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BY THE COMPTROLLER GENERAL

Report To The Chairman, Subcommittee On Military Installations And Facilities, Committee On Armed Services House Of Representatives

RELEASED

OF THE UNITED STATES

Reserves' Reported Facilities Backlog Now Exceeds $2 Billion; Acquisition Planning Questioned

In 1970 Defense Reserve components reported a $1.2 billion backlog of facility needs. Between fiscal years 1970 and 1979, the Congress provided over $1 billion to meet these needs. However, the backlog has continued to grow, until it is now estimated at over $2 billion.

This report points out that:

--The backlog overstates the Reserves' needs for construction funds and therefore does not provide the Congress with an accurate indication of needs.

--By strengthening State Reserve Force facility boards, the Reserves could satisfy many of their facility needs in a more timely manner and at less cost by making greater use of existing facilities and by consolidating requirements into fewer, but larger facilities.

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LCD-80-45
MAY 19, 1980

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

IN REPLY
REFER TO:

B-196752

The Honorable Lucien N. Nedzi, Chairman
Subcommittee on Military Installations and Facilities
Committee on Armed Services
House of Representatives

Dear Mr. Chairman:

As requested in your January 26, 1979, letter, we reviewed the feasibility of Reserve Forces sharing or solely using regular force facilities which are either vacant or underused because of base realinement actions. This report also summarizes our views on other major issues of the Reserve Forces Facilities Acquisition Program.

On February 4, 1980, your office directed us to process this report without comments from the Office of the Secretary of Defense, if we had not received them by February 6, 1980. We did not receive comments by then and, therefore, the report is being issued without them.

As arranged with your office, we are sending copies of this report to the Director, Office of Management and Budget; the Secretary of Defense; the Secretaries of the Army, Navy, and Air Force; and other interested parties upon request.

Sincerely yours,

Comptroller General
of the United States

COMPTROLLER GENERAL'S
REPORT TO THE CHAIRMAN,
SUBCOMMITTEE ON MILITARY
INSTALLATIONS AND FACILITIES
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

RESERVES' REPORTED FACILITIES BACKLOG NOW EXCEEDS $2 BILLION; ACQUISITION PLANNING QUESTIONED

D I G E S T

The six Department of Defense Reserve components' reported backlog of unmet facility needs does not accurately reflect their needs for construction funds.

Approximately 38 percent of the 132 backlog construction projects reviewed by GAO were invalid. Other projects were questionable because, according to Reserve officials, the construction would correct deficiencies that have little, if any, impact on Reserve unit readiness. If the Department of Defense follows its own criteria, many of these projects should not be funded. Still others appeared valid but could not be constructed because of constraints other than a lack of Federal funds.

Unless the Department improves its review procedures for Reserve construction projects, not only will it fail to provide the information the Congress needs to make sound decisions on authorization and appropriation requests for Reserve facilities, but it also will decrease the likelihood that facility needs will be met in the most cost-effective manner. (See ch. 2.)

The Department has established State Reserve Force facility boards to assist in reviewing Reserve construction projects. The boards are responsible for identifying alternatives to unilateral construction and for making recommendations to the Department on the feasibility of using (1) existing facilities to satisfy Reserve requirements and (2) joint (interservice)

Some Reserve Force facility needs could be satisfied by sharing Active Force facilities that are fully used during the week but vacant or underused during the weekends when Reserve units train. (See ch. 5.)

When facility needs cannot be satisfied by using existing space, Reserve components plan to unilaterally construct new facilities even though joint construction is feasible and required and would be more cost effective. Additional opportunities exist to consolidate the facility needs of closely located activities of the same component. (See ch. 6.)

RECOMMENDATIONS

GAO recommends that the Secretary of Defense direct the services to:

--Revise review procedures to more effectively identify invalid and questionable projects before submitting them to the Congress.

--Use underused and vacant facilities at Reserve centers, Active Force installations, and installations being closed to the maximum extent possible.

--Adopt policies that encourage using and sharing Active Force facilities under an approach similar to the Coast Guard's augmentation concept.

The Secretary of Defense should also:

--Enhance the effectiveness of the State Reserve Force facility boards by adding a member to each board. The additional members, who should chair their respective boards, should be full-time employees reporting directly to the Department's office responsible for approving Reserve construction projects.

All of the Department's Reserve components disagreed with the recommendation that moratoriums be imposed on the construction of armory and Reserve facilities for a specified period of time, within 25 miles of completed unilaterally constructed armory and Reserve facilities as a method of getting the Reserve components to more closely evaluate joint construction opportunities. While it is not GAO's intent to preclude construction of facilities under any and all conditions, this recommendation, with appropriate exceptions for unanticipated changed conditions, can result in more joint construction.

Contents

CHAPTER 1

INTRODUCTION

Under the Department of Defense (DOD) total force policy, the Selected Reserve Forces are an important element of our Nation's defense capability. They are the prime source of trained and ready units to augment and sustain the Active Forces during an emergency. And now that the size of the Active Force is at its lowest level since World War II ended, Reserve Forces are assuming missions previously assigned to Active Forces.

The total Selected Reserve Force consists of seven components. Six of these are DOD components--the Army, Air Force, Marine Corps, and Navy Reserves and the Army and Air National Guard. The Coast Guard Reserve, the seventh component, comes under DOD during wartime but is managed by the Department of Transportation during peacetime. As used in this report, the term "Reserves" refers to all these components.

The following tables show the size of the Reserve Forces in relation to their parent Active Force components and the extent of the Reserves' responsibilities for major missions.

Mission	Percent of responsibility: Active Forces	Percent of responsibility: Reserve Forces
Army:		
Deployable forces	44	56
Infantry and armor battalions	48	52
Field artillery battalions	43	57
Tactical support	33	67
Air Force:		
Strategic airlift wartime capability	50	50
Tactical airlift aircraft	39	61
Airborne early warning aircraft	-	100
Air defense interceptors	37	63
Navy:		
Surface combatants	86	14
Tactical air squadrons	83	17
Antisubmarine warfare air squadrons	75	25
Marine Corps:		
Divisions	75	25
Tactical air squadrons	79	21

To ensure that Reserve units maintain a high degree of readiness, adequate facilities must be provided for unit training and administration and for maintenance of unit equipment.

DOD POLICIES ON PROVIDING FACILITIES FOR THE RESERVES

The National Defense Facilities Act of 1950 (10 U.S.C. 2231 et seq.) established the Reserve Forces military construction program to meet facility needs. The primary objectives of the act are to encourage joint construction and use of facilities and to allow Federal contributions to States for construction of armories.

--Unilateral construction of a new facility by a single Reserve component only when all the above methods have been carefully reviewed and found impractical or uneconomical by a State board.

While these methods are generally presented in order of cost effectiveness, there are exceptions. For example, the cost to renovate existing facilities to Reserve requirements could exceed the cost of new construction. Consequently, the directive states that, when appropriate, economic analyses and program evaluations of Guard or Reserve Forces facilities shall be made.

The Reserve components identify their facility requirements and submit projects to DOD requesting funds to satisfy those requirements.

THE CONSTRUCTION PROJECT APPROVAL PROCESS

The six DOD Reserve components receive appropriations for their facilities separately from their parent Active service. The Army Reserve, Army National Guard, Air Force Reserve, and Air National Guard each has a separate program and appropriation. The Navy and Marine Corps have a combined program and appropriation. Facility needs for the Coast Guard Reserve are funded as part of the Active Coast Guard program.

DOD's construction approval process starts each year with the Reserve units and programing offices of the Reserves' intermediate headquarters identifying facility deficiencies. Deficiencies can result from factors, such as mission changes, unit relocations, space criteria changes, or deterioration of existing facilities.

Lists of construction projects needed to correct the deficiencies are forwarded through command channels. Eventually, each Reserve component includes all known requirements into a long-range program. The long-range program consists of construction projects--identified by location, type, size of facility, and estimated cost--planned for each of the next five fiscal years. The program also includes a summary page showing the number of projects and the aggregate estimated costs for each year of the 5-year period, plus the residual no-year increment. As used in this report, the term "backlog" is synonymous with the long-range program. When the Reserves report their backlogs to the Congress, they are--in effect--reporting their long-range programs.

authorized amount provided for each Reserve component when the projects' estimated cost exceeds $175,000. Upon notification of the Congress, DOD must wait 30 days before proceeding with a proposed project. Additionally, both the Senate and House Committees on Appropriations require DOD to seek their approval before reprograming funds for projects. According to Reserve officials, the ability to reprogram 1/ projects provides the flexibility that they believe is essential to react quickly in satisfying urgent, unanticipated requirements.

RESERVE FORCE CONSTRUCTION BACKLOG

In 1970 the DOD Reserve components reported a $1.2 billion backlog of unmet facility needs.

To eliminate the backlog, DOD asked the Congress to increase funding for Reserve construction under a 10-year enhancement program. The Congress responded by appropriating more than $1.3 billion between fiscal years 1970 and 1979. However, in early 1979, DOD estimated the backlog at over $2 billion. 2/

Component	Backlog 1970	Backlog 1979	Increase (note a)	Appropriations 1970-79
	(000,000 omitted)			
Army Reserve	$ 328	$ 715	$387	$ 365
Navy and Marine Corps Reserve	248	199	-49	193
Air Force Reserve	52	153	101	101
Army National Guard	299	672	373	415
Air National Guard	273	378	105	288
Total	$1,200	$2,117	$917	$1,362

a/In our draft report we noted that the increase might be partially due to inflation. However, the Army commented that based on Engineering News Record indices of 862 for October 1970 and 1,869 for October 1979, the backlog actually decreased by about $485 million in constant dollar terms. The Army noted this decrease is apparently due largely to a reduced Navy Reserve mission rather than an increased funding level for construction.

1/Modify, add, or substitute.

2/This included all outstanding projects, less those to be constructed with funds already appropriated by the Congress.

in the fiscal year 1980 program and projects funded in earlier fiscal years but not constructed at the time of our review. While we did not attempt to develop a statistically valid sample of projects, we believe our findings are generally representative.

During our review of the projects, we considered factors that would have a bearing on whether existing facilities could be used. These factors included

--the locations of the facilities in relation to the residences of Reserve personnel who would be using them,

--the cost to modify or configure a building to meet Reserve requirements,

--the impact on personnel recruiting and retention, and

--operational differences.

For the most part, the projects were located within a 50-mile radius of three large metropolitan areas (Oakland, California; Philadelphia, Pennsylvania; and Norfolk, Virginia) and of three less populated areas (Brookville, Pennsylvania; Fresno, California; and Warrenton, North Carolina). Altogether, our review included 132 projects (78 Army National Guard and Reserve, 17 Navy and Marine Corps Reserve, and 37 Air Force Reserve and Air National Guard) having estimated costs of $110 million.

INVALID PROJECTS IN THE BACKLOG

Using information that either we developed or the Reserves developed, we determined that 50 of the 132 backlog projects reviewed were invalid. The Reserves later canceled 14 of these projects. Of the 36 invalid projects that were not deleted from the backlog, 5 were submitted to the Congress for funding.

In some instances, we found backlog projects had no relationship to facility deficiencies. For example, the Air National Guard backlog includes a $750,000 project for an aircraft parking apron at the Fresno, California, Air National Guard base. This project, which has been on the backlog since 1975, cannot be justified by any current facility deficiency and was initially placed on the backlog because local officials wished to obtain heavy aircraft, such as the C-141, for their unit. In commenting on our draft report, Air National Guard officials noted that some fighter units are increasing in size and that if that occurs at Fresno, the expansion of the parking apron would be needed. It was noted that the opinion that C-141 aircraft might be stationed there appeared unfounded. Significantly, officials stated that the proposed project would be deleted from the next revision of the long-range program.

We developed a set of criteria to determine if projects were valid or invalid. Invalid projects generally fell into one of three major categories: (1) projects for units without specific approved mobilization missions, (2) projects to replace adequate facilities, and (3) projects that can be be satisfied through the use of existing facilities.

The problem of including projects in the backlog when existing facilities are available, which is due largely to State Reserve Force facility boards failing to accomplish their assigned responsibilities, is discussed in chapters 3 and 4. The other major categories of invalid projects, which exist primarily because programing agencies have failed to adequately review their facility requirements before including them in the backlog, are discussed in the following sections.

billets that have been validated as wartime mobilization mission assignments. These units are required in the early days of a contingency in support of CINC OPLANS, Navy Manpower Mobilization Plans and other contingency plans."

If the Army adopted a similar policy, there would be a major impact on the Army Reserve and Army National Guard backlogs, which together account for approximately 66 percent of the total Reserve backlog. In March 1979 we reported 1/ that, of the Army Reserve and Guard units logically considered deployable, 2/ about 25 percent were not scheduled for overseas deployment during the first 6 months following mobilization. Many projects for these units were included in the backlog. For example, of the 78 Army National Guard and Reserve projects reviewed, 18 involved deployable units that were not scheduled for overseas deployment during the first 6 months following mobilization.

The Air Force Reserve disagreed with our position. In commenting on our draft report, it stated that DOD Directive 1225.5 does not specifically restrict facilities requirements to units with a specific mobilization mission.

The Air Force Reserve components have also programed projects for units without specific mobilization missions. For example, $17.5 million worth of the backlog of unmet facility needs reported during the fiscal year 1980 congressional hearings was for communications flights that, for the most part, were without a specific mobilization mission since as far back as 1971. One project, a communications-electronics training facility at the Greater Pittsburgh International Airport, was included in the fiscal year 1980 construction program approved by the Congress.

While we did not attempt to identify the scope of past construction for units without specific mobilization missions, we did determine that facilities were constructed

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1/"Can the Army and Air Force Reserves Support the Active Forces Effectively?" (LCD-79-404).

2/Excludes units whose principal missions would involve assignment in the United States, such as training divisions.

DOD's policy is not to require a formal economic analysis where it would be a waste of resources to consider obviously impractical alterations. Although we agree with this policy, we believe that a replacement project should not be considered justified because an existing facility is less than permanent construction or is more than 25 years old, as appears to have been the case with the Fort Story project.

QUESTIONABLE PROJECTS IN THE BACKLOG

Many backlog requirements are technically valid but are probably unnecessary. According to DOD Directive 1225.5, facilities will be provided which will make the greatest contribution to readiness and which are essential for proper development, training, operation, support, and maintenance of the Reserve components. However, our review of the backlog disclosed that many projects, especially those in the Army Reserve backlog, would correct facility deficiencies that have little, if any, adverse impact on readiness. In many instances, projects have been programed solely because the construction criteria permits projects to be programed.

Impact on readiness

Showing a correlation between a Reserve unit's readiness status and the adequacy of its facilities is difficult. For example, the Air National Guard, which has over 1,500 aircraft and 92,000 people, reported a backlog of unmet facility needs in excess of $364 million during the fiscal year 1980 congressional hearings. At the same time, it was achieving the highest combat readiness rating in its history--97 percent of its major units were rated combat ready by the Air Force. Similarly, a Fresno unit of the California Air National Guard is rated fully combat ready even though it has a facility backlog of more than $4 million.

On the other hand, new facilities do not ensure that a unit will attain a high readiness rating. For example, Reserve officials told us that the inability to recruit and retain enough personnel was one of their most serious readiness problems. Because this is an area where facilities could ostensibly have an impact, we reviewed strength data for units in newly constructed Army and Navy Reserve centers to determine if new facilities had a favorable impact on recruiting and retention. Overall, we found no correlation. Although the strength posture improved in some instances, it deteriorated just as often.

"Because of the vagaries of the bureaucratic world in which we exist, directives are frequently misinterpreted, and the result is far from what was intended. This is particularly true of facility requirements. For example, a common interpretation of the quantitative facility requirement obtained by multiplying by the facility planning factor, is that the installation is automatically entitled to this amount of that category of facilitiy. This is not true. The installation is entitled to the minimum facilities that it actually needs to accomplish its mission and to perform efficiently all of the various tasks with which it is charged. Regardless of the quantity determined by computation, the need for each category of facilities must be supported by a clear-cut justification based upon the actual needs of the installation in the light of all local circumstances and foreseeable changes in mission, base loading, and tasks. It is pertinent to note that the military departments have been severely criticized by reviewing agencies all the way up to and including committees of the Congress of the United States because they have submitted, in many instances, inflated requirements based upon blind computation. Computation is not a substitute for justification."

Many Reserve components have generally complied with the intent of this guidance, but some have not. For example, the Army Reserve and, to a lesser extent, other Reserve components have included projects in their backlogs based solely on the facility planning criteria. In commenting on our draft report, Army officials noted that this occurs in planning, but in programing "the scopes are nearly always adjusted from what blind computations would provide."

Army Reserve programing policy

Many Army Reserve backlog projects have been generated by comparing the space available in an existing facility with the maximum criteria specified in DOD Manual 4270.1M and by mechanically identifying a requirement whenever a deficiency exists. Such comparisons were accomplished at the Continental U.S. Army level without the participation or knowledge of units assigned to the respective Reserve

79th Army Reserve Command Projects Within 50 Miles of Philadelphia

Location	Project (note a)	Cost (000 omitted)
Bethlehem	Alterations	$ 250
Bristol	Alterations	250
Chester	Alterations	300
Edgemont	Alterations and AMSA (note b)	1,100
Folsom	Expansion from 600- to 800-person capacity	1,686
Horsham	Alterations	300
Norristown	Expansion from 200- to 300-person capacity	715
Philadelphia	Alterations	250
Reading	400-person center, OMS (note c) and AMSA	2,340
Worcester	Alterations	250

a/Unless otherwise indicated, projects refer to Reserve centers.

b/Area maintenance support activity.

c/Organizational maintenance shop.

A State or local government's unwillingness to participate in a project can preclude armory construction. For example, a California Guard official stated that land acquisition was the biggest constraint to armory construction in his State. He admitted that the priorities placed on armory projects were frequently based on whether the local community could provide a suitable site rather than where the most urgent requirements existed. In Virginia, the Army National Guard has been unable to construct armories in recent years because of an inability to obtain State matching funds.

A comparison of the projects submitted for congressional approval with those actually constructed further illustrates that an inability to obtain State matching funds has been a major obstacle to new armory construction. For example, although Virginia has not constructed any armories since 1975, the National Guard Bureau included and submitted four armory projects for Virginia in its annual program to the Congress. One project, an armory in Lynchburg, appeared three times--in fiscal years 1976, 1977, and 1980. According to a State official, the four projects were not constructed because of an inability to obtain State matching funds.

That official also stated, however, that State funds were available and indicated that design of the Lynchburg project was proceeding.

Backlog includes projects for low-strength units

Since the end of the draft, the Army's Reserve components have found it increasingly difficult to recruit and retain enough personnel. As a result, many of their backlog projects do not meet the strength criteria for Reserve construction. 1/

1/In commenting on our draft report, the Army noted that the overall strength of the Army Reserve was less than 75 percent of authorized strength, which meant that collectively units at a Reserve center had to be above average strength to warrant facility support. Since nearly all units suffer from this unusually low strength problem, it is the exceptional Reserve center that presently has more than 75 percent authorized.

In fact, the strength problem of Company D is considerably worse than the table indicates. Company D, which has the mission of providing a tactical bridging capability to the Active Army's 7th Infantry Division, has been split between Fort Ord and Santa Cruz since it was formed 3 years ago. However, the Santa Cruz detachment has never been staffed and exists only on paper. According to the Active Army officer responsible for monitoring and evaluating the unit's readiness, the Santa Cruz detachment was not organized as a logical subelement of the company, but apparently to justify the 60-person center. 1/ When the authorized strength of the detachment is also considered, Company D's assigned strength drops to only 40.6 percent of the total authorized.

The 7th Infantry Division Commander expressed the following concern about this strength problem in a recent letter to the 6th Army Commander.

> "The continued inability of our Affiliated Round-out Bridge Company, Company D * * *, 13th Engineer Battalion, to recruit enough people to achieve an effective strength level is of great concern to us * * * . The crux of the problem is that D Company is based in the Fort Ord area where recruiting has historically been poor * * *. The beginning of a new Reserve Component training year, as well as the impending addition of new ribbon bridging equipment, makes this an especially appropriate time to look for some new approaches to solving Company D's personnel problems."

The division commander concluded his letter by identifying the following alternatives for resolving the problem.

> --Convert the bridge company from Reserve to Active status.

1/As of March 30, 1978, the 6th Army backlog included a $200,000 project to alter the Santa Cruz facility for this nonexistent unit. In addition, even though no one was in the detachment, the unit technician was required to travel to Santa Cruz three or four times a week to "open the center." The center has subsequently been closed and the project canceled. However, the detachment is still officially located at Santa Cruz.

"The total request for Reserve component construction is $100 million for fiscal year 1980. This is $68,900,000 below the fiscal year 1979 appropriation. Testimony before the Committee indicated that there is a significant backlog of Reserve construction but there are several reasons why the Committee is reluctant to support the addition of funds to the fiscal year 1980 request. First, since the start of fiscal year 1979, much of the Army National Guard and the Army Reserve construction programs has been reprogrammed from projects which were to be constructed in fiscal year 1979 to future years. This reflects adversely on the programming ability of the Reserve components and causes questions regarding their ability to execute the requested fiscal year 1980 program. Second, due to this large number of reprogrammings in 1979, the proposed construction program for fiscal year 1980 far exceeds available funding. Representatives of the Reserve components could offer no approach short of additional funding to correct what is apparently a priority and programming problem."

Army Reserve and National Guard officials have expressed similar concerns about the adequacy of their project planning. For example, in a recent letter to subordinate headquarters, the Office of the Chief, Army Reserve, stated the following.

"This agency continues to seek higher funding levels to suport retention of the Reserve Program in the 1,100 or so communities now served * * * However, problems associated with poor planning, inadequate design, declining troop strength and unit realignments have made it extremely difficult to obligate even the limited funds now being provided."

Similarly, a National Guard Bureau official said:

"To avoid the full effect of the yearly inflationary spiral, the National Guard Bureau has had to program for early award of construction projects and since a project can be deferred at any time during the 3-1/2 year review process, the National Guard has had to overprogram

--The Army Reserve plans to build a maintenance facility, equipment concentration site, and warehouse at Los Alamitos, California, even though it may be more cost effective to use existing facilities at Fort MacArthur.

--The Army and Marine Corps Reserves plan to construct a new Armed Forces Reserve center at Middletown, New Jersey, even though several more cost-effective alternatives are available.

--The Army Reserve plans to build two battalion annual training facilities at Fort Pickett, Virginia, that do not appear to be fully justified.

--The Air Force Reserve might have built an unnecessary operations and training building at Travis Air Force Base, California, if we had not demonstrated that the project was not justified.

As of October 1979, all but the Air Force Reserve project at Travis Air Force Base were still included in an approved annual program.

CONCLUSIONS

Because the Congress has used the reported backlog of unmet facility needs as a basis for decisions on the amount of funds to authorize and appropriate, the backlog should provide a reasonably accurate indication of the Reserves' needs for construction funds. In our opinion, it should not include projects that either are invalid or have little, if any, clearly identifiable impact on readiness. Similarly, unless the backlog is appropriately categorized, it should not include projects that, because of other constraints, cannot be constructed even if the Congress appropriates the necessary funds.

The disparity between the Reserves' reported needs for facilities and their actual requirements exists primarily because (1) the Reserves do not thoroughly review and validate their requirements before including them in the backlog and (2) neither DOD nor the military departments have established effective procedures to identify invalid, questionable, and non-cost-effective projects when they are reviewed. Many backlog projects, because of their relatively low priority, have not yet been thoroughly reviewed nor validated.

AGENCY COMMENTS AND OUR EVALUATION

With the exception of the Air National Guard, which did not comment, the Reserve components generally agreed with our recommendations. However, the Army and Navy Reserve components were generally unresponsive to the recommendations we made on questionable, congressionally approved projects. (See p. 28).

The Air Force Reserve agreed that the backlog should be persistently reviewed and purged of invalid and nonessential requirements. It said its backlog requirements were reviewed recently and purged of suspect requirements. It also said it intends to make this review a special interest item to ensure that (1) only bona fide requirements based on need are included in the backlog and (2) the backlog is reviewed semiannually by the Air Force Reserve facilities board.

The Naval Reserve agreed that its construction backlog was not 100 percent free from error, but indicated the backlog was not 40 percent inaccurate. Since we never intended to estimate the percentage of the backlog that was invalid, we did not select our projects through a statistical sample. Consequently, we agreed that it would be inappropriate to project the number of invalid projects we found to either the total backlog or the Naval Reserve backlog. However, since our review projects were selected in an objective and systematic manner (see p. 8), we believe the large number of invalid projects is indicative of a fairly significant problem. For example, of the 17 Navy and Marine Corps projects we reviewed, 9 appeared to be either invalid or highly questionable.

The Navy also said it should be recognized that errors in the backlog are a "plus or minus proposition." We agree. For example, we found that many Marine Corps Reserve requirements had not been integrated into the backlog the Navy reported to the Congress. We believe it is just as important to add unidentified, valid requirements to the backlog as it is to purge invalid projects.

Finally, the Navy stated that its shore facilities planning system fulfills the intent of our recommendations. We agree that this system, if properly implemented, will either meet or exceed the intent of our recommendations. Under this system, the Chief of Naval Reserve and two separate engineering activities must review the projects

As will be noted in chapter 4, the Reserves appear to have numerous opportunities to use existing facilities to satisfy backlog requirements. If these requirements do not reflect valid needs, then we believe they should not be included in the backlog even if they are technically valid. Conversely, if the requirements reflect valid needs, then they should be matched with available assets. In this case, the available assets are unused or underused facilities that could possibly be used to satisfy Reserve needs at little or no cost. We do not believe it is appropriate to expend resources identifying requirements and then to forgo opportunities to satisfy these requirements simply because the requirements do not have a high priority.

The Army and Navy Reserves' comments on a draft of this report were not responsive, in our opinion, to the recommendations concerning the use of existing facilities or joint construction. For example, the Navy is planning a Navy/Marine Reserve center at Ebensburg, Pennsylvania, for the Johnstown/Altoona/Ebensburg area. The project is estimated to cost $2,130,000.

The Marine Corps does not have a unit in that area and has not identified a requirement to place one there. To the contrary, the Marine Corps made studies in 1976 and 1978 and concluded that recruiting in the area would be extremely difficult. Because of this, the Marine Corps was reluctant to participate in the Ebensburg project. Without a Marine unit in the area, the Navy could not justify building the center. In August 1978, the Marine Corps Commandant advised the Secretary of the Navy that:

> "While these factors (previous recruiting studies) may indicate a degree of difficulty in the initial manning, every effort will be made to support a Department of the Navy decision to proceed with a joint construction project."

One alternative considered by the Marines was to move a unit from Erie, Pennsylvania, to Ebensburg.

Notwithstanding, whether the Marine Corps can recruit effectively in the area, placing a Marine Corps unit in Ebensburg cannot be considered an urgent need.

Before the Navy decided to consolidate its Johnstown and Altoona units in Ebensburg, the Navy had scheduled a fiscal year 1979 minor construction project to repair the

Also, the Army Reserve has a fiscal year 1979 major construction project to build a 200-person center in Johnstown to alleviate an overcrowded condition there. When this center is completed, either it or the existing Army Reserve center could absorb the Johnstown Navy Reserve units. We recognize that some construction may be required to adapt the existing Johnstown and Altoona centers for Navy use. We believe, however, the scope of such construction will be considerably less than the currently programed $2,130,000 project.

Concerning use of Army facilities, the National Guard Bureau did not concur with our example that it would be cost effective to expand the Army Reserve center at Fort Bragg to satisfy the Raeford and Parkton armory requirements described in this report. The Bureau's position was based on an economic analysis which, in our opinion, did not adequately address the alternative which we identified.

Our evaluation of the Bureau's economic analysis indicated that:

--The costs to satisfy the armory requirements by expanding the Fort Bragg Reserve center were overstated.

--The costs to satisfy the armory requirements by unilateral construction at Raeford and Parkton were understated.

The analysis shows the estimated cost of expanding the Fort Bragg Reserve center is $448,400. In our opinion, this estimate is overstated by about $26,000 because the Bureau does not recognize that existing space for kitchen, scullery, and food storage could be used.

Unilateral construction cost of a 100-person armory in Raeford is shown as about $626,700, of which about $470,000 would be funded by the Federal Government. The economic analysis did not include estimated construction costs for the planned 100-person armory in Parkton. Using the criteria for estimating costs for the armory at Raeford, the estimated costs for constructing the Parkton center are $626,700.

CHAPTER 3

NEED TO STRENGTHEN STATE RESERVE FORCE FACILITY BOARDS

State Reserve Force facility boards must be strengthened to effectively identify and recommend the most economical ways to meet Reserve Force facility needs. State boards have the key role in reviewing proposed construction projects, identifying alternatives to unilateral construction, and making recommendations to DOD officials. However, in the five States included in our review, the boards had not identified and recommended use of existing facilities or joint construction alternatives to unilateral construction for any of the backlog projects where these alternatives were possible.

PROBLEMS WITH STATE BOARDS ARE LONGSTANDING

Problems with the State boards' reviews have been identified before. We reported on these problems in 1976, 1/ and the Defense Audit Service reported similar findings in its March 1979 report number 79-059 on the use and construction of Reserve Forces facilities.

Those earlier reports essentially concluded that the State boards were ineffective and provided "rubber stamp" approval to proposed projects because of inadequate reviews, insufficient information, and parochialism. Recommendations included in the reports were that:

--State boards review construction projects when they are initially proposed and annually thereafter until funded for construction or otherwise satisfied.

--Project initiators submit documentation on alternatives considered for their projects and reasons for rejecting them to State boards. This documentation would include certification that existing facilities

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1/"Improvements Needed To Prevent Unnecessary Construction of Reserve Forces Facilities"(LCD-75-309).

Limiting the analyses as planned could result in missed opportunities for more economical methods of facility acquisition. DOD officials informed us that the number of alternatives the State boards must consider was limited because a map analysis had revealed that, with the exception of certain metropolitan areas, six or fewer existing or programed facilities would fall within the 15-mile parameter. Additionally, the officials believed that limiting the number of alternatives could result in better evaluation work by the boardmembers. We see no reason to limit the analyses to six facilities. DOD regulations permit travel up to 50 miles for Reserve duty. While this distance may cause transportation cost problems, we believe the 15-mile radius should be expanded. Although we did not seek to determine the most appropriate radius, we believe a 25-mile radius could provide additional alternatives for construction.

Because of the continuing growth of the facility backlog, the Reserve Forces should consider all opportunities to meet their facility needs in the most cost-effective manner. Thus, by expanding the area of coverage, more alternatives would be subject to evaluation and potential savings. Except for the metropolitan areas identified in DOD's map analysis, the State boards' workload would not increase much above the level presently anticipated.

Lack of boardmember independence

State boardmembers are generally appointed from operating personnel assigned to the respective Reserve commands. They are responsible for providing objective advice to DOD on the most economical ways of meeting the need for proposed projects. We believe, however, that members perceive their responsibilities as representing the interests and supporting the project recommendations of their individual Reserve components.

The Defense Audit Service concluded in its 1979 report that the boards would not recommend joint construction of facilities because the members supported their components' desires for units to remain independent and self-sustaining. Boardmembers in our five-State review area generally agreed. They perceived their primary responsibility as getting their components' projects approved. They stated that they were reluctant to question projects of another component for fear of retaliation.

The Alameda armory illustrates the type of time-consuming, but necessary, analyses that are required in evaluating alternatives to proposed construction projects. This project, which was recommended for unilateral construction by the California board in December 1978, is within 25 miles of 20 armories and Reserve centers, 5 major Active Force installations, and an Air National Guard base. Consequently, the State board should have evaluated, in our opinion, the feasibility of using each of these 26 facilities to satisfy all or part of the Alameda armory requirement. The time needed to make only 1 of these 26 analyses could easily exceed the 2 hours the California board normally meets.

The potential for combining Reserve center and armory projects also should have been considered before the State board recommended unilateral construction. Because four additional armory and Reserve center projects are programed within 25 miles of Alameda, we believe the board should have made four additional analyses before recommending unilateral construction.

All together, if the California board had done its job effectively and conscientiously, it would have made 30 separate analyses--26 for using existing space and 4 for joint construction potential--before it recommended unilateral construction.

ACTIONS NEEDED TO STRENGTHEN THE BOARDS

The Reserve components are an important part of the Nation's defense force. In recognition of this role, the Congress has provided substantial funds (over $1 billion in the 1970s) to meet the Reserves' reported facility needs. However, as indicated by both earlier GAO and DOD evaluations and subsequent chapters of this report, the State boards have not been effective as DOD's mechanism for identifying alternatives to new unilateral construction to meet the Reserve components' facility needs.

In its 1979 report, the Defense Audit Service recommended that each of the State boards includes at least one additional member who does not have a vested interest in the Reserve construction program. This individual, who would chair the board, would be in a better position to direct objective evaluations of construction programs for higher authority review. The report concluded that without this objectivity, DOD could generally expect State boards to

CONCLUSIONS

Alternatives to unilateral construction exist for many Reserve requirements. However, State boards will probably continue to be ineffective in identifying these alternatives until DOD resolves the boards' problems. Boards must discontinue their rubber stamp approval of proposed projects and initiate truly independent reviews with sufficient information and time to identify and analyze possible alternatives.

RECOMMENDATIONS

We recommend that the Secretary of Defense:

--Enhance effectiveness of the State boards by adding one additional member to each board who would report to the DOD office responsible for approving Reserve facility projects. The new members should be full-time employees who do not have a vested interest in the Reserve construction program. The number of people required to fill the new positions could be minimized by having them chair several State boards, possibly on a regional basis.

--Formally assign Reserve component facility program officials the task of identifying and presenting to State boards the most economical methods to meet specific facility requirements and hold these officials accountable for their decisions. In identifying alternatives, the officials should be required to make analyses similar to those presently required only of State boards. Tasking Reserve component management as such would enable State boards to act as the DOD review mechanism intended, while clearly recognizing Reserve component management's inherent responsibility to make the initial determinations.

AGENCY COMMENTS

With respect to our recommendation that facility program officials be assigned the task of identifying the most economical method to meet specific facility requirements, the Army Reserve believed that additional staff would be needed to perform any additional cost-effectiveness analyses. The Army National Guard felt that the person responsible for developing the long-range construction program at the State level should be the programing official assigned the responsibility. The Guard,

CHAPTER 4

OPPORTUNITIES TO MAKE GREATER USE OF EXISTING FACILITIES

Requirements for Reserve facilities could be satisfied without leasing or constructing new facilities if greater use were made of existing facilities. We identified 19 projects in our review, estimated to cost $22 million, for which the requirements could be satisfied by using existing facilities. 1/ Facilities which we believe could be put to greater use include those of both the Reserve and the Active Forces. DOD has not taken advantage of these opportunities and has, in fact, disposed of facilities which could be used by Reserves.

BETTER USE OF RESERVE COMPONENT FACILITIES

Underused Reserve facilities are available, and in many instances, could be used as alternatives to constructing new Reserve facilities or leasing facilities. These facilities are frequently not used to satisfy requirements because components needing space do not have information on other components' facilities and, because, as discussed in chapter 3, the State boards have not been effective in carrying out their responsibilities. In many instances, greater use could be made of facilities because the using units are not at sufficient strength to fully use them. Further, Reserve units normally use facilities only one weekend a month. We believe existing facilities could be used by other units on alternate weekends.

Facilities with utilization below rated capacity

The authorized strengths of units occupying many armories and Reserve centers are significantly below their facilities' rated capacities. For example, 29 of the 144 armories and Reserve centers in the areas we reviewed had rated capacities that were at least 60 persons above the

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1/Some costs may be necessary to modify the alternative facilities for Reserve use. Such costs were not available and we did not attempt to develop them.

Reserve center approximately 5 miles away. This 600-person center is currently used only 2 weekends a month by units having an authorized strength of 465. Its storage, arms vault, and personnel locker space is about twice that authorized for the present units. Administrative space would be tight under the current method of operations. But use of the center for three weekends a month and implementation of a 6th Army recommendation 1/ would free about 2,500 square feet of administrative space. The space, thus freed, would be more than enough to satisfy the Marine's administrative space requirements.

BETTER USE OF FACILITIES VACATED BY ACTIVE FORCES

With the drawdown and realinement of the Active Forces, facilities have become available that could be used as alternatives to Reserve Force construction. In some instances, space is available at installations which Active Forces still occupy. In other instances, space becomes available when installations are closed and the Active Force is transferred to other bases. In each of these situations space is frequently available and suitable for use by the Reserve Forces.

Space on Active Force installations

At 4 of 11 Active Force installations we visited considerable amounts of vacant space were available to satisfy Reserve facility needs. However, space inventories at these installations did not accurately reflect current situations and probably would not be useful to a programing agency or State board. Generally, inventory information is

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1/In a March 26, 1976, letter to the Army Forces Command, the 6th Army recommended that exclusive-use space be limited to unit commanders and, at the battalion or higher level, deputy commanders and executive officers because "We consider that authorization of exclusive use space to other persons such as section chiefs, etc., is too expensive and the return gained is not sufficient to warrant the expense." The 6th Army proposed that some form of movable partitions be used to enclose space for offices for these officials and that this common-use space be shared by units training on alternate weekends.

The amount of vacant space found on Active Force installations is shown in the table below.

Reported Vacant Space on Active Force Installations
Possibly Suitable for Reserve Force Needs
Square feet of vacant space (note a)

Installation	Inventory date	Administrative	Academic Instruction	Barracks	Warehouse and storage	Other
			(000 omitted)			
Oakland Army Base, Calif. (note b)	May 1979	106	-	44	289	-
Naval Support Activity, San Francisco, Calif.	Apr. 1979	35	139	65	26	17
Travis Air Force Base, Calif.	July 1979	19	-	-	19	26
Presidio of San Francisco, Calif. (note c)	Feb. 1979	d/75	-	-	-	-

a/Space is shown under the same categories as those carried on the installation inventories. Such categories indicate the last use of the space but are not the only possible use.

b/In April 1979, the District Corps of Engineers issued an invitation for bid to outlease 96,000 square feet of administrati space, 39,000 square feet of warehouse space, and all the open storage space at Oakland. Except for minor quantities withdrawn from this action because of continuing DOD needs, all this space was subsequently outleased to commercial concerns.

c/We did not review the facility inventory at this installation. The information was taken from the Presidio of San Francisco Base Realinement Task Force Report.

d/If the planned replacement of barracks at the Presidio is accomplished, the already-approved conversion of old barracks to administrative space will generate an additional 347,000 square feet of space.

Operation of entire bases

Reserve Forces can assume operation and control of formerly Active Force installations and thus satisfy requirements with existing facilities. However, this action entails continuing operation and maintenance costs similar to those of the former Active Force operator. Many of these costs are not standard for typical Reserve center operations. In addition, using existing facilities may require modification and rehabilitation costs to make them suitable to Reserve needs. Therefore, the cost effectiveness of having Reserve Forces assume operation of installations being closed must be studied closely. It appears the concept is only feasible when the installation is needed to satisfy special Reserve Force mission requirements and/or when use by large numbers of Reserves makes it cost effective.

We reviewed the California National Guard's operation at the Los Alamitos Armed Forces Reserve center in Orange County to determine the feasibility of Reserves taking over operation of an entire base. The Reserve center was established in 1973 on a former naval air station at which the Navy discontinued its flying operations in 1970. The Navy continued to serve as host until 1977, when it transferred the facility to the Army for operation by the Guard. The Guard currently operates the center under license from the Army.

DOD studies established the need for the center at Los Alamitos to satisfy urgent Reserve and other DOD requirements in the Los Angeles area. For example, an imperative need for facilities to house Reserve components aviation units in the Los Angeles area dictated the Army requirement for Los Alamitos. The existing facilities at Los Alamitos were adequate to handle the units' 100 helicopters and 3 fixed wing aircraft. Although the Reserve center could train about 5,000 reservists, actual strength as of June 30, 1979, was 3,158, as shown on the following page.

	Fiscal year			
	1978	1979	1980	1981 (note a)
	(thousands)			
Utilities	$ 181.8	$ 107.2	$ 224.3	$ 260.1
Facility maintenance	789.9	298.2	419.6	1,129.5
Operations supplies	88.7	20.0	35.0	126.9
Rentals and services	10.9	19.4	16.7	19.1
Personnel:				
Maintenance	742.4	661.0	861.2	912.9
Operations	506.6	514.8	649.3	688.3
Firefighters	466.3	468.4	271.7	288.0
Security	(b)	(b)	250.0	275.0
Other	10.8	21.5	23.0	33.0
Total	$2,797.4	$2,110.5	$2,750.8	$3,732.8

a/Projected costs.

b/Included in firefighter costs above.

In addition to operation and maintenance costs, costs may be incurred to alter existing facilities to meet the Reserves' training needs. In this regard, the Army Reserve has programed a $2.25 million alteration and an additional project in conjunction with its planned realinement of units to the Los Alamitos center.

Using portions of closed installations

Because of the high cost associated with operating entire installations, it appears more practical for Reserves to assume control over only those portions of a closed base that are needed to satisfy their specific facility needs. This has been done in some instances. Such facilities are operated similarly to Reserve centers. Two instances in which Reserve Forces are using portions of closed bases are discussed below.

--In 1978 the California National Guard completed a $13,000 project which severed its 100-person armory at Fort MacArthur from the remainder of the installation, which is scheduled to close in fiscal year 1981.

units presently occupying adequate facilities at both Fort MacArthur and Hamilton Air Force Base.

Oakland Army Base

At the time of our review, the District Corps of Engineers had just screened and outleased significant quantities of vacant space at Oakland Army Base which were excess to the installation's need. (See p. 47.) Much of this space was in categories suitable to Reserve needs--of which there were many within a 25-mile radius.

Fort MacArthur

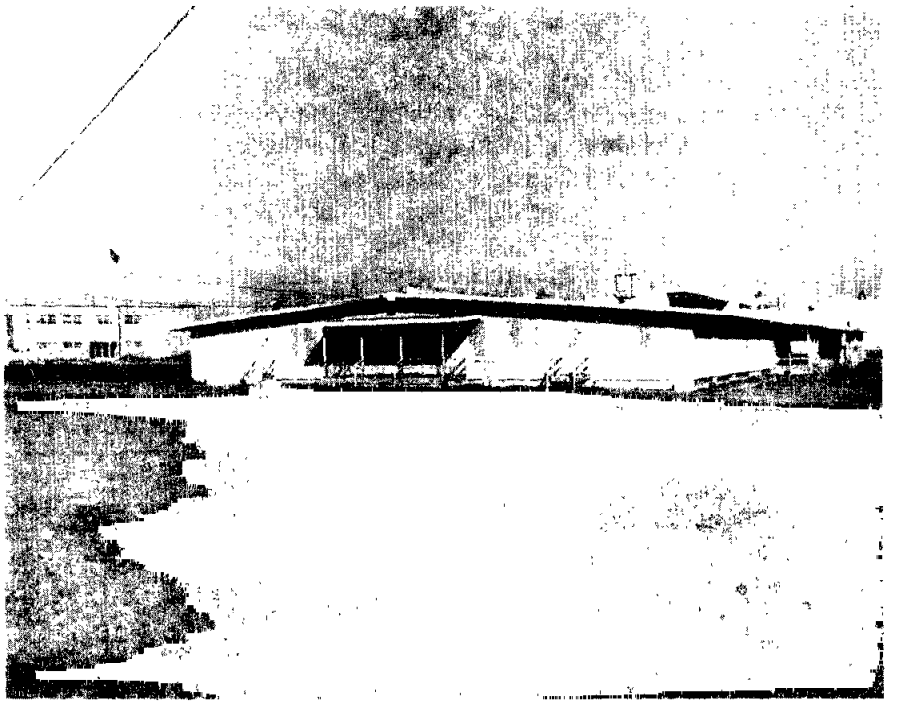
When Fort MacArthur closes, eight Army Reserve units are scheduled to move from the fort's facilities to the Los Alamitos Reserve Center. The planned move of these units has resulted in a $2.25 million fiscal year 1981 project to rehabilitate and construct facilities at Los Alamitos. The Fort MacArthur facilities engineer stated it would be possible to retain portions of the base for these units. However, he could not estimate the costs for such an action because it would depend on the facilities to be retained.

An Army Reserve official said the planned move would allow closure of Fort MacArthur, enhance the utilization of Los Alamitos, and enhance the recruiting area and potential of the units to be moved. We believe the Army Reserve should study the cost effectiveness of retaining a portion of Fort MacArthur before proceeding with its planned Los Alamitos project and before moving the units. In addition, the Reserve components should study the suitability and cost effectiveness of using portions of Fort MacArthur to satisfy other backlog requirements within a 25-mile radius.

In commenting on our draft report, the Army Reserve said that a detailed base realignment study for Fort MacArthur included an analysis of the alternatives of status quo, contract base operations, and increased use of existing facilities. The study indicated the cost of retaining existing facilities was greater than that of transferring activities to Los Alamitos. While this is true, the study did not include, as an alternative, the establishment of a center similar to the National Guard armory at Fort MacArthur and Army Reserve centers at Hamilton Air Force Base. We believe the Army Reserve should make an economic analysis

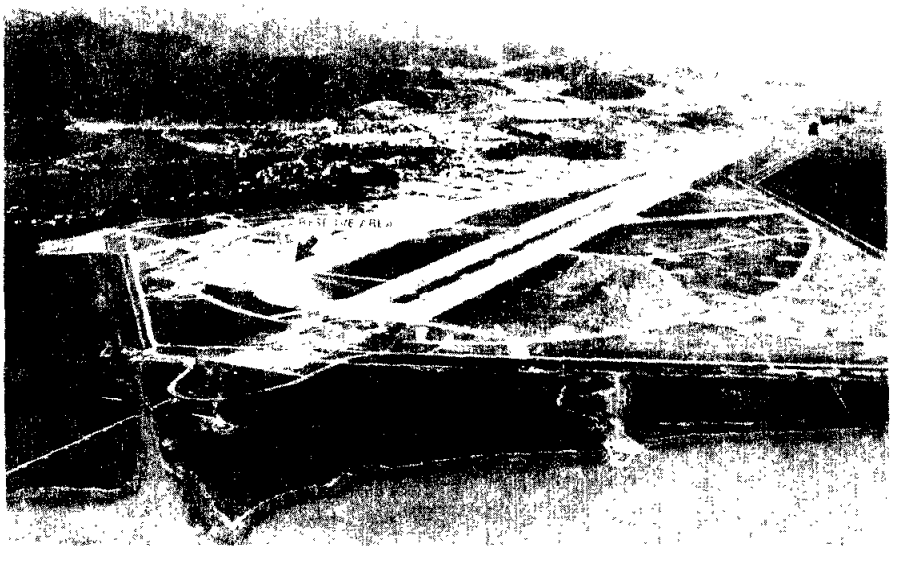
Because the Army has a continuing need for its aviation operations at Hamilton, we believe the aviation property should be transferred to the Army. In addition, the Reserve components should study the suitability and cost effectiveness of expanding the use of Hamilton Air Force Base to satisfy existing backlog projects within a 25-mile radius.

In commenting on our report, the Army said its retention of facilities at Hamilton Air Force Base for its flight activities would be contingent on Hamilton becoming a general aviation airport. In the event Hamilton does not become a general aviation airport, we do not believe it is necessary to dispose of the facilities currently supporting the air operations at Hamilton and relocate the Army units. Hamilton officially ended flying operations on June 30, 1979, but Army aviation units still continue flying activities there. The Army should acquire facilities it currently uses to maintain its flight operations. This may be critical in light of the nonavailability of space at both Alameda and Moffet Naval Air Stations which are being considered as alternatives to Hamilton.



ONE OF THE BUILDINGS AT OAKLAND ARMY BASE THAT WAS RECENTLY LEASED FOR COMMERCIAL USE. EXISTING RESERVE CENTER IS IN BACKGOUND.

SOURCE: U.S. ARMY



ARMY AVIATION FACILITY AT HAMILTON AIR FORCE BASE WHICH COULD BE LOST THROUGH DISPOSAL ACTION.

SOURCE: DEPARTMENT OF DEFENSE

--The military services to address, in the impact statements on the disposal of excess property, the feasibility of satisfying outstanding Reserve requirements within a 25-mile radius. When entire installations are closed, the statements should address the feasibility of using portions of such installations to meet requirements.

AGENCY COMMENTS

The Army agreed with the conclusions and recommendations but not with "the degree" to which they are stated, noting that it is not always feasible to use installations being closed by Active Forces. The Air Force Reserve said it concurred in the basic intent of the recommendations as a means to improve the data bank of available facility space for use by facility programers and endorsed use of existing space where it is cost effective and meets mission requirements. The Air National Guard and Navy did not comment on this chapter.

their own facilities for training because of the availability of space. Units that trained at the 12th District headquarters used the offices and desks which Active Coast Guard personnel used during the week.

AIR FORCE RESERVE AUGMENTATION PROGRAM

DOD policy requires that unused facilities of either Reserve or Active Force components be used to meet Reserve needs. However, Active Force facilities which are used exclusively on weekdays are considered fully used and, with few exceptions, are not used on weekends by Reserve units. The Air Force Reserve Associate Aircraft Maintenance Program is one example of using Active Force facilities to meet Reserve requirements.

The program is used exclusively by the Military Airlift Command in its strategic airlift mission. Over 10 percent of the Air Force Reserve strength of about 53,900 is assigned to maintain aircraft for the command. The following are examples of the program.

--The largest Reserve associate unit is located at Travis Air Force Base. Of the authorized personnel in the unit, 56 percent are assigned to aircraft maintenance. Over 70 percent of the available training space is shared by these Reserve mechanics and Active Force personnel.

--At McGuire Air Force Base, the Military Airlift (Reserve) wing's maintenance function is totally integrated with its Active Air Force counterpart. The aircraft maintenance function accounts for 33 percent of the authorized personnel in the associate unit. Other units of the associate program, such as medical, aerial port, and base security personnel, share Active Force facilities at this location.

POTENTIAL FOR INCREASED SHARING OF ACTIVE FORCE FACILITIES

Reserve facilities are generally used one to three weekends each month. Conversely, Active Force facilities are used during the week but are generally underused or vacant during the weekends. Integration of more Reserve

units. Therefore, when Reserve units are colocated with or close to Active Force units with similar missions, using the Active unit's underused or vacant weekend space provides added realism to the total force concept. Although some Reserve units are not located close to Active Force units with similar missions, this situation should not prevent the use of suitable Active Force space that is unused or underused on weekends.

Facility requirements could be satisfied by sharing facilities

By increasing their effort to share existing Active Force facilities, the Reserve components could reduce the scope of planned construction projects. The Reserves could save about $493,000 by sharing existing facilities with Active Force units at Mather Air Force Base, California, rather than building new facilities. Although some dedicated sole-use space would be required for Reserve use for command and administration, other requirements could be met with Active Force space.

Similarly, an opportunity to share Active Force facilities exists at Fort Story, Virginia. The Army Reserve has identified a requirement to construct a garage-type building to maintain LARC-60 vehicles, even though an Active Army facility already exists to service similar vehicles. However, the Reserves could use the Active Army facility on drill weekends and eliminate the need to construct its own facility at a cost of about $246,000.

The Army Reserve, in its comments on our draft report, stated the Fort Story project is not yet in a program year and when selected for a program year, the normal planning sequence may show the LARC-60 portion to be invalid. As discussed on page 31, we believe that when valid requirements are identified, efforts should be made to meet the requirements through existing facilities.

More sharing could free existing exclusively used Reserve facility space

Although Reserve and Guard Forces colocated at Active Force facilities may have different wartime missions and use different weapons and/or equipment, the possibility for sharing Active Force facilities does exist. For example, the New Jersey Air National Guard unit located

AGENCY COMMENTS

In commenting on our draft report, the Air National Guard noted that its forces conduct flying operations, aircraft maintenance, and support functions almost every day of the week. The Air Force Reserve, agreeing that its associate units are effective, said it was expanding the associate concept. The Navy had no comments on this chapter.

The Army noted that Active Army forces with large, widely spaced military posts and the Army Reserve with small, widely dispersed facilities do not readily compare with Coast Guard units, which are both small, widely dispersed, and mutually funded. The National Guard believes that in most cases, joint use of Active component and Reserve component facilities is only appropriate for range facilities. In its comment, the Coast Guard said requiring Reserve units to colocate with Active units is an extension of its promotion of the total force concept.

"Armories [note 1] will be fully utilized consistent with preservation of unit integrity. Training at multiple unit locations should be spread over a period of 4 nights per week, or 4 weekends per month, where local conditions and efficient administration of the training program make this practical and economical."

In the past, the Reserve Forces have not maximized joint use of facilities. As of August 1979, there were 4,130 Reserve centers and armories. Of these, only about 8 percent were joint projects and about half of these projects involved the Navy and Marine Corps. And the trend of not planning for joint construction is continuing. The military construction programs for fiscal years 1978 and 1979 included only eight joint construction projects--about 2 percent of the total authorized projects. Of these, half were for joint use by the Navy and Marine Corps Reserve components. The fiscal year 1980 program included only six joint-use projects and again, half were for joint use by the Navy and Marine Corps Reserves. The Navy appears to be trying, but the other Reserve components are not.

SERVICE FUNDING POLICIES DIFFER

The service components differ in their policies for funding Reserve facility projects. The Navy and Marine Corps fund their Reserve components jointly, whereas the Army and Air Force fund theirs separately.

The Navy and Marine Corps emphasize joint construction to meet Reserve facility requirements. The five States in our review have 73 Navy and Marine Corps Reserve locations, of which 36 are used jointly by the Navy and Marine Corps or by one of them and other Reserve components.

According to officials at one naval readiness command region, the only fiscally sound approach to constructing Reserve facilities is to do so jointly by all Reserve components in the area. They said joint construction is more economical because it results in constructing buildings with fewer square feet, since common areas can be shared.

1/The term "armory" as used here, refers to structures used for training and administration by units of the National Guard and other Reserve components.

Regulation 415-17, which considers economies-of-scale, includes a chart to compute the relationship between cost and size. An Army official provided the following example.

> Assume an Army Reserve center of 20,000 square feet costs $49 a square foot. If the center's size were doubled to 40,000 square feet, the cost for each square foot would be $46.06, or about $3 a square foot cheaper than the smaller facility. However, if the size were reduced to 10,000 square feet, the cost would increase by $2.45 to $51.45 a square foot.

It is also less expensive to operate and maintain one large facility than two small ones. As shown above, a 100-person armory has about 11,000 square feet less than two 60-person armories to heat, cool, and maintain. Although we did not compute actual costs, the potential savings are obvious.

Navy data 1/ has shown that it is less expensive to operate and maintain a large facility than several small ones. It costs $8,500 yearly to operate and maintain a small (less than 100 persons) Navy and Marine Corps Reserve center and $20,200 yearly for a medium (up to 350 persons) center. Thus, it would take 3-1/2 small centers to equal the capacity of one medium center and they would cost about $29,750 yearly to operate and maintain, or over $9,500 more than one medium center.

Large facilities are also less likely to be closed than are small ones. For example, half of the 40 vacant National Guard armories as of June 30, 1979, were 60-person facilities, and none of them were 400-person or larger facilities.

According to the Defense Audit Service report, construction practices for National Guard armories and Army or Navy Reserve centers differ significantly. Generally, the National Guard is authorized more troops in a given area

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1/Testimony before the Subcommittee on Military Construction, House Committee on Appropriations, on military construction appropriations for 1978.

One local official, who at one time had been a National Guard advisor, said the Guard had always been overcapitalized and its armories underused. Consequently, he favored joint or consolidated construction. By renovating the Warrenton armory and adding space for the Henderson personnel, a savings of over $300,000 would be possible. Another option would be to jointly construct one large armory between the two towns. This would save over $250,000 when compared with the two separate projects.

However, the benefits of constructing fewer but larger facilities are not being realized because joint construction opportunities are not always considered, as discussed below.

JOINT OR CONSOLIDATED CONSTRUCTION OPPORTUNITIES NOT ALWAYS CONSIDERED

The process used to plan the construction of Reserve facilities is not effective. Reserve components are constructing separate facilities when opportunities exist for joint-use projects.

The State facility boards are assigned a key role in the approval process. They are responsible for reviewing proposed construction projects, identifying alternatives to unilateral construction, and making recommendations to DOD officials. One of their responsibilities, according to a DOD directive, is to "assure maximum joint construction and/or utilization in fulfilling the facility requirements of the Reserve Force." However, the boards are not adequately reviewing proposed projects.

Better State board reviews needed

The State boards we visited generally did not adequately review proposed construction projects to determine if joint use was possible. As previously noted, one of the reasons was that the boards did not have the information necessary to determine whether joint construction alternatives existed.

Probably the most important reason, however, is the way the various boardmembers have perceived their responsibilities. Further, members we interviewed generally did not believe it was the State boards' responsibility to identify opportunities to build fewer but larger facilities to satisfy facility needs for closely located activities of the same component. The boards had not identified any of the projects

Officials from both components stated that a lack of funds had prevented either project from being constructed. It appears funding would be more likely if the two projects were combined, because joint construction would take priority over unilateral construction. By jointly expanding the Reserve center, a savings of over $793,000 would be possible.

--Three projects are planned in the contiguous cities of Hampton and Newport News, Virginia. The National Guard plans to replace two 100-person armories, one in Hampton and the other in Newport News, which are less than 10 miles apart. The Army Reserve plans to replace three centers with one 400-person center. It appears the Army Reserve center will be built before the two National Guard armories are built due to State funding priorities.

The Defense Audit Service's position was that the Reserve center project should be delayed and a joint-use facility planned. We agree with this recommendation, particularly because we could not identify any adverse impact the current facilities were having on readiness. A joint National Guard and Army Reserve project would save over $893,000 in construction costs.

An official said one way to increase the number of joint-use and consolidated, single-component facilities would be to impose a 6-year moratorium on future projects in an area where a unilateral project had been approved. This moratorium should be for a 25-mile radius. Further, he said documentation for a proposed project should include a list of all other projects within the 25-mile radius. This, he believed, would make State boards and others aware of closely located projects.

Other factors inhibiting joint and consolidated construction

Many factors inhibit joint or consolidated construction of Reserve facilities. These factors include parochialism, a State law forbidding such construction, National Guard Bureau reluctance unless its units are the hosts, and DOD directives that do not require State boards to consider possible single-component consolidation. In our opinion, these factors should not preclude constructing joint or consolidated facilities.

Although DOD directives require State boards to consider joint construction possibilities by two or more Reserve components, they do not require the boards to consider opportunities to consolidate facilities to satisfy needs of closely located activities of the same component. State boardmembers we interviewed generally did not believe it was their responsibility to identify consolidation opportunities for one component. We believe they should have this responsibility, and if DOD emphasizes this in its regulations, the boards should be able to identify many consolidation opportunities.

CONCLUSIONS

DOD's policies require that joint-use facilities be constructed whenever possible to satisfy the deficiencies of two or more Reserve components and that a concentrated effort be made to maximize use of facilities. The Reserve Forces have not followed these policies. We believe this problem will be present to some degree as long as the Reserve components' parochial interests take precedence over economy in Government. Thus, DOD needs to improve its process for approving projects proposed by the Reserve Forces to prevent unnecessary construction from being programed and completed.

DOD relies primarily on information which the State boards develop in deciding whether to approve Reserve Forces' proposed construction projects. To fulfill their responsibilities, the boards must have information on current and future projects and must make critical evaluations of proposed projects in light of their information. One method of making the State boards and others aware of all projects in an area would be to require that documentation for a proposed project list all other projects, as well as existing facilities, within a 25-mile radius.

The State boards are not fully complying with DOD's procedures for reviewing construction projects. This deficiency has allowed the Reserve Forces to include in their construction programs many facility requirements that could be satisfied by more cost-effective methods, such as building joint-use facilities and building fewer but larger facilities. Further, DOD's guidance does not specify the State boards' responsibilities for identifying opportunities to build fewer but larger facilities to

AGENCY COMMENTS

The Army and Air Force Reserve components disagreed with the recommendation to consolidate their construction appropriations by military department--one similar to the Navy and Marine Corps program. We believe the single review and consolidated construction appropriation program of the Navy and Marine Corps, which has contributed to substantial joint construction by these components, can also work for the Army and Air Force Reserve components.

All of the DOD Reserve components disagreed with the recommendation that moratoriums be imposed on the construction of armory and Reserve facilities, for a period of time, within 25 miles of completed unilaterally constructed armory and Reserve facilities, as a method of getting the Reserve components to more closely evaluate joint construction opportunities. While it is not the intent of our recommendation to preclude construction of facilities under any and all conditions, we believe that this recommendation, with appropriate exceptions for unanticipated changed conditions, will result in more joint construction.

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satisfy needs of closely located activities of the same Reserve component. Consequently, the boards are not identifying these opportunities.

Some States oppose joint construction. In one State, the law prohibits its National Guard from jointly constructing facilities with other Reserve components. In another State, the National Guard initially refused to jointly construct with another component until the National Guard Bureau refused the Federal share of construction funds. Because of this funding incentive, the State agreed to joint construction. Thus, by withholding Federal funds until Reserve components identify and agree to build joint-use facilities, DOD can reduce its expenditure for Reserve facilities. Also, the number of joint and consolidated facilities could be increased by establishing a moratorium on future Reserve construction in an area where unilateral construction has been approved.

The Navy and Marine Corps Reserves engage in joint construction more often than the other components. This is due, in part, to the single appropriation funding provided by the Department of the Navy. To increase joint and consolidated construction, DOD should consider providing such an indepth single review and funding source for all Reserve components in each military department.

RECOMMENDATIONS

We recommend that the Secretary of Defense improve the project review and funding process by:

--Clarifying and, if necessary, expanding the State boards' responsibilities to identify opportunities for building consolidated facilities to satisfy needs of closely located activities of the same Reserve component.

--Considering consolidation of each military department's Reserve construction appropriation, similar to the way the Navy and Marine Corps Reserve appropriations are consolidated under the Department of the Navy.

--Imposing a moratorium on the construction of armory and Reserve facilities, for a specified period, within 25 miles of completed unilaterally constructed armory and Reserve facilities.

It appears the Reserve Forces do not want to jointly construct facilities. Each component wants its own dedicated facilities for parochial reasons. In its 1979 report, the Defense Audit Service states the boards will not recommend joint construction because the members are operating personnel assigned to the Reserve components and because each component wants its units to remain independent and self-sustaining. The Defense Audit Service believes, therefore, that the boardmembers cannot be objective and recommend joint construction when this is contrary to the goals of their organizations.

In our discussion with Reserve component officials, we also found components generally wanted their own facilities. Some said that they had experienced problems when other components were hosts and that they wanted their own facilities to preclude possible problems.

A factor inhibiting joint construction in Texas is the State Attorney General's determination that State law prohibits the Adjutant General from constructing facilities jointly with any other agency. The Defense Audit Service believes Texas law is preventing the Federal Government from accomplishing the joint construction objective of the National Defense Facilities Act of 1950. According to a National Guard Bureau official, one way to ensure joint construction is to withhold Federal funds if the State refuses. He said the National Guard Bureau used this authority for one project in Florida until a joint construction agreement was reached.

Another factor inhibiting joint construction is National Guard Bureau reluctance. The Bureau generally opposes joint construction unless its units can be hosts for several reasons. One reason is that generally it is less expensive for the National Guard to be host than for other components. As host, the Guard can rent the facility when it is not used for military purposes and help offset some of the operating and maintenance costs. Also, the Guard wants to select the most desirable weekends for drills. Being sole occupant, the National Guard would not have a scheduling problem. Further, it is cheaper for the National Guard to do the initial construction than for the Army Reserve, which uses the Army Corps of Engineers. It appears that, if it is less expensive for National Guard units to be hosts, they should be, as long as they participate in joint construction projects.

we identified as having joint construction potential. The following examples illustrate the joint-use construction opportunities we identified.

--Two 100-person armories are planned for two North Carolina communities (Parkton and Raeford) located about 15 miles from Fort Bragg. They are armor units, and their major equipment is stored at Fort Bragg. Also, the units are required to train at Fort Bragg four weekends yearly. This leaves only eight monthly meetings to be held at the two armories.

Further, an Army Reserve center at Fort Bragg could accept an addition, according to Reserve center personnel and Fort Bragg engineers. The Reserve center is currently used two weekends a month. Thus, by building some additional dedicated space for the National Guard units and jointly using the common areas, a construction cost savings of $520,000 could be realized. By using more recent cost estimates, the savings would be over $800,000. The State board had not identified this possibility.

We contacted the chairperson and one other member of the State board, but neither one was the National Guard member. Both were aware of the Raeford project which was planned for fiscal year 1980. However, they were unaware of the Parkton project, which is planned for fiscal year 1982, because they did not have a complete backlog list. Further, the two members disagreed on the State boards' responsibilities. One member did not believe it was the boards' responsibility to identify opportunities to build consolidated facilities, and the other believed it was but did not know how the boards should do it. However, the chairperson believed the boards should consider these possibilities.

--Two projects are planned about 1 mile apart in Butler, Pennsylvania. One is a new 200-person Army National Guard armory to replace an old armory. This project was planned for the fiscal year 1980 military construction program, but State funds were not available. The other project is for a 200-person expansion to the Army Reserve center. It is planned for the fiscal year 1981 military construction program.

than the other Reserve components. Even so, the National Guard is constructing many small armories (300 persons or less) in proximity to each other. In contrast, the Reserves, which have less personnel, are building large centers (600 persons or more), as shown by the following table.

Rated Capacity of Armory and Center Projects
In Fiscal Years 1978, 1979, and 1980

	National Guard		Army Reserve		Navy Reserve	
Size	Number of projects	Percent of total	Number of projects	Percent of total	Number of projects	Percent of total
60 persons	17	16	1	2	-	-
100 to 300 persons	76	70	34	52	2	25
400 to 600 persons	9	8	10	16	3	37
More than 600 persons	6	6	19	30	3	38
Total	108		64		8	

A similar situation existed in the States we reviewed, where several small armories and Reserve centers are planned in proximity to one another, even though more economical alternatives existed. For example, two projects are planned for two towns in North Carolina which are about 25 miles apart--a 100-person armory in Henderson and a major renovation to the Warrenton armory. State personnel advised us that armories were being built in this manner because the National Guard was surviving, in part, on the local community's support. However, local officials in the two areas favored a combined armory. Further, data shows that each armory currently depends on the other and surrounding towns for personnel, as shown below.

	Number of assigned personnel residing in			
Armory location	Henderson	Warrenton	Other	Total
Henderson	55	12	38	105
Warrenton	11	26	32	69

Common areas include classrooms, bathrooms, drill halls, and parking spaces. The Navy, they said, had not experienced any major problems in using joint facilities.

Chief of Naval Reserve officials said one possible reason for the high percentages of Navy and Marine Corps joint construction was that they had a single review and funding source. All proposed Navy and Marine Corps Reserve facility projects must be approved by the Chief of Naval Reserves before being submitted for funding. Funding for both Reserve components is provided by a single appropriation to the Department of the Navy. This single appropriation helps to ensure maximum use of joint construction.

The Army and Air Force fund their Reserve and National Guard components separately. For example, the Army approves and requests funds for Army Reserve centers separately from Army National Guard armories. We believe this process is resulting in fewer joint construction projects among these components. For example, the fiscal year 1980 military construction program includes 27 armory and Reserve center projects for the Army Reserves and National Guard. Only three are joint use, and one of these is for joint use by the Army and Marine Corps Reserves.

BENEFITS OF FEWER BUT LARGER FACILITIES

Many benefits can be derived by constructing joint-use facilities by more than one Reserve component and by consolidating facilities of closely located activities of the same component. These benefits include, but are not limited to, savings in the initial construction cost, a reduction in annual costs to operate and maintain a single building, and a reduction of closings of small facilities.

It is less expensive to build one large facility than two or more small ones. For example, under DOD criteria, two 60-person Army National Guard armories would be authorized over 25,000 square feet of space (12,700 each) and 6 acres of land (3 each). By combining the two small armories into one 100-person armory, a space savings of about 11,000 square feet and 2 acres of land would be possible. Assuming a construction cost of $30 a square foot, the cost savings would be at least $330,000.

Not only will less square feet be needed, but economies-of-scale will result in a reduced cost for each square foot in the one large facility. Department of the Army

CHAPTER 6

OPPORTUNITIES TO CONSTRUCT FACILITIES JOINTLY

The Reserve Forces have not identified or taken advantage of opportunities for constructing facilities which could be used jointly by two or more Reserve components or by closely located activities of the same component. In our opinion, facilities have not been constructed for joint use because

- --the State Reserve Force facility boards have not effectively carried out their responsibilities (see ch. 3),
- --the Reserve components maintain a parochial view in considering projects,
- --at least one State has a law prohibiting joint construction,
- --the National Guard Bureau is generally reluctant to initiate joint construction unless a Guard unit can be host, and
- --DOD directives do not require State boards to consider possible single component consolidation.

As a result, Reserve components have programed, and DOD has approved, construction projects for requirements that could be satisfied by constructing joint-use facilities at a savings of over $3 million for the projects we reviewed. The Congress has expressed its intent that Reserve components use joint facilities to the greatest practicable extent to satisfy their needs. Also, DOD requires the maximum use of resources.

DOD Directive 4165.6 requires that a concentrated effort be made to maximize joint use of facilities to achieve savings in overhead, support areas, and logistical functions which are common in nature and can be combined economically. In furtherance of this aim, as noted earlier, DOD has established the State boards. DOD Directive 1225.5 stresses fully using Reserve centers and armories by stating:

at McGuire Air Force Base operates its own medical facility. However, Guard members are treated for medical necessities at the Active Force medical facility. The Guard can close its facility and use it to meet other requirements.

CONCLUSIONS

We believe opportunities exist to reduce the backlog of Reserve Force construction by expanding such concepts as the Coast Guard's augmentation program and the Air Force's associate program wherever possible. Reserve units which are located within short distances of Active Force facilities and having missions similar to those of the Active units are prime candidates for augmentation programs. Successful integration of the Reserve and Active Forces reduces the need for continued expansion of Reserve facilities. In addition, where Active Force facilities with units which have missions unlike those of the Reserves are available, a careful evaluation could be made to determine the feasibility of using such facilities for Reserve units.

RECOMMENDATIONS

We recommend that the Secretary of Defense:

--Adopt formal policies, similar to those of the Coast Guard, to encourage colocating Reserve and Active Force units and sharing facilities to the extent feasible. Facility space criteria that take into account facility sharing by similar Reserve and Active Force units should be developed and the backlog of requirements adjusted accordingly.

--Direct the State boards, as part of their responsibility for reviewing projects, to consider whether those Reserve components requesting new or expanded facilities could use augmentation or associate program concepts and thereby reduce their facility requirements.

units into the underused or vacant facility space of Active Force units will increase not only the use of existing Government facilities but also the opportunities for joint training of Active and Reserve Forces for mutual benefit. While integration would reduce the amount of separate facility space required by Reserve units, most units would still need some exclusive use space for functions, such as command, administration, management, and storage.

A number of Reserve units are located with or close to Active Force units. The following schedule shows the projects identified during our review for Reserve units located on or near Active Force installations.

	No. of projects	Value	No. of projects for Reserve units located on or near Active Force installations	Value
California	36	$ 28,956,000	19	$15,965,000
Pennsylvania	52	37,912,000	10	5,649,000
New Jersey	14	10,426,000	1	700,000
North Carolina	10	4,713,000	3	1,163,000
Virginia	20	28,030,000	18	26,980,000
Total	132	$110,037,000	51	$50,457,000

Active and Reserve Force officials stated that training Reserve units with Active Force units would benefit both services. The Reserves receive realistic hands-on experience, and the Active units acquire added personnel resources to perform their missions. For example, Air Force Reserve civil engineer units accomplish projects that the Active civil engineer units are unable to accomplish due to resource constraints. Also, Coast Guard Reserve units stand watch and perform search and rescue duties with Active

CHAPTER 5

OPPORTUNITIES FOR RESERVE COMPONENTS TO SHARE ACTIVE FORCE FACILITIES

DOD could increase the use of existing facilities and reduce the backlog of Reserve facility needs if Reserve units located within 25 miles of Active Force installations or colocated with Active units increased their use of underused Active Force facilities. DOD has no formal policy to encourage Reserve units to colocate with Active Force units and share facilities. Air Force Reserve officials said their unwritten policy is to locate units with Active Force units where possible because colocation is the least costly mode of operation. Coast Guard policy, on the other hand, encourages Reserve units to share Active Force facilities where possible.

COAST GUARD RESERVE PROGRAM

The Coast Guard Reserve has two missions--to train for service in the event of war or national emergencies and to augment the Active Coast Guard in its peacetime mission. The augmentation mission, which accounted for about 65 percent of Reserve training time in fiscal year 1979, does not require separate facilities. Reserve units do require limited administrative space, either shared or exclusive use, at the sites of the units augmented.

Examples of the sharing of facilities by Coast Guard Reserve and Active units under the augmentation program follow.

--The 3d Coast Guard District, on the east coast, had 1,941 Reserve positions, or 17 percent of the total Coast Guard Reserve strength, assembled into 46 units in fiscal year 1979. These units augmented Active Coast Guard Forces and used their equipment and facilities.

--The 12th Coast Guard District, on the west coast, had 1,125 Reserve positions, or 10 percent of the total Reserve strength, assembled into 22 units in fiscal year 1979. Of the 22 units, 8 augmented Active Forces and shared their equipment and space. The remaining units shared space and had some of

CONCLUSIONS

Underused and vacant Reserve and Active Force facilities constitute viable alternatives to constructing new Reserve facilities. Underused Reserve facilities are the most readily identifiable source of space and will satisfy backlog requirements and improve utilization of existing facilities. Active Force installations often have vacant facilities and probably have underused space suitable for Reserve requirements. Although this information was not readily identifiable from inventories, we found that responsible installation officials were at least aware of their vacant facilities. Finally, it is feasible to satisfy some Reserve backlog projects by continuing operations on installations being closed by the Active Forces.

Programing agencies and State boards have not taken full advantage of these alternatives to construction. They should be required to more actively seek information on the availability of existing facilities.

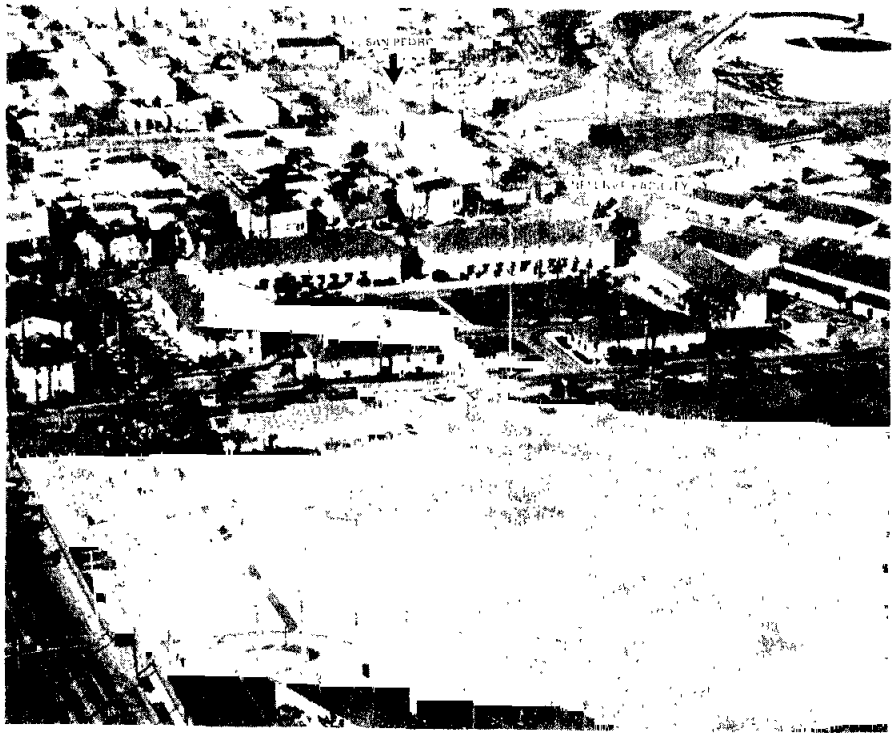
RECOMMENDATIONS

We recommend that the Secretary of Defense direct:

--Programing agencies to use underused and vacant facilities at Reserve centers, Active Force installations, and installations being closed to the maximum extent possible. State boards should make the independent reviews needed to see that this is done.

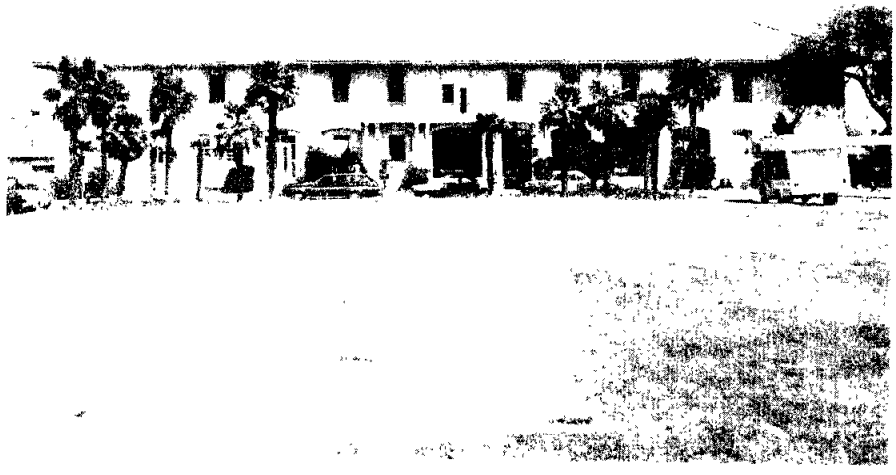
--Programing agencies to exchange information on the use of their Reserve facilities so that all components can take advantage of each other's underused facility.

--Programing agencies and State boards to more actively seek information on the availability of space on Active installations. Outstanding project requirements should be submitted annually to all Active Force installations within a 25-mile radius of proposed projects. As a project nears funding, Active installations which have not made a space utilization study within a reasonable period should be required to make one.



AERIAL VIEW OF THE RESERVE FACILITY AT FORT MacARTHUR. CITY OF SAN PEDRO IN THE BACKGROUND.

SOURCE: U.S. ARMY



RESERVE COMPONENT FACILITY THAT MAY BE LOST DUE TO THE CLOSURE OF FORT MacARTHUR, CA.

SOURCE: U.S. ARMY

for the planned move to Los Alamitos versus retention of a center at Fort MacArthur, particularly in light of the recent transfer of Fort MacArthur to the Air Force.

The Navy, in commenting on our report, said it investigated the feasibility of using existing facilities at Fort MacArthur for a 1,200 person, $5.3 million, fiscal year 1980 Reserve center planned at Long Beach, California. According to the Navy, the life cycle cost analysis indicated it was more cost effective to construct a new center.

If the Army Reserve analysis which we recommend on page 53 shows a center concept is cost effective for its Reserve units now at Fort MacArthur, we believe the Navy should consider the use of Los Alamitos. As indicated on page 53, the Army's proposed move from Fort MacArthur to Los Alamitos will require an estimated construction cost of $2.25 million for facilities to accommodate about 1,125 personnel.

Hamilton Air Force Base

Prior to the Air Force's decision to discontinue operation of Hamilton Air Force Base, the 6th Army moved its Active Force flight detachment and a Reserve flight detachment from the Presidio of San Francisco to Hamilton. These units occupy a hangar complex and some adjacent area. According to 6th Army officials, the Department of the Army directed the 6th Army not to acquire fee title to any aviation facilities. Therefore, the 6th Army's flight detachments operated from Hamilton under a license from the Air Force. This license has since expired, but the Army has continued its operations.

According to 6th Army officials, they have a continuing need for this portion of Hamilton which they currently operate similarly to the two Army Reserve centers at Hamilton Air Force Base. They stated that Hamilton offers a number of unique advantages to accomplish the 6th Army's missions and that they therefore want to continue operations there. However, a General Services Administration official stated that, although the Army could continue its operations for the present, the ultimate disposition of Hamilton could result in the Army being forced out of the aviation facilities unless it acquires fee title to them.

This project, which provides independent utilities to the Guard facilities, enables the Guard to continue using the Fort MacArthur facilities it needs.

--In 1974 the Army took title to two areas at Hamilton Air Force Base, an installation the Air Force closed and turned over to the General Services Administration for disposal in 1974. The Army now occupies and operates these facilities as Reserve centers. The facilities consist of (1) the former base hospital and four adjacent buildings which are used to train two Army Reserve medical units having an authorized strength of 680 personnel and (2) an administrative building and some adjacent vacant space which are used to train two additional Army Reserve units having an authorized strength of 106 personnel. According to 6th Army officials, these Army Reserve centers are operated as independent areas much the same as any other Army Reserve centers. At the present time, utilities are provided by the Navy, which took over the base housing. Access to the centers is through the base, which is currently in caretaker status. Sixth Army officials stated that the Army had not experienced any problems in operating the two Reserve centers and planned to continue their operation.

DISPOSAL OF FACILITIES REQUIRED BY RESERVES

Although excess DOD property can provide opportunities to satisfy Reserve facility requirements, these opportunities are not always adequately considered in disposal actions. Military departments must screen their excess property with other DOD components and the Coast Guard prior to disposal. In addition, they must submit impact statements to the House and Senate Committees on Armed Services for property valued in excess of $50,000. However, they are not required to screen excess property with the state boards who are responsible for reviewing Reserve Force requirements and impact statements to the Armed Services Committees do not identify Reserve facility requirements near excess facilities.

As a result, DOD's screening procedures failed to identify opportunities to satisfy nearby Reserve facility requirements while disposing of facilities at Oakland Army Base, Fort MacArthur, and Hamilton Air Force Base. In addition, base closure actions may adversely affect Reserve

California National Guard	a/1,454
Army Reserve	b/611
Navy and Marine Corps Reserves	987
Active duty personnel	c/33
Army-Air Force Exchange Service/ nonappropriated fund personnel	73

a/Includes 83 full-time personnel performing host functions and 20 personnel to operate the airfield.

b/After the realinement of Army Reserve units based on the planned closure of Fort MacArthur in fiscal year 1981, Army Reserve units at Los Alamitos will have an authorized strength of 1,740. Assigned strength of these units as of June 30, 1979, was 1,530.

c/Does not include unit advisors who are included with the respective service components.

The Guard has operated the Reserve center for 2 years and should be able to continue. But, the operation is costly, and many of the costs are not normally associated with operating a Reserve center. Although the Guard is operating Los Alamitos with fewer personnel than authorized for a comparable Army post, full-time operations and maintenance personnel similar to those of an active DOD installation are still required. A breakout of the Guard's budgets to operate and maintain Los Alamitos is shown on the following page.

The following examples illustrate how space could be used to satisfy Reserves' backlog requirements.

--The planned move of the 6227th Army Reserve school from temporary type facilities at the Presidio of San Francisco to the Golden Gate Reserve center at the Presidio is part of the justification for a $1,239,000 expansion to this center. The needs of this school could be easily satisfied in the 139,000 square feet of vacant academic instruction space we found at the Naval Support Activity, Treasure Island, San Francisco. (See p. 47.)

--The California National Guard has programed a new $583,000 armory for Fairfield, California. Although the Guard has not identified a unit for this armory, we found vacant space at nearby Travis Air Force Base which could satisfy the specific Guard requirements when determined.

In response to our draft report, the Army Reserve stated the report ignored costs to renovate and operate existing space and the fact that space released to Reserve Forces by an Active installation was seldom if ever in usable condition.

We agree that modification, renovation, and operation cost considerations dictate case-by-case total cost to the Government economic analyses. We disagree that space released to the Reserve Forces by an Active installation is seldom if ever in usable condition. Much of the vacant space we reviewed on Active installations was comparable to that used by the Active Forces on the installations.

Installations vacated by Active Forces

Facilities on Active Force installations being closed can be used to satisfy Reserve Force requirements. We reviewed Reserve operations on three installations affected by base closures and found the Reserves had assumed responsibility for operating one and had established Reserve centers on portions of the other two. Although it is possible for the Reserves to operate entire installations, this appears very costly. Retaining only those portions necessary to satisfy Reserve requirements appears to be a more effective mode of operation.

inaccurate, 1/ does not reflect use of assigned space, 2/ and is not in a format conducive to programing agency or State board use. Only through discussions with installation officials were we able to identify the existence of vacant space which would be suitable for Reserve Forces' needs. We believe, therefore, programing agencies and State boards should take a similar approach and should be required to actively seek space on Active Force installations.

1/None of the inventory reports reviewed were completely accurate. Responsible officials attributed this to the impact constantly changing missions have on space allocations. Some of these officials also perceived the updating of inventories as low-priority requirements.

2/Officials at the installation level were not generally aware of how assigned space was being used. Only two installations had space utilization reviews in the past 5 years, and one review identified 77,000 square feet of excess space which is now being used to fill Active Force needs. Some officials stated that, were they directed to provide space for Reserves, they might be able to do so because they had found space for other activities in the past.

authorized strengths of the units presently assigned. These facilities should be considered prime sites for satisfying new facility requirements.

An underused Reserve center could both satisfy a backlog project and eliminate the need for currently leased space. For example, the Army Reserve backlog includes a $530,000 project to house units currently occupying leased space costing $9,000 a year in Oxford, North Carolina. The requirements of these units having an authorized strength of 44 could be satisfied through use of underused space in a Durham, North Carolina, Reserve center approximately 25 miles away. One of two Durham Reserve centers has a rated capacity of 400 but houses units with an authorized strength of only 315 and an assigned strength of 281. Making greater use of the Durham facility would provide an additional advantage in that the Oxford unit is required to periodically train with its parent unit in Durham. 1/

Opportunities to improve utilization of facilities by training on alternate weekends

Reserve units usually meet only one weekend a month. Thus, the actual capacity of an armory or Reserve center may be increased by properly planning and scheduling Reserve Forces training. The 1979 Defense Audit Service report noted that some Reserve facilities were larger than necessary because they were designed to permit all units in the facility to drill at the same time, even though some units drilled on separate weekends.

Using existing armories and Reserve centers to their design capacity for up to three weekends a month could satisfy some requirements presently in the Reserve Forces' construction program backlogs. For example, the Navy has programed a $3 million project to replace its overcrowded Navy and Marine Corps Reserve center in San Jose, California. Officials at this center stated that, although expansion at the present site is not possible, the existing facilities would be adequate if one of two Marine Reserve companies presently there could be relocated. Either of these companies could be relocated to a San Jose Army

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1/In commenting on our draft report, the Army said the project would be recalculated.

as well as the Air National Guard, felt it would be counterproductive to change the range for consideration of alternatives to 25 miles. The Army Guard agreed that in some States boardmembers lacked independence and did not have sufficient information, but said this was not the case in many States.

The Navy commented that its position on our recommendations was to allow time for recent DOD initiatives to take effect and planned actions to be implemented before commenting on this section of the report. The Air Force Reserve agreed with us and said Air Force Reserve component facility programers would be instructed to identify alternatives and present this analysis to State boards.

continue rubber stamp approval of projects for unilateral construction. We agree with that recommendation, and several DOD officials told us they also agreed. They stated that an independent member could provide continuity, ensure that all needed information is available, and handle the increasing paperwork requirements.

In our opinion, the new member should be a full-time employee reporting directly to the DOD office responsible for approving the Reserve components' construction programs. The number of people required to fill the new positions could be minimized by having them chair several State boards, possibly on a regional basis. The new boardmembers' responsibilities should also include development of a master facility plan to aid in better management of the Reserve Force facility program.

In our opinion, the Reserve components' facility program managers should be responsible for developing more of the initial data and making preliminary analyses for the boards, such as those required by the April 1979 DOD instruction. Placing responsibility for gathering detailed data with the program managers who develop the requirements would allow the boards more time for analysis and review and could result in satisfying requirements without constructing new facilites.

The DOD office responsible for the Reserve Forces' facility program believed that before revising the board's membership, more time should be allowed to see whether the procedures and new form instituted in April 1979 will work within the existing structure. During our review, we found one instance where the procedures were used, and therefore, failed to identify an opportunity to use existing space in an Army Reserve center about 25 miles from a programed 150-person armory.

In our opinion, prior problems with the Reserve construction program have been caused more by State boards' failure to implement instructions than by a lack of adequate instructions. We believe, therefore, more has to be done to strengthen the structure of the boards.

One boardmember related an instance in which another member questioned one of his project proposals. He said he retaliated by questioning a subsequent project brought before the board by this member. Another boardmember said that he once backed off from a joint construction recommendation when questioned by other boardmembers on whether the recommendation was in accordance with his commander's policy.

Boards lack sufficient information

State boards are required to regularly acquire current data and guidance from the military departments on the policies, criteria, units, facilities, inventories, current plans, programs, and long-range requirements and resources concerning their Reserve components. They are also required to acquire information on the nature and availability of Active Force facilities.

The boards in the five States we reviewed did not have the necessary information to determine whether there were alternatives to unilateral construction for projects proposed by the Reserve components. For example, none of the State boards had a current short- or mid-range facilities acquisition plan for the Reserve components, nor did they have current inventories of existing Reserve and Active facilities in the State, as required by DOD Directive 5126.24.

Also, some of the data the boards had was misleading. Reserve units were shown as being in centers when they trained elsewhere. For example, the data showed a center with a unit assigned when in fact the center was empty. In addition, the Navy component's data frequently showed the rated capacity of its Reserve centers as being whatever the assigned strength of the units currently assigned was rather than the capacity its centers could accommodate based on their square footage.

Boards lack sufficient time

State boards also generally lack sufficient time to determine whether more cost-effective alternatives are available for proposed construction projects. Board membership is a part-time, additional duty, and the boards generally meet for 1 to 2 hours, two to three times a year. During that time they must review many projects. For example, during the 18 months ended June 30, 1979, the California Board met four times and reviewed 164 projects.

could not satisfy the requirement and annual recertification of this until the requirement is satisfied or funded for construction.

--State boards independently review proposed construction projects to ensure that they are the most cost-effective means of satisfying facility requirements.

--State boards include one additional person, who does not have a vested interest in the Reserve construction program, to provide objectivity.

--DOD auditors make cyclical reviews of State boards' performance.

It appears that problems--lack of boardmember independence and insufficient information and time to review projects for possible alternatives--still plague the boards. We believe that until these problems are resolved, the boards will continue to be ineffective in identifying alternatives to new unilateral construction.

New DOD procedures

DOD added new procedures in April 1979 which require State boards to provide more information on existing facilities. We believe, however, that these procedures do not go far enough to enable the boards to consider all possible alternatives to a proposed project. All alternatives need to be considered if the Reserve Forces are to meet their facility needs in the most cost-effective manner possible.

The new DOD procedures were added to assist the State boards in reviewing proposed construction projects and in identifying alternatives to new unilateral construction. The procedures require the boards to identify the nearest six existing or programed facilities, Active or Reserve, within a 15-mile radius of the proposed project 1/ and to analyze the capability of each facility to meet the requirement. These analyses are to contain the rationale for or against expanding or rehabilitating the facilities to accommodate the requirement.

1/If there are not six facilities within a 15-mile radius, the boards are to show the nearest three within a 30-mile radius.

Accordingly, when data shown in the economic analysis is adjusted for the above, the estimated construction cost of expanding the Fort Bragg Reserve center is $422,400. Estimated costs of constructing two armories--one in Raeford and one in Parkton--are $1,253,400. Over $800,000 in construction costs could be avoided by expanding the Fort Bragg Reserve center and by using these resources to meet other requirements.

Johnstown center at a cost of approximately $97,600. Navy officials agree that the Altoona center is in better condition than the Johnstown center. In view of this, we pointed out in our draft report that as one alternative the Navy could relocate its Johnstown units to Altoona, close the Johnstown center, and rehabilitate only the Altoona center. The Altoona center is located in a highly visible area and has the capacity to accommodate the units at the Johnstown center.

Since only 5 of the 123 reservists currently assigned to the Johnstown center would have to travel more than 50 miles to attend monthly drills at the Altoona center, we do not believe the relocation will adversely affect the strength posture of the Johnstown units, which currently have approximately 189 percent of their total authorized strength.

In its comments, the Navy stated "Even after spending a minimum of $500,000-$750,000 each for interior work only, the centers will still be 1947 buildings that are not properly configurated." Considering the estimated costs of $2.1 million for the new center, the Navy could save about $1.4 million by rehabilitating the Altoona center.

In addition to the Navy's Reserve center at Altoona, we believe the Navy has and should consider other facilities as an alternative to constructing a new center in Ebensburg. The table below discusses the alternatives.

	Units	Authorized	Assigned	Percent authorized
Altoona Army Reserve 300-person center--used 2 weekends a month	2	262	227	87
Altoona Army Guard 150-person center--used 1 weekend a month	1	29	47	162
Altoona Army Guard 400-person center--used 2 weekends a month	2	291	291	79

before they are included in the backlog. In addition, backlog projects must be supported by an economic analysis of all viable alternatives. However, while we believe the concepts incorporated into the Navy's system are commendable, we also believe the system loses credibility when the planning and review process can be circumvented--as it apparently was with the Ebensburg Reserve center project.

The Army stated that our recommendations were generally beneficial to the management of the program. However, it indicated more thorough reviews could only be accomplished if (1) additional personnel were provided and (2) the Office of the Secretary of Defense established a comprehensive crossfeed of information between all branches of the service. While we agree that a more effective crossfeed of information is required, we believe the programing agencies should have the primary responsibility for obtaining this information (see our recommendations in ch. 4). Furthermore, we seriously question the Army's contention that it will need additional personnel to accomplish these reviews. We are simply suggesting that the Army adopt a policy which the Air Force and Navy Reserve have implemented and are recommending that the Army perform the type of reviews which, according to DOD, can be accomplished by State Reserve Forces facility boards in one or two meetings per year.

The Army also stated, "It is the position of the Army Reserve and Army National Guard that the backlog may be understated due to conservative cost estimating and due to as yet unidentified field training and training support requirements." While the Army's contention may be true, our review disclosed neither evidence of conservative cost estimating procedures nor an indication that the Army had significantly understated its training facility requirements. The Army emphasized the distinction between the backlog and the long-range program implying that our analysis of the backlog was inappropriate. As discussed in chapter 1, however, for all practical purposes, there is no real distinction.

In summarizing its position on how much emphasis should be placed on the backlog, the Army concluded, "It does not serve any purpose to expend large amounts of overhead defining solutions to requirements which are in a constant state of change until those requirements and solutions are within reach of resolution." If this is the Army's position, we disagree.

We believe DOD can significantly reduce the difference between reported needs and actual requirements by (1) directing the Reserves to review and purge their backlogs of all invalid and questionable projects and (2) requiring the Reserves to thoroughly review and validate new facility requirements before including them in future backlog figures which are provided to the Congress. DOD must also improve its review procedures if it hopes to provide the Congress with a reasonably accurate indication of the Reserves' needs for construction funds.

RECOMMENDATIONS

We recommend that the Secretary of Defense:

--Ensure that future backlog data reported to the Congress identifies that portion that has not been validated and could not be constructed even if the Congress appropriated the funds.

--Revise review procedures to more effectively identify invalid and questionable projects before submitting them to the Congress.

--Reevaluate invalid and other questionable projects discussed in this chapter, especially those that have already been submitted to the Congress, and take appropriate action.

We further recommend that the Secretary of Defense direct the military departments to:

--Review the projects currently included in the Reserves' backlogs and delete those projects that are invalid or have little, if any, identifiable impact on readiness.

--Review new facility requirements before including them in the backlog they report to the Congress.

--Issue policy guidance on programing construction projects to emphasize that facilities requirements are justified on need rather than what is authorized by published criteria. This recommendation is specifically directed toward the Army Reserve.

at least 8 additional projects for each project that appears in the original lump sum appropriation."

More important than the number of projects reprogramed, in our opinion, is the number of invalid and questionable projects which are approved during the last screening process. In addition to tne Fort Ord project discussed previously (see p. 22), eight of the congressionally approved projects we reviewed were either invalid or highly questionable. These projects are summarized below.

--The Air Force Reserve plans to build a communications-electronics training facility at the Greater Pittsburgh International Airport for a unit that does not have an approved specific mobilization mission.

--The Navy and Marine Corps Reserves plan to build a Reserve Center at Ebensburg, Pennsylvania, at an estimated cost of $2.1 million. The new facility is planned to replace an existing facility which is operationally adequate for the Navy's needs. In our opinion, this project is invalid and should be canceled. The Marine Corps has no units in the Ebensburg area and has not identified a requirement for a Reserve center at Ebensburg. In fact, the Marine Corps conducted two recruiting surveys and concluded it would experience difficulty recruiting in the area. In addition, Navy officials agreed that their portion of the project is a relatively low-priority requirement.

--The Army National Guard plans to build a new armory at Raeford, North Carolina, even though it would be more cost effective to add to an existing Army Reserve center.

--The Army Reserve plans to construct a new Reserve center at Churchland, Virginia, at an estimated cost of $1.3 million, even though it would be more cost effective to add to an existing Army National Guard armory at Portsmouth, Virginia--less than 15 miles away. The Portsmouth armory is used only one weekend a month. The unit commander said the facility could absorb other units for alternate weekend use if certain dedicated space were added. There is adequate land available for expansion. We estimate the potential savings for such an addition to be $939,550.

--Convert the bridge company from Reserve to Active status in return for having one of the current Active line companies of the 13th Engineer Battalion becoming a Reserve roundout unit. Concurrently, look for another location to base the Reserve engineer line company.

--Convert the bridge company to Active status except for one bridging platoon which would remain a roundout unit at its present location.

If any of these alternatives are adopted, we believe the Army will have to either cancel the Fort Ord project or substantially reduce its scope. Consequently, we believe design effort should not proceed on the project until Company D's strength problem is resolved. However, in commenting on our draft report, the Army indicates that it plans to continue with project design.

MORE THOROUGH REVIEWS OF BACKLOG PROJECTS ARE NEEDED

Every year the Reserves must reduce the thousands of projects in their backlogs to the few hundred that will be submitted to the Congress for funding. The projects selected in this screening process should be those that will have the greatest impact on readiness. In our opinion, selecting and planning for these high-priority projects have not been very effective. The Reserves have had to reprogram 38 percent of the projects in their fiscal year 1979 construction programs. In other words, of the 211 projects that were completely reviewed by DOD and selected as the most urgent, 81 projects had to be changed after they were sent to the Congress. In commenting on our draft report, the Navy noted that none of its projects were changed, although two could not be funded due to inflationary pressures and insufficient funds. The Army said that the large number of changes justified the need for expedient methods to make adjustments.

A recent report by the House Committee on Appropriations 1/ expressed the following concern about the magnitude of these reprograming actions.

1/H. R. Report No. 96-246,43 (1979).

According to DOD criteria, a project may be programed when the actual strength of the units assigned at an installation is 50 percent of the units' total authorized strength. However, congressional notification will not normally be initiated until the actual strength is at least 75 percent of the total authorized. Furthermore, for all projects where the total actual strength is 85 percent or less of the total authorized, a statement must be included in the notification request relating the facility requirement to current and projected personnel strengths.

The Army Reserve, in particular, has found it difficult to satisfy these strength requirements. For example, the backlog it reported to the Congress during the fiscal year 1980 budget hearings contained 86 projects for 6th Army units. 1/ As of March 1979, nearly half of these projects did not meet the strength criteria for congressional notification (units total assigned strength was not 75 percent of authorized strength) and 13 did not even meet the strength criteria for programing (50 percent of authorized strength).

Some projects included in our review--either in the backlog or previously authorized for construction, but not yet constructed--met the 75 percent strength criteria, but were questionable because one or more of the units used to justify them were experiencing serious recruiting and retention problems. For example, the Army's fiscal year 1978 construction program included a project for a new organizational maintenance shop and Reserve center at Fort Ord, California. The two units used to justify this project had a total assigned strength that was 103.5 percent of their total authorized strength. As of March 1979, however, as the following table illustrates, one of the units was considerably over strength and the other was considerably under strength.

Unit	Authorized strength	Assigned strength	Percent
Company D(-), 13th Engineer Battalion	82	58	70.7
Section 4, 6253d U.S. Army hospital	32	60	187.5
Total	114	118	103.5

1/The 6th Army is an Active Army headquarters that commands all Army Reserve units in 15 Western States.

The 79th Army Reserve Command official responsible for facilities management stated that the Norristown and Reading projects were the only valid requirements. The remaining eight projects, having an estimated cost of $4,386,000, were programed against criteria at 1st Army headquarters and inserted into the backlog as long-range requirements. The official disagreed with the policy of including these questionable projects in the backlog. He noted that no adverse impact on readiness could be identified at these facilities at this time. We believe the Army Reserve's valid facility requirements lose credibility when unnecessary projects, such as these, are included in the backlog.

In commenting on our draft report, the Army said these projects would be reviewed against programing criteria when consideration of programing is given.

OTHER CONSTRAINTS TO RESERVE CONSTRUCTION

Even if the Congress appropriated the necessary funds, other constraints would prevent the Reserves from satisfying facility needs. This situation is especially true of the Army National Guard, which cannot obtain suitable sites or State matching funds for many Guard armory projects, and the Army Reserve, which has been unable to maintain acceptable strength levels in many of its units.

By including these types of projects in their backlogs, the Reserves are providing the Congress with an indication of their facility needs but are considerably overstating their requirements for construction funds. We believe the backlog data presented to the Congress should be categorized to reflect this additional information.

Armory construction constraints

Unlike other Reserve Force construction projects which are funded entirely by the Federal Government, Army National Guard armories are funded partially by States and, in some instances, local governments. Because the Guard uses its armories to accomplish both State and Federal missions, funding is generally shared on a 75 percent Federal and 25 percent State basis. The States must also obtain suitable sites for their armory projects, but States frequently make this a responsibility of the local communities.

centers. We found personnel below the Continental U.S. Army level were unaware of these projects and questioned their validity.

Continental U.S. Army officials admitted that deficiencies identified in this manner would not necessarily have an adverse impact on readiness. They stated, however, that it is Army Reserve policy to develop projects for all known facility deficiencies. One official stated that he had been specifically directed to include a project for every existing Reserve center in his area. This official was told that because every facility would eventually have to be either modified or replaced, the backlog should include a project reflecting this requirement. He further stated that it is theoretically possible to have two projects for the same facility. For example, a new facility could be programed for 1984, and an expansion for that (as yet unconstructed) facility could be identified as a long-range requirement.

Although this policy may be useful from an internal planning prespective, we question whether it provides the Congress and DOD with the information they need to make sound decisions on authorization and appropriation requests.

How this policy has affected the size of the Army Reserve's reported backlog can be seen by looking at the projects in eastern Pennsylvania.

U.S. Army Reserve backlog projects in eastern Pennsylvania

The backlog the Army Reserve reported during congressional hearings for its fiscal year 1980 construction program contained 31 projects for units assigned to the 79th Army Reserve Command. 1/ Ten of these projects, having an estimated cost of $7,441,000, are within a 50-mile radius of Philadelphia and were therefore included in our review.

1/The 79th Command is responsible for all Army Reserve units in eastern Pennsylvania.

In some instances, the deterioration in strength was substantial. For example, the Army Reserve expanded the capacity of a Reserve center in San Pablo, California, from 300 to 400 persons as part of its fiscal year 1975 construction program. Prior to the project's completion in April 1976, units at the center had an aggregate assigned strength that was 86.5 percent of the total authorized. However, by March 1979, the aggregate assigned strength of the units at the center had dropped to less than 50 percent of the total authorized. 1/ A unit must have 90 percent of its authorized strength to be rated fully combat ready and 70 percent to be rated marginally combat ready.

These findings are consistent with the views of many Active and Reserve component officials. While these officials recognize that other factors, such as the adequacy of a unit's facilities, do have some impact, they generally feel that leadership is the primary factor affecting unit readiness.

In commenting on our draft report, the Navy acknowledged that leadership and the availability of modern training equipment play a key role in readiness, but it also maintained that facilities play "an indirect, but important role, through the creation of an environment to learn and train for a mission and to attract others to join and stay in the Navy." This is probably true. However, we believe it is important to place the impact of new facilities in the proper perspective. For example, we believe it would be self-deceiving to assume that the Reserves' current recruiting and retention problems are due largely to inadequate facilities.

Programing against criteria

Various DOD and service regulations prescribe technical criteria, space authorizations, and policy guidance for the design and construction of military facilities. However, these are only guidelines and are expected to be applied judiciously. This belief is perhaps best summarized by the following excerpt from the Navy's criteria on facility planning.

1/In commenting on a draft of this report, the Army stated that the present strength is just above 50 percent.

for them. For example, a communications-electronics training facility was constructed at Billy Mitchell Field as part of the Air Force Reserve's fiscal year 1975 construction program.

In commenting on our draft report, the Air Force Reserve stated these units are in being to meet wartime manning shortages but, nevertheless, specific mobilization tasking for each Air Force Reserve communications flight was being developed. It also stated that this tasking, together with a Force realinement plan, is expected to be completed by June 30, 1980. However, since the lack of specific mobilization tasking for these units is a longstanding problem, we believe projects for these units (including the fiscal year 1980 project at Greater Pittsburgh International Airport) should be held in abeyance until the tasking is completed.

Programing projects to replace adequate facilities

We identified projects in the backlog to replace operationally adequate facilities. According to DOD policy, these projects would be justified if an economic analysis demonstrated that the construction and operation of a new facility would be more cost effective in the long run than continued use of the existing facility.

While we did not make any detailed economic analyses, we did identify several replacement projects that did not appear justified. 1/ For example, the Army Reserve backlog includes a $2,364,000 project to replace a Reserve center at Fort Story, Virginia. Although the existing facility is a World War II temporary structure, it was recently renovated at a cost of $111,000 to accommodate the 4th Training Brigade. According to the brigade training officer, the existing facility adequately satisfies his unit's needs.

1/Our 1976 report, "Improvements Needed to Prevent Unnecessary Construction of Reserve Forces Facilities" (LCD-75-309), cited similar instances where operationally adequate facilities were unnecessarily replaced or scheduled for replacement.

Programing and constructing facilities for units without specific mobilization missions

In view of the Reserves' large backlog of unmet facility needs and the concerns raised about the level of resources available for new construction, care must be taken to ensure that funds are spent on only required units. However, the Army and Air Force Reserve components' backlogs include projects for units without specific mobilization 1/ missions.

DOD Directive 1225.5 states that

> "Facilities will be provided that * * * are essential for the proper development, training, operation, support (including troop housing and messing) and maintenance of the Guard and Reserve components, who must meet approved operational readiness and mobilization requirements * * *" (emphasis added).

However, the directive does not define the term "approved operational readiness and mobilization requirements." Consequently, its intent is not totally clear.

We believe programing should be limited to units that (1) have a specific mission within the first 6 months following mobilization or (2) do not have a specific mobilization mission, but are necessary for the training and support of units that do. The latter category would include units, such as U.S. Army Reserve schools and State Guard headquarters.

Our position is consistent with current Navy policy. In its comments on our draft report, the Navy stated the following:

> "All Navy units subject to facilities construction programing contain only Selected Reserve

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1/The term "mobilization" refers to the act of ordering the Reserves to active duty in preparation for war or another national emergency. Generally, mobilization missions are tied to a requirement that must be met within the first 6 months following mobilization.

CHAPTER 2

THE REPORTED BACKLOG DOES NOT ACCURATELY REFLECT THE RESERVES' NEED FOR CONSTRUCTION FUNDS

The reported $2.1 billion backlog of unmet facility needs overstates the Reserves' actual need for construction funds. Because of inadequate review procedures, it contains many projects that

--are invalid;

--are technically valid but questionable because they are programed to correct facility deficiencies that, according to Reserve officials, have little, if any, adverse impact on readiness; and

--do not represent the most cost-effective alternatives for satisfying facility deficiencies. 1/

In addition, because of such constraints as inability to obtain State matching funds, projects could not be constructed even if the Congress appropriated the necessary funds. Unless the Reserves develop a backlog that more accurately reflects actual requirements, the potential exists for both the Congress and DOD to be misled as to total Reserve facility needs and their decisions on authorization and appropriations for new facilities construction may be inappropriately influenced by the large, overstated backlog.

In addition, by reporting this inflated backlog, the Reserves are decreasing the likelihood that their facility needs will be met in the most cost-effective manner possible. DOD has disagreed with this assessment in the past, noting that normal review procedures will usually eliminate unjustified and non-cost-effective alternatives when the budgets are prepared. We believe, however, that the high level of reprograming shows that the Reserves are frequently unable to plan effectively for those projects submitted to the Congress for funding.

1/Non-cost-effective projects include, but are not limited to, those programed for unilateral construction when joint construction is feasible. (See ch. 6.)

Military leaders and the Congress have expressed concern about this growing backlog of unmet facility needs. The military leaders, for example, cite shabby and inadequate facilities as major factors contributing to the Reserves' current recruiting and readiness problems.

Because of the limited authorization in fiscal year 1980 for this construction program and the reported increase in the backlog of required construction, the Chairman, Subcommittee on Military Installations and Facilities, House Committee on Armed Services, requested that we assess the feasibility of the Reserve and Guard components sharing or solely utilizing Active Force facilities that are either vacant or underused as a result of base closures and consolidations. Subsequently, the Chairman's office asked us to (1) assess the validity of the construction backlog and (2) evaluate DOD's project planning process.

SCOPE OF REVIEW

We made our review at the Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics); various Active and Reserve component headquarters of DOD and the Coast Guard, including the Departments of the Army, Navy, and Air Force in Washington, D.C.; U.S. Army Forces Command, Fort McPherson, Georgia; First U.S. Army, Fort Meade, Maryland; and Sixth U.S. Army, San Francisco, California; the National Guard Bureau; and Reserve facilities in California, New Jersey, North Carolina, Pennsylvania, and Virginia. We selected these States to provide geographical balance and to include areas that had a significant number of Reserve Forces' projects planned.

We reviewed (1) management data and studies on the Reserve Forces' construction program, (2) files on planned construction, and (3) utilization and disposal data on existing Active and Reserve facilities. We discussed planned construction with DOD officials and Active and Reserve component personnel at the various headquarters, installations, and facilities visited.

Our review focused on the adequacy of controls to ensure that (1) the projects included in the backlog were valid and (2) the Reserve Forces satisfied their facility needs in a cost-effective manner. We selectively reviewed projects in the construction backlog reported to the Congress during its review and consideration of the fiscal year 1980 budget request, including projects authorized for construction

The first fiscal year increment is called the annual program. It includes projects that will be presented to the Congress for funding during the next budget hearings and is supported by documents that contain information on

--the project cost, scope, location, and justification;

--other Reserve and Active Force facilities in the area; and

--the units that will use the new facility, including their current authorized and assigned strengths.

Projects in the second year of the long-range program are also supported by such documentation; however, projects in later years generally are not so documented.

DOD reviews projects in each component's annual program before projects are submitted to the Congress for funding. To assist in this review, DOD has established State Reserve Force facility boards in all 50 States, Puerto Rico, the Virgin Islands, and the District of Columbia. Each board is composed of representatives from each military department and the State's National Guard. The boards are directed to review Reserve construction projects within their respective jurisdictions and are supposed to submit recommendations to DOD citing (1) the projects' contribution to improved readiness, (2) joint (interservice) construction opportunities, and (3) the potential for using available space in nearby Guard, Reserve, or Active Force facilities to satisfy the requirements. Although the boards function solely in an advisory capacity, DOD considers them the key to ensuring the services comply with its policies.

On the basis of the supporting documents submitted with the projects and minutes of the State board meetings, the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) or his designee approves or disapproves the projects included in each Reserve component's annual program. However, DOD has a single individual overseeing the entire Reserve construction program and seldom disapproves projects programed by the Reserves.

The Congress authorizes and appropriates funds for Reserves' facility construction in lump-sum amounts. However, under the law, the Congress is furnished advance notification concerning the location, nature, and estimated cost of specific projects to be undertaken within the

Concerning facility acquisition, DOD Directive 1225.5 states that:

> "* * * facilities will be provided that will make the greatest contribution to readiness and that are essential for proper development, training, operation, support (including troop housing and messing) and maintenance of the Reserve components, who must meet approved operational readiness and mobilization requirements * * *."

DOD has instructed the Reserve Forces to use the most cost-effective method when acquiring new facilities or expanding, repairing, and replacing existing facilities. DOD Directive 1225.5 establishes the following sequence for considering methods to fulfill facilities requirements.

--Utilization of existing facilities which are not being fully used, including facilities of the other Reserve components and the Active Forces.

--Utilization of real property excess to the needs of any of the military departments or other Federal agencies by transfer, use agreement, or permit.

--Lease or donation of privately or publicly owned space which can fulfill the need or be modified at reasonable costs to meet the requirement.

--Construction of additions to existing facilities of the Reserve components or Active Forces or on property already controlled by them, with provisions for maximum joint or common use of existing space and facilities.

--Purchase of existing real property suitable for the purpose without uneconomical remodeling or renovation.

--Construction of a new facility by two or more Reserve components as a joint venture. If such construction at a single location cannot be accomplished concurrently because of an unreconcilable disparity in priorities or for other cogent reasons, provisions will be made in the design and siting of the initial structure for future expansion.

Component	Authorized personnel (note a)	Percent of authorized strength to total service authorization	Assigned personnel (note b)
	(thousands)		(thousands)
Army:			
Active	774.0	57.8	771.1
Reserve	200.3	15.0	185.8
National Guard	364.7	27.2	341.0
Total	1,339.0	100.0	1,297.9
Air Force:			
Active	559.0	78.8	569.5
Reserve	57.2	8.1	53.9
National Guard	93.5	13.2	91.7
Total	709.7	c/100.0	715.1
Navy:			
Active	528.0	91.5	530.1
Reserve	48.9	8.5	82.8
Total	576.9	100.0	612.9
Marine Corps:			
Active	189.0	84.9	190.8
Reserve	33.7	15.1	32.7
Total	222.7	100.0	223.5
Coast Guard:			
Active	37.5	76.2	36.9
Reserve	11.7	23.8	11.4
Total	49.2	100.0	48.3

a/Congressionally authorized strengths for fiscal year 1980.

b/Actual end strengths for fiscal year 1978.

c/Does not add due to rounding.

ABBREVIATIONS

DOD	Department of Defense
GAO	General Accounting Office

--Formally assign Reserve component program officials the tasks of (1) identifying alternative ways to satisfy specific facility requirements, (2) making the analyses needed to determine the most cost-effective alternatives, and (3) presenting this information to the State boards for review.

--Consider consolidating each military department's Reserve construction appropriation similar to the way the Navy and Marine Corps Reserve appropriations are consolidated under the Department of the Navy.

--Impose a moratorium on the construction of armory and Reserve facilities, for a specified time, within 25 miles of completed armory and Reserve facilities for a single component.

AGENCY COMMENTS AND GAO ANALYSIS

GAO provided a draft of this report to the Secretary of Defense on November 27, 1979, requesting written comments. On January 9, 1980, the Office of the Assistant Secretary of Defense provided information copies of internal Department comments from the Reserve components and noted that comments from the Office of the Secretary of Defense would follow. These comments were not received by GAO in time to be included in this report. The Reserve components generally agreed with most of GAO's recommendations.

The Army and Air Force Reserve components disagreed with the recommendation to consolidate Reserve construction appropriations by military department. GAO believes the single review and consolidated construction appropriation program of the Navy and Marine Corps, which has contributed to substantial joint construction by these components, could also work for the Army and Air Force Reserve components.

construction. GAO believes that the boards, as presently constituted, are ineffective. (See ch. 3.)

The members, who are part time, are responsible for providing objective recommendations to the Department. But in the five States visited by GAO, they more often perceived their roles as representing the interests and supporting the project recommendations of their respective components. (See p. 37.) They did not recommend use of existing facilities or joint construction for any of the 37 projects where GAO determined these alternatives were possible.

The Department has made procedural changes to improve performance of the State boards. GAO believes, however, that these changes will do little to ensure that the boards objectively consider all viable alternatives in their analyses. (See p. 36.)

GAO also questions whether, as a part-time duty, boardmembers can realistically be expected to make the type of detailed analyses the new procedures require. Until the parochialism problem is resolved, the boards will probably continue to provide "rubber stamp" approval to proposed projects, even when more cost-effective alternatives are clearly apparent. (See ch. 3.)

COST-EFFECTIVE ALTERNATIVES TO PROGRAMED RESERVE FORCE CONSTRUCTION

The Reserve components could satisfy facility needs by making greater use of existing Active and Reserve Force facilities, including those on installations being realined or closed by the Active Forces. Reserve components and State boards could do more to identify these alternatives and should be required to more actively seek information on the availability of underused and vacant facilities. (See ch. 4.)