either along existing lines or in new directions, positive action should be taken to overcome the problems our report identified and periodic review of the program would be necessary. In commenting on the report, DOD generally agreed with GAO's findings and indicated that actions were being taken on the recommendations. (B-159451, Feb. 17, 1972.)

MILITARY READINESS

NEED FOR IMPROVEMENT IN READINESS OF STRATEGIC ARMY FORCES

Department of the Army

GAO reviewed the Strategic Army Forces (STRAF), composed of 4-1/3 divisions that are to be constantly available to support national commitments, and found that it would be difficult for STRAF units to deploy quickly because many are not combat ready. Considerable maintenance would be required to make the essential combat and combat support equipment fully ready. In the units GAO reviewed more than one-third of such equipment could not perform their primary missions.

Battalion and division levels did not have adequate supplies to promptly repair equipment. In the three divisions reviewed:

- No stock was available for about 25 percent of the authorized repair parts.
- Requisitions for repair parts were not being prepared promptly.
- No followup actions were being taken on unfilled requisitions.

Other factors beyond the divisions' control, such as high turnover of personnel, lack of qualified personnel, and funding restrictions, prevented them from achieving and maintaining a high state of readiness.

Readiness reports did not always contain accurate information to permit command officials at division levels and at the higher echelons to adequately evaluate divisions' readiness.

Since the divisions' manpower problems are not likely to be remedied in the near future, GAO recommended that the Army consider alternatives to protect its substantial investment in STRAF equipment and consider whether restructuring STRAF would help. The criteria used in preparing

readiness reports should be revised, and the divisions should more closely supervise requisitions.

The Army generally concurred in GAO's evaluations and many of its suggestions and recommendations. It did not analyze, however, the costs or benefits of alternatives to protect equipment or to restructure STRAF. GAO recommended that the Army study such matters. (B-146896, May 8, 1972.)

OTHER AREAS OF OPERATIONS

POTENTIAL SAVINGS THROUGH BETTER PROCEDURES FOR SETTING RENTS FOR CIVILIAN OCCUPANTS OF MILITARY FAMILY HOUSING

Department of Defense

GAO wanted to know if Department of Defense (DOD) policies and practices for rental of family housing to about 4,200 civilian employees were resulting in fair rental payments to the Government and compliance with legislation and administrative regulations. GAO wanted to consider also the feasibility of an alternative to the appraisal method of adjusting rental rates which would simplify procedures, economize operations, and make rates more equitable.

The Office of Management and Budget (OMB) prescribes the principles and procedures for establishing rents for quarters leased to Government employees. Generally, these are established through fee appraisal with appraisals adjusted every 3 years. The rent should be based on prevailing rates for comparable housing or, if such housing is not present in the area, the reasonable amount of income a property should produce with respect to its fair market value.

The Government lost an estimated \$1.6 million in income because of unauthorized downward adjustments in rents, unauthorized utility charges, and delays in establishing and implementing rates. This loss is continuing in some cases.

The losses occurred primarily because of lack of control at both the Washington and local levels to insure that rental rates are properly established and implemented promptly. Additionally, regulations are equivocal in certain respects and have been interpreted differently by various people.

The method of implementing and adjusting rental rates through appraisal is too complicated. GAO believes the Consumer Price Index of the Bureau of Labor Statistics, Department of Labor, could be used to annually adjust rental rates for military-owned housing.

GAO suggested that:

- The Secretary of the Navy have rents at the Naval Weapons Center, China Lake, California, and the rents and utility charges at the Naval Ammunition Depot, Hawthorne, Nevada, reexamined.
- The Secretary of Defense, along with the Director, OMB, consider revising OMB Circular No. A-45 to clarify (1) what kind of adjustments, if any, may be made to basic shelter rents once such rents have been computed on the basis of comparable private housing and (2) what factors should be considered in computing utility charges.
- The Secretary of Defense provide for closer control over the establishment of rents and utility charges to insure that they are in accord with A-45 and are periodically revised and put into effect promptly.
- To eliminate the need for a triennial appraisal and the problems in adjusting rental rates, the Secretary of Defense, in conjunction with OMB, test the Consumer Price Index as a basis for annually adjusting rental rates for military-owned housing.

DOD agreed that the rents at China Lake and the rents and utility charges at Hawthorne should be reexamined and said the Navy had directed such a reexamination. The Navy has implemented corrective action; for example, the utility rates at China Lake have been revised upward resulting in additional revenue to the Government of \$107,500 per year.

Regarding revision of Circular A-45, OMB felt the problem lies in DOD's implementation of it rather than in its wording. OMB said it will consider modifying A-45 to provide additional guidance in computing utility charges.

DOD agreed to participate in tests of the Consumer Price Index. OMB endorsed the GAO suggestion and said it had begun informal discussions with interested agencies concerning the tests.

GAO asked the Secretary of Defense, in conjunction with the Director, OMB, to advise it of the test results. (B-157391, Oct. 5, 1972.)

OPPORTUNITIES FOR FURTHER CONSOLIDATION OF
SUPPORT FUNCTIONS IN THE PACIFIC AREA

Department of Defense

It is Department of Defense (DOD) policy to reduce costs by having one military service perform support functions for the rest. In its report on DOD operations, the Blue Ribbon Defense Panel concluded that effectiveness, efficiency, and economy could be improved through increased sharing of logistics functions.

The Pacific Command had numerous interservice support accomplishments. However, it overlooked many opportunities to reduce costs by consolidating common services. For example:

- The Army and Air Force both had laundry and drycleaning facilities within 22 miles of each other in the Kanto Plains, Japan, area. The Army's more modern plant was operating at less than one-third capacity while the Air Force's plant was also operating at less than full capacity. After GAO's review the Air Force plant was closed in December 1971 with annual savings estimated to be as much as \$750,000.
- The Army, Navy, and Air Force each maintain a general hospital in the Tokyo, Japan, area within 30 miles of each other. The Army hospital had an occupancy rate during the 6-month period ended May 31, 1971, of only 68 percent with a lower rate expected in the future because DOD had stopped evacuating patients from Southeast Asia to Japan. To convert the Army hospital in Tokyo to a dispensary would save about \$2 million a year. During GAO's review, the size of the Army hospital was reduced and DOD promised to consider converting it to a dispensary as soon as the situation in Southeast Asia permits.

GAO suggested that the Secretary of Defense:

- Establish a full-time staff for administering an interservice support program in the Pacific Command.

--Develop procedures to insure that the unified command knows about, and adequately considers, all potential interservice support opportunities.

--Clarify or revise Joint Chiefs of Staff directives to provide clear-cut authority for a unified command to direct interservice arrangements when it would be economical and when the military missions of the services would not be compromised.

DOD cited several actions underway that would enhance interservice support. (B-160683, May 11, 1972.)