095475 2.03-#11

GENERAL ACCOUNTING

REPORT TO THE CONGRESS

Savings Available
By Consolidating Certain
Reserve Fleet Activities 8-768700

Department of Commerce Department of Defense

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

7.00875 09547.

XOV.18,1971



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

B-168700

To the Fresident of the Senate and the Speaker of the House of Representatives

This is our report on savings available by consolidating certain reserve fleet activities of the Department of Commerce and the Department of Defense.

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Copies of this report are being sent to the Director, Office of Management and Budget; the Secretary of Commerce; the Secretary of Defense; the Secretary of the Army; and the Secretary of the Navy.

Comptroller General of the United States

Ilmes B. Starts

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

SAVINGS AVAILABLE BY CONSOLIDATING CERTAIN RESERVE FLEET ACTIVITIES
Department of Commerce
Department of Defense B-168700

DIGEST

WHY THE REVIEW WAS MADE

The Maritime Administration, the Department of the Navy, and-to a lesser extent-the Department of the Army maintain inactive vessels at reserve fleet sites on the east, west, and gulf coasts. The agencies have a common mission of preserving the reserve fleets in the best condition possible with available funds in case they are needed for commercial or national defense purposes.

Because the reserve fleet activities of these agencies are similar and because the fleet sites are close to each other, the General Accounting Office (GAO) reviewed the situation to see if it would be practicable to consolidate the management of Maritime, Navy, and Army fleet sites in the Beaumont, Texas, and San Francisco, California, areas.

FINDINGS AND CONCLUSIONS

After the first year annual savings of about \$664,000 could be realized by having Maritime assume the function of preserving the Army and Navy inactive vessels in the Beaumont and San Francisco areas. Because of certain costs at the start, savings the first year would be about \$392,000. (See p. 11.)

The most advantageous method of consolidation is to leave the vessels at their respective reserve fleet sites and have Maritime assume responsibility for the maintenance and preservation and related administrative functions.

In the San Francisco area, however, the watercraft in wet storage at the Army Rio Vista site should be physically consolidated with the watercraft at the Navy Vallejo site or placed in dry storage. The Navy Stockton berthing area should be closed and its vessels moved to Vallejo and Maritime's Suisun Bay site. (See p. 34.)

At Vallejo Maritime would be able to assume the maintenance and preservation function more economically than the Navy because Maritime uses experienced civilian personnel, whereas the Navy uses relatively inexperienced military employees. Additionally, fewer administrative employees would be needed by Maritime at both Orange, Texas, and Vallejo because some of the Navy administrative tasks would be absorbed by the administrative employees located at Maritime reserve fleet sites. (See p. 15.)

Specifically, GAO found that:

- --In the Beaumont area Maritime could assume the maintenance and preservation and related administrative functions for the vessels at the Navy Orange facility and save about \$251,000 annually in manpower costs. (See p. 18.)
- --In the San Francisco area Maritime could assume the maintenance and preservation and related administrative functions for the vessels at Vallejo--which includes the Stockton, California, site--at annual manpower savings of about \$308,000. (See p. 22.)
- --Annual savings of about \$105,000 in security manpower costs could result by consolidating watercraft berthed in wet storage at the Army Rio Vista site with watercraft at the Navy Vallejo site or placing these watercraft in dry storage. (See p. 26.)

RECOMMENDATIONS OR SUGGESTIONS

GAO recommends that the Secretary of Defense and the Secretary of Commerce make arrangements to:

- --Have the Maritime Administration assume the maintenance and preservation and related administrative functions for the Navy inactive vessels at Orange and Vallejo.
- --Close the Army wet storage facility at Rio Vista and move the watercraft in wet storage to Vallejo or place the watercraft in dry storage.
- --Close the Navy Stockton berthing area and move the vessels to Vallejo and Suisun Bay. (See pp. 34 and 35.)

GAO recommends also that the Secretary of Defense and the Secretary of Commerce have a study made to ascertain the feasibility, including the effect on costs, of consolidating functions for other Army, Navy, and Maritime Administration inactive fleet sites. (See p. 35.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

Maritime was receptive to the idea of working with the Navy and the Army to achieve the proposed consolidation of reserve fleet functions. Maritime advised GAO that it would be appropriate to make a concurrent study of the feasibility of consolidating other reserve fleets. (See p. 27.)

The Navy concurred in the intent of the GAO proposals but strongly recommended that partial consolidation be avoided. (See p. 28.)

The Navy agreed to have Maritime assume responsibility for the inactive vessels at Orange, subject to a Navy decision to redesignate Orange as a

ship and craft storage site only. The Navy also stated that it was possible to have the Army watercraft berthed in wet storage at Rio Vista transferred to Vallejo and agreed to close the Stockton berthing area and move the vessels to Vallejo and Suisun Bay. (See p. 28.)

The Navy, however, was opposed to having Maritime assume the maintenance and preservation and related administrative functions at Vallejo because of the Navy's concern over the ability of Maritime to preserve unfamiliar combat ships and the ability of Vallejo to carry out the Navy's military responsibilities should Maritime assume the maintenance and preservation responsibility for the inactive vessels. (See pp. 29 and 30.)

The Navy did not consider that additional study was required concerning consolidation of functions for other Army, Navy, and Maritime reserve fleet sites because it believed that the factors relative to the proposed consolidation of functions at its Vallejo fleet site would be applicable to any consolidation of vessels at other reserve fleet sites. (See p. 32.)

The Army concurred in the GAO recommendations. (See p. 33.)

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report informs the Congress of the substantial savings possible by consolidating certain reserve fleet activities.

Contents

	Contents	Page
		<u>rage</u>
DIGEST		1
CHAPTER		
1	INTRODUCTION	4
	Maritime Administration	5 8
	Department of the Navy	10
	Department of the Army	10
2	SAVINGS AVAILABLE BY CONSOLIDATING CERTAIN	
	RESERVE FLEET ACTIVITIES	11
	Navy and Maritime preservation methods	12
	Alternative consolidation methods con-	
	sidered	14
	Consolidation of maintenance and pre-	
	servation functions for Texas fleets	18
	Labor costs	20
	Impact costs	21
	Consolidation of maintenance and pre-	
	servation functions for San Francisco	22
	area fleets	22 25
	Impact costs Army craft at Rio Vista	25 25
	Army Craft at Rio Vista	2.5
3	AGENCY COMMENTS	27
,	CONCILICION C. AND DECOMMENDATION C.	2.4
4	CONCLUSIONS AND RECOMMENDATIONS Conclusions	34 34
	Recommendations to the Secretaries of	54
	Defense and Commerce	34
	belense and commerce	34
APPENDIX		
I	Letter dated July 1, 1971, from the Assistant Secretary of Defense, Installations and Logistics, to the General Accounting Office	37
		37
II	Letter dated July 7, 1971, from the Department of Commerce to the General Account-	
	ing Office	43

APPENDIX		Page
III	Principal officials of Departments of Defense, Army, Navy, and Commerce responsible for administration of activities discussed in this report	46
	ABBREVIATIONS	
GAO	General Accounting Office	
DOD	Department of Defense	

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS SAVINGS AVAILABLE BY CONSOLIDATING CERTAIN RESERVE FLEET ACTIVITIES
Department of Commerce
Department of Defense B-168700

DIGESI

WHY THE REVIEW WAS MADE

The Maritime Administration, the Department of the Navy, and-to a lesser extent--the Department of the Army maintain inactive vessels at reserve fleet sites on the east, west, and gulf coasts. The agencies have a common mission of preserving the reserve fleets in the best condition possible with available funds in case they are needed for commercial or national defense purposes.

Because the reserve fleet activities of these agencies are similar and because the fleet sites are close to each other, the General Accounting Office (GAO) reviewed the situation to see if it would be practicable to consolidate the management of Maritime, Navy, and Army fleet sites in the Beaumont, Texas, and San Francisco, California, areas.

FINDINGS AND CONCLUSIONS

After the first year annual savings of about \$664,000 could be realized by having Maritime assume the function of preserving the Army and Navy inactive vessels in the Beaumont and San Francisco areas. Because of certain costs at the start, savings the first year would be about \$392,000. (See p. 11.)

The most advantageous method of consolidation is to leave the vessels at their respective reserve fleet sites and have Maritime assume responsibility for the maintenance and preservation and related administrative functions.

In the San Francisco area, however, the watercraft in wet storage at the Army Rio Vista site should be physically consolidated with the watercraft at the Navy Vallejo site or placed in dry storage. The Navy Stockton berthing area should be closed and its vessels moved to Vallejo and Maritime's Suisun Bay site. (See p. 34.)

At Vallejo Maritime would be able to assume the maintenance and preservation function more economically than the Navy because Maritime uses experienced civilian personnel, whereas the Navy uses relatively inexperienced military employees. Additionally, fewer administrative employees would be needed by Maritime at both Orange, Texas, and Vallejo because some of the Navy administrative tasks would be absorbed by the administrative employees located at Maritime reserve fleet sites. (See p. 15.)

Specifically, GAO found that:

- --In the Beaumont area Maritime could assume the maintenance and preservation and related administrative functions for the vessels at the Navy Orange facility and save about \$251,000 annually in manpower costs. (See p. 18.)
- --In the San Francisco area Maritime could assume the maintenance and preservation and related administrative functions for the vessels at Vallejo--which includes the Stockton, California, site--at annual manpower savings of about \$308,000. (See p. 22.)
- --Annual savings of about \$105,000 in security manpower costs could result by consolidating watercraft berthed in wet storage at the Army Rio Vista site with watercraft at the Navy Vallejo site or placing these watercraft in dry storage. (See p. 26.)

RECOMMENDATIONS OR SUGGESTIONS

GAO recommends that the Secretary of Defense and the Secretary of Commerce make arrangements to:

- --Have the Maritime Administration assume the maintenance and preservation and related administrative functions for the Navy inactive vessels at Orange and Vallejo.
- --Close the Army wet storage facility at Rio Vista and move the watercraft in wet storage to Vallejo or place the watercraft in dry storage.
- --Close the Navy Stockton berthing area and move the vessels to Vallejo and Suisun Bay. (See pp. 34 and 35.)

GAO recommends also that the Secretary of Defense and the Secretary of Commerce have a study made to ascertain the feasibility, including the effect on costs, of consolidating functions for other Army, Navy, and Maritime Administration inactive fleet sites. (See p. 35.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

Maritime was receptive to the idea of working with the Navy and the Army to achieve the proposed consolidation of reserve fleet functions. Maritime advised GAO that it would be appropriate to make a concurrent study of the feasibility of consolidating other reserve fleets. (See p. 27.)

The Navy concurred in the intent of the GAO proposals but strongly recommended that partial consolidation be avoided. (See p. 28.)

The Navy agreed to have Maritime assume responsibility for the inactive vessels at Orange, subject to a Navy decision to redesignate Orange as a

ship and craft storage site only. The Navy also stated that it was possible to have the Army watercraft berthed in wet storage at Rio Vista transferred to Vallejo and agreed to close the Stockton berthing area and move the vessels to Vallejo and Suisun Bay. (See p. 28.)

The Navy, however, was opposed to having Maritime assume the maintenance and preservation and related administrative functions at Vallejo because of the Navy's concern over the ability of Maritime to preserve unfamiliar combat ships and the ability of Vallejo to carry out the Navy's military responsibilities should Maritime assume the maintenance and preservation responsibility for the inactive vessels. (See pp. 29 and 30.)

The Navy did not consider that additional study was required concerning consolidation of functions for other Army, Navy, and Maritime reserve fleet sites because it believed that the factors relative to the proposed consolidation of functions at its Vallejo fleet site would be applicable to any consolidation of vessels at other reserve fleet sites. (See p. 32.)

The Army concurred in the GAO recommendations. (See p. 33.)

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report informs the Congress of the substantial savings possible by consolidating certain reserve fleet activities.

CHAPTER 1

INTRODUCTION

Our review of the feasibility of consolidating activities for maintaining and preserving the inactive vessel fleets of the Maritime Administration, the Department of the Navy, and the Department of Army was conducted at Maritime and Navy sites in the Beaumont area and at Army, Navy, and Maritime fleet sites in the San Francisco area. We limited our review to these two areas because the fleets in these areas were close to each other and because they appeared to offer the most potential for consolidation. Our review was directed primarily toward comparing the manpower required to accomplish similar activities at the fleet sites of the respective agencies. We did not evaluate the effectiveness of the programs at these fleet sites.

Maritime, Navy, and Army, on a much smaller scale, maintain reserve fleet sites on the east, west, and gulf coasts of the United States. These agencies have a common requirement of maintaining the vessels in their reserve fleets in the best possible condition with available funds in the event that the vessels are needed for commercial or national defense requirements.

The vessels in the reserve fleets are divided into two main categories—retention and nonretention. It is the vessels in the retention category and the manpower required to maintain these vessels that are discussed in this report. The vessels in the nonretention category generally are being held for sale for scrapping, and very little manpower is required to maintain them.

The similarities and differences in maintaining the agencies' fleets are discussed in the following sections.

MARITIME ADMINISTRATION

The Maritime Administration's National Defense Reserve Fleet was established pursuant to section 11(a) of the Merchant Ship Sales Act of 1946 (50 U.S.C. App. 1744). The reserve fleet primarily comprises (1) vessels owned by Maritime on the date that the reserve fleet was established and (2) military-type ships having commercial characteristics which are being preserved for the Navy.

Maritime is responsible for the maintenance and preservation of vessels in the reserve fleet that are considered to have sufficient value for commercial and national defense purposes in the event of a national emergency. For example, from 1965 through 1967 a total of 161 vessels were withdrawn from the fleet to assist in carrying supplies in support of military activities in Southeast Asia.

On September 30, 1970, a total of 962 vessels, most of which were designed and built during World War II, were in the reserve fleets and were located at six anchorages on the east, west, and gulf coasts. Included were 555 commercial-type vessels and 398 military-type vessels with commercial characteristics (military auxiliaries). The following table shows the fiscal year 1970 operating costs and the number of retention and nonretention vessels at each of the reserve fleet sites as of September 30, 1970.

	Num1			
Fleet site	Reten- tion	Nonre- tention	Total	Operating <u>costs</u>
Hudson River, New York				
(note a)	-	42	42	\$ 367,000
James River, Virginia	143	172	315	1,449,000
Mobile, Alabama	1	109	110	330,000
Beaumont, Texas	59	72	131	802,000
Suisun Bay, California	172	97	269	1,862,000
Olympia, Washington	48	_38	86	676,000
Total	<u>423</u>	<u>530</u>	<u>953</u> b	\$ <u>5,486,000</u>

^aThe Hudson River fleet site was closed effective April 30, 1971.

Does not include nine vessles which were berthed at the fleet sites pending Maritime or Navy action on disposition of the vessels.

Of the total reserve fleet operating cost of \$5,486,000 for fiscal year 1970, \$1,792,000 was for reimbursable work performed by Maritime for the Military Sealift Command, Department of the Navy. This work related to preparing Maritime vessels, which had been operating in support of military activities in Southeast Asia and which recently had been returned, for storage in the fleet. The remaining \$3,694,000 was for the maintenance and preservation and related administrative and security functions for vessels in the fleet that might be needed in the event of a national emergency.

The Maritime fleets are located in relatively isolated areas having very few land facilities--usually a headquarters and supply unit located in a building or on a barge. At the Maritime facilities the vessels are anchored in open water, whereas, at the Navy facilities, most of the vessels are moored at piers. Vessels in the Maritime fleets are, for the most part, cargo-carrying merchant vessels compared with vessels in the Navy fleets which are warships--such as destroyers, destroyer escorts, and minesweepers. Also most of the vessels in the Maritime fleets are much larger than those in the Navy fleets and therefore require greater effort to preserve. For example, Maritime's predominant vessel types--Liberty and Victory ships--are about 450 feet long and 60 feet wide and have drafts of about 28 feet compared with the Navy destroyers and destroyer escorts, which range from 306 to 376 feet in length and from 36 to 40 feet in width and have drafts of 9 to 12 feet.

The Maritime fleet at Beaumont is anchored in open water, and the shore facilities cover a land area of about 4 acres. Beaumont has a berthing capacity for approximately 350 Victory-type ships. Berthing capacity is stated for a specific type of vessel because it can vary significantly depending upon the type and size of vessel. For example, for vessels smaller than Victory ships, the capacity at Beaumont could be greatly in excess of 350 vessels.

As of September 30, 1970, Beaumont had 131 vessels in the fleet and a work force of 115 employees. Of these, 58 were involved in vessel maintenance and preservation, including related administrative and security functions, and the remaining 57 employees were engaged in preparing Maritime vessels recently returned from the Southeast Asia sealift for storage in the fleet.

Maritime's only berthing site in the San Francisco area is at Suisun Bay, which has a berthing capacity for 350 Victory-type ships. As of September 30, 1970, Suisun Bay had a total of 269 vessels in the fleet and a work force of 239 employees. Of these, 113 were involved in vessel maintenance and preservation, including related administrative and security functions, and the remaining 126 were engaged in preparing Maritime vessels recently returned from the Southeast Asia sealift for storage in the fleet.

DEPARTMENT OF THE NAVY

The mission of the Navy inactive ship maintenance facilities is to provide for the inactivation, security, maintenance, and activation of naval ships and craft. Although they generally are attached to larger naval installations, the facilities are under the direction of the Inactive Ship Division of the Naval Ship Systems Command. As of September 30, 1970, a total of 802 vessels (539 ships and 263 craft) were located at seven inactive ship maintenance facilities. The location of the facilities and the number of retention and nonretention vessels at each facility at that date and the operating costs for the fleet sites for fiscal year 1970 are shown in the following table.

	Numb			
	Reten-	Nonre-		Operating
<u>Inactive ship facility</u>	tion	tention	<u>Total</u>	costs
Bremerton, Washington	84	4	88	\$ 1,622,000
San Diego, California	133	17	150	2,432,000
Vallejo, California	94	30	124	1,674,000
Pearl Harbor, Hawaii	53	15	68	851,000
Norfolk, Virginia	65	5	70	1,888,000
Philadelphia, Pennsyl-				. ,
vania	119	17	136	3,227,000
Orange, Texas	<u>150</u>	<u>16</u>	<u>166</u>	2,121,000
Total	698	104	802	\$13,815,000

The Navy inactive fleets, with the exception of the Orange fleet, are parts of larger naval installations, such as shipyards or Navy bases. In general, the inactive fleets have much more extensive shore facilities than do the Maritime fleets, which is attributable primarily to the increased fleet responsibilities that the Navy sites have. Since the vast majority of Navy ships are moored at piers, they are more easily accessible than Maritime ships for normal maintenance and preservation work. Also the piers permit easier access to remove equipment and to inactivate the vessels.

The Navy fleet at Orange is located about 20 miles from the Maritime fleet at Beaumont. This fleet, unlike other Navy fleets which are parts of larger Navy installations, is a separate self-sustaining activity and as such must provide for services, such as base security and warehousing. Most of the 166 vessels at Orange as of September 30, 1970, were berthed at piers. The Orange facility has a berthing capacity for about 250 destroyer-type ships. As of August 31, 1970, Orange had 168 employees, of which 122 were civilian and 46 were military.

The Navy's inactive fleet in the San Francisco area is at the Vallejo Inactive Ship Maintenance Facility, which consists of two berthing areas about 60 miles apart: (1) Mare Island, Vallejo, California, and (2) Rough and Ready Island, Stockton, California. Both berthing areas are parts of larger Navy installations and receive support services, such as facility security, communications, and supply, from other Navy facilities in the area.

The Mare Island site is the main berthing area and is located about 20 miles from Maritime's Suisun Bay fleet. All phases of an inactive fleet operation, such as inactivation and maintenance and preservation, can be performed at Mare Island, whereas work at the Stockton site is limited primarily to vessel storage and certain phases of preservation. The Mare Island site has a berthing capacity for 73 destroyer-type ships, whereas the Stockton site has a berthing capacity for 57 such vessels.

As of September 30, 1970, a total of 124 ships and craft were located at Vallejo's two berthing areas. As of March 1, 1970, Vallejo had 225 employees of which 189 were military and 36 were civilian.

DEPARTMENT OF THE ARMY

In terms of number of fleet sites and the sizes and number of vessels, the Army marine operations are much smaller than those of Maritime and Navy. Because the Army operation was smaller and because Department of Defense (DOD) officials advised us in December 1969 that consolidation of the Army Rio Vista watercraft storage facility with the Navy site at Stockton might be economically advantageous, our review of Army operations was much more limited than our review of the Maritime and Navy reserve fleets.

The Army stores watercraft at two Army depots located at Lathrop, California, and Charleston, South Carolina. The marine operations of the Sharpe Army Depot in Lathrop actually are conducted at Rio Vista, about 37 miles distant. The Rio Vista facility consists of a marine repair facility and a wet storage area. The repair facility consists of several buildings and about 32 acres of land, including space for dry storage of amphibious craft.

Effective June 30, 1970, the facility's repair and rebuilding mission for watercraft was terminated. Since June 30, 1970, the facility's mission has been receipt, storage, and preparation of watercraft for shipment, and any required repair of watercraft has been provided under contracts.

The wet storage area has a berthing capacity for about 200 to 250 watercraft, such as barges, tugs, and patrol craft. In September 1970 about 25 watercraft were in wet storage. Except for moorings the wet storage area anchorage has no permanent or temporary structures.

Fiscal year 1970 costs related to wet storage operations were about \$161,000, of which about \$56,000 was for maintenance and the remaining \$105,000 was for 24-hour security patrols performed by 14 employees.

CHAPTER 2

SAVINGS AVAILABLE BY CONSOLIDATING

CERTAIN RESERVE FLEET ACTIVITIES

Our review showed that, after the first year, annual savings of about \$664,000 could be realized by having the Maritime Administration assume the function for preserving certain Army and Navy inactive vessels. Our savings are predicated upon leaving the Navy and Maritime inactive vessels at their present sites in the Beaumont and San Francisco areas. But we concluded that, in the San Francisco area, the watercraft in wet storage at the Army Rio Vista site should be moved to the Navy Vallejo site or placed in dry storage and that the vessels at the Navy berthing area at Stockton should be moved to the Navy Vellejo site and Maritime's Suisun Bay site.

Savings during the year that Maritime would assume maintenance and preservation responsibility would amount to about \$392,000 because of certain nonrecurring impact costs, such as towing, corrective preservation steps, and site preparation, that would be incurred in effecting the consolidation.

Although our work was limited to fleets in the Beaumont and San Francisco areas and although our computations of possible savings apply to those areas, a potential may exist for additional savings by consolidating maintenance and preservation activities at other Army, Navy, and Maritime fleet sites located in the same geographical areas. We believe, for example, that potential for additional savings may be available by consolidation of the Navy fleet at Norfolk, the Maritime fleet at James River, and the Army fleet at Charleston. Consolidation of the Navy fleet at Bremerton and the Maritime fleet at Olympia should also be considered. In terms of missions, facilities, and overall operation, the fleets covered by our review generally are typical of the other fleets of the respective agencies.

Our estimate of possible savings is based on (1) the number of naval personnel that no longer would be required to maintain and preserve the vessels at the Orange and Vallejo inactive fleet sites, (2) the number of employees necessary for Maritime to assume the responsibility for preserving the Navy vessels at the two sites, (3) an allowance for certain impact costs which would be incurred, and (4) the reduced security costs that would result from moving the Army watercraft berthed in wet storage at Rio Vista to the Navy fleet site.

NAVY AND MARITIME PRESERVATION METHODS

The Navy and Maritime have a common mission of maintaining and preserving vessels in their reserve fleets in the best condition possible with the funds available. Maritime's reserve fleet vessels are primarily merchant vessels, whereas the Navy reserve fleet consists primarily of military combattype ships.

An important factor that must be considered in any proposed consolidation is the difference in the preservation methods used by the two agencies. Navy officials contend that significant differences exist between Navy and Maritime methods and requirements for the preservation of vessels. Our review of the preservation methods used by the Navy and Maritime showed that, although some differences did exist, the differences were not significant enough to affect the feasibility of consolidation.

With the exception of the Navy requirement for periodic dry-docking, Maritime and Navy preservation methods basically are the same. The Maritime preservation and maintenance program, however, consists of a number of periodically recurring work steps requiring varying preestablished numbers of workdays depending upon the type of ship. On the other hand the Navy preservation system is conducted on an asneeded basis except for a vessel's interior and the part of the hull below the waterline, which are maintained at specified intervals.

Both Maritime and the Navy protect the part of a vessel's hull below the waterline by a system which passes an electric current between anodes and the hull of the vessel to prevent underwater rusting and pitting. Maritime officials believe that this system, for the most part, eliminates hull deterioration on vessels in inactive status and that, therefore,

vessels need not be dry-docked. The Navy, however, periodically dry-docks thin-hulled and heavier hulled vessels every 8 years and 15 years, respectively. Dry-docking essentially involves removing the vessel from the water for inspecting, cleaning, and painting the hull.

The Navy and Maritime protect the deck and that part of the hull of a vessel that is above the water by applying paint or other preservative compounds. Maritime performs this work periodically, whereas the Navy performs the work on an as-needed basis.

Both Maritime and the Navy have used similar dehumidification systems to preserve the vessels' interiors. Dehumidification is used because corrosion of metals can be reduced greatly or stopped completely in confined spaces by reducing the water vapor. The Navy dehumidifies the entire interior of the vessel, whereas Maritime only partially dehumidifies the interior of a vessel because it believes that it is not necessary to dehumidify cargo holds on merchant-type vessels. Maritime only recently began using the dehumidification method on its own vessels entering the reserve fleet; however, it has been preserving Navy ships with dehumidification since early in 1962. In fact, many of the Navy ships under Maritime's care have dehumidification systems that were installed by Maritime.

Although Maritime is familiar with the Navy procedures and does have a large number of Navy vessels in its reserve fleet, the interiors of most of the vessels in the Maritime fleet were still preserved under Maritime's earlier preservation method, which consisted of coating the vessel's interior with contact preservatives—basically grease and oil. This method requires a significantly higher man—day expenditure than does the dehumidification method. For example, on two Victory—type ships in the fleet, one under contact preservation and the other under the dehumidification method, the annual man—day requirements to preserve the interiors of the vessels are 48 man—days and 15 man—days, respectively.

ALTERNATIVE CONSCLIDATION METHODS CONSIDERED

Because of differences in impact costs, labor costs, and the uncertainty over how long the vessels would be left in the fleet, we considered two alternative methods of consolidation: (1) administrative consolidation, that is, leaving the vessels at their respective fleet sites and having either Maritime or the Navy assume the preservation function and (2) physical consolidation of the vessels at one site under either Maritime or Navy control.

We ruled out the alternative of having the Navy assume responsibility for either physical or administrative consolidation, because a comparison of Navy and Maritime manpower required to perform the same functions showed that Maritime would require fewer additional employees. Also the Navy fleet sites covered by our review do not have adequate berthing capacity to accommodate all the vessels from the nearby Maritime fleets. Therefore the remaining possible alternatives for consolidation are

- --administrative consolidation, leaving the vessels at their respective fleet sites and having Maritime perform the maintenance and preservation function, or
- --placement of all vessels at Maritime sites.

Although we had considered both of these alternatives, discussion with Navy officials, subsequent to their review of a draft of our report, showed that, although placing all vessels at Maritime sites would provide greater economic benefits to the Government during the fourth year of consolidation in the San Francisco area and during the seventh year of consolidation in the Beaumont area, certain administrative problems and Navy mission responsibilities could make such a consolidation impractical.

According to Navy officials, the Navy must retain control over its inactive vessels, including freedom of access to the vessels for equipment removal, equipment validation, inspection, supply overhaul, and the expeditious identification of material to be removed from reserve ships to meet active fleet requests.

In view of the Navy responsibility, the more desirable method of consolidation appears to be for the Navy vessels to remain at Orange and Vallejo and for Maritime to perform the maintenance and preservation function. This alternative would allow the Navy to retain the vessels at its own facilities for performance of its military responsibilities. Both alternatives, however, are discussed in the following sections of this report to show the contrast between a physical consolidation and a consolidation of the maintenance and preservation and related administrative functions only.

To arrive at a comparison of Maritime and Navy manpower requirements to perform the same work, we compared manpower information furnished by Maritime employees with Navy manpower utilization reports for the fleet sites covered by our review. Analysis of Navy manpower utilization reports for the Orange and Vallejo inactive fleets showed that a total of about 161 man-years of effort were being expended annually in support of the maintenance and preservation function.

On the basis of the numbers of vessels being preserved at Orange and Vallejo at the time of our review and the Maritime standards of man-day requirements for vessel preservation, we estimate that a total of 88 man-years of effort would be required by Maritime annually to maintain and preserve the Navy vessels. This would enable about 161 Navy personnel (84 at Orange and 77 at Vallejo), having an annual labor cost of about \$1,294,000, to be released or reassigned, while Maritime would assume their work with 88 employees at an annual labor cost of about \$735,000, a resulting annual saving of about \$559,000.

Maritime's ability to perform the maintenance and preservation and related administrative functions more economically appears to be related to its use of experienced civilian employees at Suisun Bay in contrast to the Navy use of relatively inexperienced military personnel at Vallejo and also to the absorption of certain administrative functions at both Orange and Vallejo by administrative employees located at the Maritime reserve fleet sites.

A significant part of the difference in the labor costs results from the smaller number of administrative employees

which would be needed by Maritime. As shown in the tables on pages 18 and 22 of this report, we estimated that work requiring 41.8 man-years of Navy effort that was allocated to the administrative function in support of the maintenance and preservation function could be assumed by Maritime. On the basis of estimates by Maritime officials, Maritime would require only 16 man-years of effort to assume the administrative function, provided the Maritime operations at the Navy fleet sites were conducted as satellite operations receiving some administrative support from employees at Maritime's Beaumont and Suisun Bay sites.

We obtained estimates from Maritime officials of the number of additional administrative employees needed to assume responsibility for the maintenance and preservation and related administrative functions for the Navy Orange and Vallejo fleet sites because there were no standards which could have been used for this purpose. The Maritime estimates were based on the number of additional administrative employees needed to manage the number of vessels and employees which would be added to its maintenance and preservation responsibilities.

We did not perform a manpower utilization review to determine the reasons Maritime would require fewer preservation workers than the Navy was utilizing. We believe, however, that this difference was explained, at least partially, by the fact that most of the difference was at Vallejo where the Navy was using mostly relatively inexperienced military personnel, generally assigned for only 2 years, to perform the preservation work, whereas the Maritime work force was composed of civilians, most of which had many years of experience. The Navy work force at Orange was composed mostly of civilians.

As previously discussed, the work force at Vallejo as of March 31, 1970, was composed of 225 employees, of whom 189 were military and 36 were civilian. Of the 36 civilians, 20 were temporary or intermittent and eight had administrative-type duties. Maritime and Navy officials advised us that an experienced, stable work force was an important factor for most phases of ship preservation.

We did not find any evidence during our review that the Navy use of a greater number of preservation man-days for each vessel than Maritime resulted in more effective preservation of the vessels in the Navy fleet than that provided by Maritime for vessels in the Maritime fleet.

CONSOLIDATION OF MAINTENANCE AND PRESERVATION FUNCTIONS FOR TEXAS FLEETS

We estimate that \$251,000 could be saved annually after the first year by Maritime's assuming responsibility for the maintenance and preservation and related administrative functions at the Navy Orange fleet site. These savings would result from the reduced number of man-years required by Maritime to perform the same functions that the Navy is performing. We estimate that work requiring 84 man-years of Navy effort at a labor cost of \$698,000 could be performed by Maritime with 57 man-years of effort at a labor cost of \$447,000.

Savings during the year in which Maritime would assume maintenance and preservation responsibility would amount to only \$86,000 because of certain corrective preservation measures which Maritime officials believe would be necessary if Maritime were to assume these functions for the Navy vessels.

The following table shows (1) the man-years expended by major function at Orange on the basis of the number of personnel on board as of August 31, 1970, and a manpower utilization schedule as of that date and (2) our man-year estimates of those functions that should be retained by the Navy and those that would be assumed by Maritime if it were to assume responsibility for preserving the Navy vessels.

		GAO estimate of Navy man-years		Estimated man-years
•		for function	ns to be	needed by
•	Tota1	Retained	Assumed by	Maritime to assume
<u>Function</u>	man-years	by the Navy	<u>Maritime</u>	Navy functions
Maintenance and preservation	48.6	_	48.6	49
Inactivation and activation	13.2	13.2	_	-
Ship disposals	1.9	1.9	_	_
Inspections other than those				
related to maintenance and				
preservation	3.7	3.7	_	-
Administration	51.2	28.1	23.1	8
Security	24.9	24.9	-	_
Leave, special liberty, sick-				
ness	<u>24.5</u>	<u>12.3</u>	12.2	<u>(a)</u>
Tota1	<u>168.0</u>	<u>84.1</u>	<u>83.9</u>	<u>57</u>

^aThe estimate for leave for the Maritime work force was taken into consideration in the computation of man-years required for the other functions.

Our allocation of man-years between Maritime and the Navy is based upon Maritime's taking over only the maintenance and preservation and related administrative functions. The other functions—specifically activation, inactivation, inspection, and ship disposal—are of the types that the Navy should have a continuing knowledge of and capacity to perform at an inactive ship facility and which, therefore, we believe should be retained by Navy.

The security function is not included among those to be assumed by Maritime because (1) part of the security provided by the Navy for Orange, about 12.8 man-years, relates to the Orange facility itself because Orange is not part of a larger Navy installation like the other inactive vessel facilities which receive facility security from the host organization and (2) the balance, or 12.1 man-years, of security relates to vessel security to guard the vessels against unauthorized access. Even though this security is similar to that provided by Maritime at its own fleet sites, it is not among those functions to be assumed by Maritime because of administrative problems that would result from having a nonmilitary agency with its own security force located on a military installation.

The basis for our estimate of man-years required by Maritime to assume the preservation and maintenance and related administrative functions at Orange was discussed with Maritime officials. Maritime officials stressed that this estimate was based on the assumption that the Navy vessels would be in relatively good condition and that the Orange operation would be conducted as a satellite operation to the Beaumont fleet which would provide assistance in the areas of administration, supervision, and supply.

As pointed out on page 14, we considered two alternative methods of consolidation: (1) administrative consolidation, leaving the vessels at their respective fleet sites and having Maritime perform the maintenance and preservation function, or (2) placement of all vessels at Maritime's Beaumont site. As shown in the following table, leaving the Navy ships at Orange and having Maritime perform the maintenance and preservation function would be more economical for the first year of consolidation, whereas moving all the vessels to Beaumont would be more economical in subsequent years.

During the first year leaving the Navy vessels at Orange would save about \$86,100, whereas first-year additional costs of about \$560,400 would be incurred if all the vessels were moved to Beaumont, a difference of about \$646,500 between the two alternatives. In subsequent years, however, having the vessels at Beaumont would result in annual savings of about \$118,200 in labor costs. It would take about 7 years, however, to offset these greater savings against the first-year \$646,500 cost difference between the two alternatives.

	First alternative ships at Beaumont and Orange	
First year		
Navy labor cost of personnel no longer required at Orange Less Maritime labor cost	\$698,300 447,171	\$816,486 447,171
First-year labor savings	251,129	369,315
Less nonrecurring impact costs: Mooring and corrective preservation Site preparation Towing Total impact costs	165,000 	457,017 216,000 256,700 929,717
First-year savings or deficit(—)	\$ <u>86,129</u>	-\$ <u>560,402</u>
Subsequent years		
Navy labor cost of personnel no longer required at Orange Less Maritime labor cost	\$698,300 <u>447,171</u>	\$816,486 447,171
Subsequent-years' savings	\$ <u>251,129</u>	\$ <u>369,315</u>

The bases for the costs shown in the above table are explained in the following sections.

Labor costs

The labor costs relate to the employees used in the maintenance and preservation function, including related administrative and security employees. These costs are the

same under either alternative except that the Navy would not have to provide about 14.2 security man-years, including related leave, for a security force to provide protection for the vessels if all the vessels were moved from Orange to Beaumont, which would result in additional labor savings of about \$118,200 a year. The basis for the number of man-years was discussed on page 15.

Impact costs

The impact costs are nonrecurring expenses that would be incurred if the reserve fleets were consolidated. As is shown in the table on page 20, most of these costs would be incurred if the Navy vessels were to be moved to Beaumont and would cover rearranging vessel berthing locations and preparing vessels to be moored at another site. A cost of about \$165,000 would be incurred for corrective preservation measures regardless of whether the Navy vessels remained at Orange or were moved to Beaumont. These measures are necessary, according to Maritime officials, to bring Navy vessels in line with Maritime preservation standards. The amount is based upon Maritime's experience with Navy vessels previously placed in the Maritime fleets for storage.

Site preparation costs would be incurred mainly for increasing the power supply at Beaumont and for installing Maritime's underwater hull protection system on the Navy vessels if the Navy vessels were moved to Beaumont. The estimates of the site preparation costs were made by Maritime officials.

The towing costs are based upon rates quoted by officials of local commercial towing companies for moving the Navy vessels from Orange to Beaumont. Navy officials at Orange advised us that they were not aware of any Navy tugs in the area that could be used.

CONSOLIDATION OF MAINTENANCE AND PRESERVATION FUNCTIONS FOR SAN FRANCISCO AREA FLEETS

We estimated that \$308,000 could be saved annually after the first year if Maritime were to assume responsibility for the maintenance and preservation and related administrative functions for the vessels at the Navy Vallejo fleet. These savings would result because Maritime would require fewer employees to perform the same function that the Navy was performing. We estimated that work requiring 77 man-years of Navy effort at a labor cost of \$596,000 could be performed by Maritime with 31 man-years of effort at a labor cost of \$288,000.

Savings during the year in which Maritime would assume maintenance and preservation responsibility would amount to only \$207,000 because of certain nonrecurring impact costs. We estimate additional annual savings of \$105,000 if the Army watercraft berthed in wet storage at Rio Vista were moved to the Navy fleet site at Vallejo.

The average number of personnel at Vallejo during fiscal year 1970 was 203. On the basis of a manpower utilization report, we estimate that 77 man-years of effort were being expended in support of the maintenance and preservation function, including related administration. The following table shows the man-years expended by major function at the Vallejo inactive fleet site during fiscal year 1970 and our estimate of those functions that should be retained by the Navy and those that could be assumed by Maritime if it were to assume responsibility for preserving the Navy vessels.

		GAO estimate of Navy man-years for functions to be		Estimated man-years needed by	
Function	Total man-years	Retained by the Navy	Assumed by Maritime	Maritime to assume Navy functions	
Maintenance and preservation	50,5	_	50.5	23	
Inactivation and activation	48,3	48.3	_	-	
Ship disposals	14.7	14.7	_	_	
Inspections other than those related to maintenance and					
preservation	6.0	6.0	-	_	
Administration	49.4	30.7	18.7	8	
Security	14.0	14.0	_	-	
Leave, special liberty,					
sickness	20.1	12.5	7.6	<u>(a)</u>	
Total	203.0	126.2	76.8	<u>3</u> 1	

^aThe estimate of leave for the Maritime work force was taken into consideration in the computation of man-years required for the other functions.

Our allocation of man-years in the above table between Maritime and the Navy is based upon Maritime's assuming only the maintenance and preservation and related administrative functions, whereas Navy would retain, as at Orange, the inactivation, activation, ship disposal, inspection, and security functions.

We estimate, on the basis of the number and sizes of ships and craft being preserved at Vallejo as of April 1, 1970, that it would require a total of 31 man-years of Maritime effort to provide for the maintenance and preservation and related administrative functions for these vessels. The estimate is predicated, in part, upon closing one of the two Navy berthing areas at Vallejo--Stockton--and distributing the 40 ships and craft berthed there between the Navy Mare Island berthing area and Maritime's Suisun Bay facilities. Maritime would provide maintenance and preservation at Mare Island, along with its current function at the Suisun Bay fleet site, and thereby receive administrative and supervisory support from Suisun Bay.

In evaluating the feasibility of consolidating the inactive fleets in the San Francisco area, as in the Beaumont area, we considered the possibility of placing all vessels at Suisun Bay. But, due to certain problems involving the Navy military responsibility regarding the inactive vessels, the high impact costs of placing all vessels at Suisun Bay, the uncertainty of how long the Navy vessels would be retained in the reserve fleet, and the unsuitability of Suisun Bay for storage of the smaller Army watercraft, the more desirable method of consolidation appears to be for the Navy vessels to remain at Vallejo and for Maritime to assume the maintenance and preservation and related administrative function.

A factor in favor of placing all vessels at Suisun Bay is that the security force maintained by the Navy to provide protection at Vallejo would not be necessary because the vessels would not be at Vallejo and because the present guard force at Suisun Bay could provide protection for the additional vessels. Under the split operation alternative, the Navy would still retain a security force of 15.5 men at Vallejo at an estimated annual cost of \$120,300, including related leave. Considering this cost the alternative of

placing all vessels at Suisun Bay would become more attractive from a purely economic standpoint during the fourth year following consolidation, at which time the \$120,300 higher annual savings of placing all vessels at Suisun Bay would offset the \$304,500 first-year cost difference between the two alternatives.

As explained on page 14, however, the physical consolidation could cause administrative problems which could make a physical consolidation impractical.

The two alternatives, their impact costs, and firstand subsequent-year savings are shown in the following table.

	First alternative ships at Suisun and <u>Vallejo</u>	Second alternative all ships at Suisun
First year		
Navy labor cost of personnel no longer required at Vallejo Less Maritime labor cost	\$595,968 288,062	\$716,248 28 <u>8,062</u>
First-year labor savings	307,906	428,186
Less nonrecurring impact costs: Mooring and corrective preservation Site preparation Towing	81,975 - 19,032	222,269 275,000 28,485
Total impact costs	101,007	525,754
First-year savings or deficit(-)	\$ <u>206,899</u>	\$ <u>-97,568</u>
Subsequent years		
Navy labor cost of personnel no longer required at Vallejo Less Maritime labor cost	\$595,968 288,062	\$716,248 288,062
Subsequent-years' savings	\$ <u>307,906</u>	\$ <u>428,186</u>

Impact costs

The impact costs are the nonrecurring expenses that would be incurred to effect the consolidation. The costs are based primarily on estimates provided by Maritime and Navy officials. The mooring and corrective preservation costs relate to rearranging vessel rows to accomodate additional vessels, incidental work on the vessels to prepare them for mooring at the fleet site, and preservation work on the Navy vessels to bring them up to Maritime's preservation standards.

The costs of mooring, corrective preservation, and towing would be greater if all vessels were moved to Suisun Bay simply because of the larger number of vessels that would be moved. Thus, if the vessels berthed at Stockton were to be moved to the Navy Mare Island and Maritime's Suisun Bay sites, the towing costs would be about \$19,000. If all the Navy vessels were moved to Suisun Bay, however, the towing costs would be about \$28,000. The towing costs are based upon using Navy tugs at Navy billing rates.

Site preparation costs are for additional electric power and installation of Maritime's underwater hull protection system on Navy vessels. The cost was estimated to be \$180,000 if all vessels were moved to Suisun Bay because power would have to be provided for about 100 additional vessels. In addition, \$95,000 would be required to install Maritime's underwater hull protection system if all the vessels were moved to Suisun Bay.

Army craft at Rio Vista

The Army watercraft at the Rio Vista storage facility are much smaller than those in the Navy and Maritime fleets. Since the security costs for watercraft berthed in wet storage at Rio Vista are relatively high, these watercraft should be considered in any consolidation plans for Navy and Maritime fleets. Because the maintenance and preservation work performed on these watercraft at Rio Vista seemed to be relatively insignificant, we did not consider the cost of any preservation work that might be necessary if these watercraft were transferred to Vallejo.

Both Navy and Maritime officials advised us that Suisun Bay generally is not suitable as a site for small watercraft, such as those berthed at Rio Vista's wet storage facility because of the strong winds and severe wave action. A Maritime official advised us that it might be possible to alter the Suisun Bay site and make it suitable for berthing the small craft.

DOD officials advised us by letter dated December 8, 1969, that a review of the Army Rio Vista storage function indicated that consolidation of the watercraft at Rio Vista site with those at the Navy site at Stockton might be economically advantageous. We believe, however, that consideration should be given instead to consolidating the watercraft in wet storage at the Rio Vista site with those at Vallejo's Mare Island berthing area. Mare Island would be more suitable than Stockton because Mare Island

- --is the main berthing area where all phases of maintenance and preservation can be performed, whereas at Stockton only limited work is performed, and
- --is much closer to Suisun Bay than Stockton, which would make it easier for Maritime to carry out its responsibilities if it were to assume the maintenance and preservation function at Vallejo.

We believe that, if the watercraft berthed in wet storage at Rio Vista were transferred to Vallejo's Mare Island site, Rio Vista's security costs, which amounted to about \$105,000 in fiscal year 1970, could be eliminated. Savings during the first year would be only about \$99,000 because of the nonrecurring costs of towing the Army watercraft in wet storage at Rio Vista to Vallejo.

CHAPTER 3

AGENCY COMMENTS

In April 1971 we brought our findings to the attention of the Secretary of Commerce and the Secretary of Defense and proposed that they make arrangements to (1) transfer the maintenance and preservation and related administrative and security functions for the Navy inactive vessels at Orange and Vallejo to the Maritime Administration, (2) move the Army craft at Rio Vista to Vallejo, and (3) close the Stockton berthing area and move the vessels to Vallejo and Suisun Bay. We proposed also that a study be made to ascertain the feasibility and effect on costs of consolidating functions of other Army, Navy, and Maritime Administration inactive fleet sites.

After consideration of Navy comments and a subsequent discussion with Navy and DOD officials on July 28, 1971, we no longer are suggesting that Maritime assume the security function at both Orange and Vallejo because of administrative problems which could arise by having Maritime assume the security function at a military installation. The comments of Navy and DOD officials obtained at this meeting are discussed in the following sections.

In commenting on our draft report, the Assistant Secretary of Commerce for Maritime Affairs advised us by letter dated June 2, 1971 (see app. II), that Maritime was most receptive to the idea of working with the Department of the Navy and the Department of the Army in the achievement of the proposed consolidation of reserve fleet functions.

Maritime stated that it did not believe that any of the organizational or technical problems which had been mentioned would be insurmountable but was of the view that funding during the transitional phase of consolidation would be the most sensitive and critical factor in the proposal.

Maritime stated further that it would be unable to assume any expense of the consolidation within its present and projected budgets and that it would be necessary for the Army and the Navy, as appropriate, to bear the costs of the consolidation. Such assistance would have to continue until

Maritime could adequately budget funds to finance its expanded reserve fleet role.

We believe that any arrangements which are made to effect the consolidation of Army, Navy, and Maritime reserve fleets by the Secretaries of Defense and Commerce should provide for the transfer of funds to Maritime until Maritime could budget funds to finance its expanded reserve fleet role.

Maritime advised us also that it believed that it would be appropriate that a study be made concurrently of the feasibility of consolidating other reserve fleets.

The Assistant Secretary of Defense, Installations and Logistics, by letter dated July 1, 1971 (see app. I), advised us that, in general, the Navy concurred in the intent of our proposals but strongly recommended that partial consolidation be avoided. The Navy agreed with our proposal that the maintenance and preservation and related administrative and security functions for the inactive vessels at Orange be assumed by the Maritime Administration but was opposed to Maritime's assuming the same functions at Vallejo.

The Navy agreed also to the closing of the Stockton berthing area but, in the event of future need, wanted to retain the option to berth inactive vessels at Stockton because it was the only Navy freshwater site on the west coast. The Navy stated that it was possible to have the Army watercraft berthed in wet storage at Rio Vista transferred to Vallejo.

The Navy commented that it was considering redesignating the Orange facility to a ship and craft storage site only. This would eliminate the requirements for activation and inactivation of vessels and would permit effectuating our proposal relative to Orange. The Navy commented also that, subject to such a decision, the Navy would recommend that Maritime assume all responsibility for the vessels at Orange--either to administer the entire Orange facility as an annex of Beaumont or to physically consolidate Orange with Beaumont, as Maritime saw fit. The Navy believed that essential Navy functions could be handled by about two officers and 10 enlisted personnel if it redesignated the facility as a storage site only.

We consider the Navy comments on its Orange facility to have merit. Should the ultimate decision by the Navy be to redesignate the Orange facility to a ship and craft storage site only, the Government could obtain savings in addition to those previously identified.

The Navy, with respect to Vallejo, was concerned with Maritime's capability to care for (1) category B combat ships—those ships maintained in a higher state of readiness than other retention ships in the fleet (classified as category C ships), (2) Navy combat ships in general, with which, according to the Navy, Maritime employees are unfamiliar, and (3) Navy combat ships having unique requirements, such as submarines, or ships requiring specially trained personnel, such as those having nuclear power.

We had previously discussed the maintenance of category B ships with Navy officials who informed us that, in theory, more maintenance should be provided to category B ships than for category C ships but that, because funds were not available, no added maintenance had been provided to category B ships.

In a subsequent discussion Navy officials told us that, during the past few years, there had been little difference in the maintenance given category B and C ships because of the mass inactivations by the Navy. They stated, however, that, when the inactivations slowed down, the Navy expected to again provide added maintenance to category B ships.

We believe that the willingness of the Navy to turn their facility at Orange over to Maritime indicates that the Navy recognizes that Maritime has the ability to care for Navy reserve fleet ships. We noted that only six of 75 retention ships in the Vallejo fleet as of April 1, 1970, were classified as category B ships.

Regarding special requirement vessels, such as submarines, Maritime officials told us that Maritime employees would have to acquire the necessary experience but did not see any problem in Maritime employees' learning to care for that type of vessel. They explained that the Maritime employees, having many years of experience in caring for inactive merchant vessels, were ship oriented and indoctrinated

in working with inactive ships. The Navy does not have any nuclear-powered vessels in its reserve fleet at Vallejo, but we were advised that the Navy did expect to place a submarine tender capable of caring for nuclear-powered vessels at Vallejo. Maritime officials advised us that they expected to have a nuclear-powered merchant ship in the Maritime fleet in the near future.

In addition, Maritime officials told us that the principles of maintaining the Navy combat vessels, particularly that principle of using dehumidification, were little different from those used on Maritime's merchant vessels and that Maritime currently was preserving military-type merchant vessels which had an even more complicated superstructure than the combat vessels.

A second concern of the Navy was the ability of the Vallejo facility to perform its mission should Maritime assume maintenance and preservation responsibility for the inactive vessels. Factors presented by the Navy in this regard consisted of (1) a need for control over the vessels to allow freedom of access for inspection, equipment removal and validation, and supply overhaul, (2) adequate geographical dispersal of its reserve vessels, and (3) qualifications and availability of Maritime employees for the expeditious identification of material to be removed from reserve vessels to meet active fleet requests.

The consolidation we proposed would involve leaving most of the Navy vessels at their present locations and moving only those Navy vessels at Stockton to the Navy Mare Island site or Maritime's Suisun Bay fleet site. Therefore the consolidation would not affect the dispersal of the vessels or the freedom of access to the vessels required by the Navy in the performance of its duties. Also, during the time covered by our review, equipment removal, equipment validation, and supply overhaul were limited.

The Navy contends that the present reserve fleet operation provides flexibility and a sufficient work force to take care of increases in other functions. According to the Navy the consolidation and the resulting decrease in its work force would remove this flexibility and hinder activation, inactivation, and other duties.

The proposed consolidation involves only functions in support of maintenance and preservation. We recognize that other Navy functions, such as vessel activation and inactivation, should be retained by the Navy. Because the Navy would retain all but maintenance and preservation and related administrative functions, it should be able to maintain a basic capability that could be expanded as requirements dictated. For example, the Vallejo staff was augmented during the recent period of mass inactivation with personnel from the ships undergoing inactivation.

Further we noted that additional personnel were available through the Naval Reserve Ship Activation, Maintenance and Repair Program. The mission of this program is to provide officers and enlisted personnel trained in ship maintenance, repair, and activation procedures for immediate active duty in the event of war or national emergency or when otherwise authorized by law.

The Navy contends that our estimate of savings is based on a figure for military manpower that is larger than normal because of augmentation of the Navy personnel to handle mass inactivations. By the end of fiscal year 1972, military manning at Vallejo is expected to decrease by at least 16 men. This decrease, according to the Navy, will reduce the savings.

Our work at Vallejo showed substantial increases in vessel inactivation between our initial survey in June 1969 and follow-up work in April 1970. Although there had been a substantial increase in vessel inactivation, the level of effort expended on maintenance and preservation had not changed significantly; however, some maintenance and preservation work had been deferred.

Analysis of the changes in work load and manpower utilization showed that the increase in the inactivation work load had been handled primarily through the assignment of additional personnel, many of whom had been assigned on a temporary basis from the ships being inactivated. Therefore, since the increase in personnel to handle increased inactivations primarily affected functions other than maintenance and preservation, a decrease in personnel at this time similarly would affect other than maintenance and preservation

personnel. In this case the savings in our report would not be affected because these savings relate only to the maintenance and preservation and related administrative functions.

The Navy also contended that untold administrative complications would be created since the inactive fleet site at Vallejo was a tenant of the Mare Island Naval Shipyard and has no administrative space other than that provided by a station ship. The Navy added that, if consolidation with Stockton should take place and if the station ship were removed to allow pier space for the ships from Stockton, Maritime would be faced with costs to establish itself at Vallejo.

We agree with the Navy that there could be some administrative problems associated with the consolidation. We believe, however, that these administrative problems would not be so great that they could not be worked out between Maritime and the Navy. The Vallejo inactive fleet site is in an area remote from the shipyard and is fenced off from the rest of the base.

Our report recommends the transfer of vessels from Stockton to both Vallejo and Suisun Bay as berthing space permits. Provision could be made in any arrangements agreed upon by Maritime and the Navy to leave the station ship at Vallejo and to allow Maritime to use it.

Apparently the Navy considers that factors relative to the proposed consolidation of functions at its Vallejo facility, as discussed above, would be applicable to consolidation of vessels at any of its other reserve fleet sites, with the exception of Orange, and therefore the Navy does not consider that additional study is required concerning consolidation of functions of other Army, Navy, and Maritime reserve fleet sites.

We do not agree. We believe that the annual savings available through consolidation of the fleets at Orange and Vallejo, as presented in this report, are substantial enough to warrant a study of the feasibility and the effects on costs of consolidating functions of other Army, Navy, and Maritime inactive fleet sites.

The Army concurred in our proposal that a study be made to ascertain the feasibility and the effect on costs of consolidating functions of other Army, Navy, and Maritime inactive fleet sites. The Army, however, did not agree that the Army watercraft at Rio Vista should be physically consolidated with watercraft at the Navy Vallejo site. Subsequently we met with Army officials and clarified our position concerning the watercraft at Rio Vista. We informed these officials that we were concerned only with the watercraft berthed in wet storage at Rio Vista rather than with all the craft at Rio Vista as interpreted by Army.

The Army officials advised us at the meeting on July 28, 1971, that they thought that the Army watercraft in wet storage could be moved to Vallejo. They stated, however, that, as an alternative, the Army was considering putting its wetstorage craft in dry storage. We informed these officials that such an alternative would meet the intent of our proposal, which was to eliminate the security costs at the wet storage site.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Substantial savings could be obtained if (1) the maintenance and preservation and related administrative functions for the Navy inactive vessels at Orange and Vallejo were assumed by the Maritime Administration, (2) the Army wet storage area at Rio Vista were closed and the watercraft were moved to Vallejo or placed in dry storage, and (3) the Navy Stockton berthing area were closed and the vessels were moved to Vallejo and Suisun Bay.

Our review indicates that the method offering the most immediate economic advantage would be to leave the vessels, with the exception of the Army watercraft in wet storage at Rio Vista and the vessels berthed at Stockton, in their respective fleets and to have Maritime assume the maintenance and preservation and related administrative functions. We recognize, however, that other methods of consolidation may be advantageous. Therefore the Secretary of Commerce and the Secretary of Defense should consider alternative methods of consolidation, such as those discussed in this report.

Although our work was limited to the fleets in the Beaumont and San Francisco areas, there may be a potential for savings at other Army, Navy, and Maritime sites located in the same geographical areas.

RECOMMENDATIONS TO THE SECRETARIES OF DEFENSE AND COMMERCE

We recommend that the Secretary of Defense and the Secretary of Commerce make arrangements to:

--Have the Maritime Administration assume the maintenance and preservation and related administrative functions for the Navy inactive vessels at Orange, Texas, and Vallejo, California.

- --Close the Army wet storage facility at Rio Vista, California, and move the watercraft in wet storage to Vallejo or place the watercraft in dry storage.
- --Close the Navy Stockton, California, berthing area and move the vessels to Vallejo and Suisun Bay, California.

We recommend also that the Secretary of Defense and the Secretary of Commerce have a study made to ascertain the feasibility, including the effect on costs, of consolidating functions for other Army, Navy, and Maritime Administration inactive fleet sites.



ASSISTANT SECRETARY OF DEFENSE WASHINGTON, D.C. 20301

1 JUL 1971

INSTALLATIONS AND LOGISTICS

Mr. C. M. Bailey Director, Defense Division General Accounting Office Washington, D. C. 20548

Dear Mr. Bailey:

Views and comments are furnished on the "Savings Available by Transferring Function of Preserving Army and Navy Reserve Fleet Ships to the Maritime Administration". (OSD Case No. 3276) GAO Draft Report dated April 27, 1971.

The Department of the Army nonconcurs in the findings, the conclusion that Army's watercraft should be physically consolidated with Navy's Vallejo site, and the recommendation that arrangements should be made to transfer the maintenance and preservation and related administration and security functions for the Navy's inactive vessels at Vallejo and Orange to the Maritime Administration (MARAD). The Army concurs with the recommendation that a study be made to ascertain the feasibility and effect on costs from consolidating functions of other Army, Navy, and Marine inactive fleet sites.

The Army doubts that savings could result from consolidation of the maintenance and preservation, security and administrative functions of the Army's inactive fleet with either Navy or the Maritime Administration. It is the Army's position that all functions of the Rio Vista storage mission could not be relocated and physically consolidated with Navy's Vallejo site. The GAO concluded that responsibility for only the functions of maintenance and preservation, security and related administrative support should be transferred to MARAD. Although not stated in the report, it appears implied that MARAD would perform this function only on inactive vessels in wet storage. There is only one inactive craft at Rio Vista that would be moved to Vallejo. Practically no savings would be gained under this circumstance. Furthermore, the GAO recognizes that other functions are performed by Army and that Army has a requirement for dry storage, but does not mention Army's other functions or dry storage requirements. functions of receipts, issues, set assembly and disassembly, security, maintenance and preservation of amphibious craft and vessels in dry storage are of a continuing nature and the capability and resources to perform

APPENDIX I

these functions must be at the storage site. Finally, the Navy in October 1970 informed the Army that dry storage space was not available. It appears conclusive that Rio Vista would have to be retained in order for Army to perform these functions.

- b. The Army nonconcurs with the recommendation that arrangements should be made to transfer the maintenance and preservation and related administration and security functions for the Navy's inactive vessels at Vallejo and Orange to MARAD.
- 1. It is noted that the recommendation is not addressed to Army. However, the GAO report implies that it is applicable to Army craft, therefore, the nonconcurrence by Army pertains only to the transfer of Army craft to MARAD.
- 2. Excluding amphibious craft and vessels which are provided dry-storage, the Rio Vista wet storage inventory consists of only one inactive item. The remaining craft, excluding depot operating craft, are being held for shipment or planned for dry storage. Transfer of one craft would not reduce the activities at Rio Vista and would, therefore, provide little advantage or savings to the government.
- 3. The Army must have assurance that sufficient wet and dry storage space is available for current and future requirements. Navy has informed Army that West coast dry storage space is not available and that wet storage space is limited and availability on a continuing basis is doubtful.
- 4. The Army concurs that a study be made to ascertain the feasibility and effect on costs from consolidating functions of other Army, Navy and Maritime inactive fleet sites. In this regard, the Army is initiating negotiations with MARAD for watercraft storage, to meet future requirements which develop from current force reductions.

The Department of the Navy's position with respect to the four recommendations made by GAO are described below:

- a. In general the Navy concurs with the intent of GAO's recommendations but strongly recommends that partial consolidation not be accomplished in any geographical area.
- 1. The Navy has two categories of its reserve ships, "B" and "C". Category "B" ships receive maximum possible maintenance effort within limitations of resources while Category "C" ships are left essentially in

an "as-is" condition. It is essential for the Navy to retain control of those ships located at its facilities, including complete freedom of access for inspections, equipment removals, equipment validation and supply overhauls.

- 2. The Navy requires that it retain the capability for inactivating and activating its ships. This the Navy believes can best be accomplished by retaining appropriate numbers of active duty personnel at the Inactive Ship Facilities. Finally, the Navy requires that its reserve ships be adequately dispersed geographically while keeping them reasonably close to industrial facilities for quick access in the event of mobilization.
- b. Recommendation 1. Transfer the maintenance and preservation, and related administration and security functions for the Navy's inactive vessels at Vallejo and Orange to MARAD.
- 1. With respect to Orange, Texas, the Navy recently evaluated the mission of this facility and is considering the redesignation of it as a ship and craft storage site only. Subject to a Navy decision to change the mission of INACTSHIPFAC Orange to eliminate the requirements of activating and inactivating, and in view of the GAO recommendation that MARAD assume the preservation, maintenance and security functions there, the Navy will recommend that MARAD assume all responsibility for the ships remaining at Orange, either to administer the entire facility as an annex of NDRF, Beaumont, Texas or to physically consolidate with the latter as it sees fit. Overhead costs associated with administering a small military base could thus be eliminated. Essential Navy functions could be handled by about two officers and ten enlisted personnel. If MARAD were to assume the 64 man-years indicated in the GAO report, a total of 28 military and 122 civilian positions would be eliminated for a net saving of 86 man-years. If this were to occur, we would be concerned that appropriate provision be made for employment priority of affected Navy civilian personnel.
- 2. With respect to Vallejo, California, operations should remain as they are now. The necessity of retaining numbers of Navy personnel at Vallejo sufficient to handle those functions for which MARAD personnel may not be qualified would reduce the alleged saving noted by GAO. These factors include the following:
- a. Navy combatant ships, although generally requiring maintenance and preservation work similar to that provided by MARAD, may have unique requirements. Submarines in a disposal status, for example, should be under control of maintenance personnel who are qualified in submarines for such hazardous operations as adjustment of trim and ballasting and de-

APPENDIX I

ballasting. A nuclear-capable or nuclear-powered ship also has special requirements which can only be handled by qualified nuclear-trained personnel who possess the requisite technical knowledge, security clearance and radiation monitoring expertise.

- b. Expeditious identification of material to be removed from reserve ships to meet active fleet requests frequently requires Navy technical ratings. MARAD personnel may be neither technically qualified nor available on short notice outside normal working hours for such contingencies.
- c. Various military functions at Vallejo would still remain after the proposed consolidation, and would continue to require Navy manning and attendant administrative effort. These tasks include riding crews for ships being towed, shore patrol, transportation, command watches, line handling details, materials handling and military communications, all of which would increase the number of man-years retained by the Navy for security and administration from about 15 man-years as reported by GAO to about 45 man-years. Provision for all these tasks by the Navy would thus reduce the estimated 110 man-year saving reported by GAO. Since military personnel are employed very flexibly, and since the actual inactivation workload has in the past fluctuated radically, manpower that becomes available when the tempo of inactivations slackens would then be immediately employed for maintenance work. This effectiveness makes it desirable for the Navy to retain maintenance and preservation responsibilities at Vallejo.
- d. The GAO report bases its savings on a figure for military manpower that is larger than normal because of augmentation of the Navy's personnel in order to handle recent mass inactivations. By end FY 1972, military manning at Vallejo is expected to decrease by at least 16, which by itself will reduce the quoted savings of \$493,000 by about \$124,000.
- e. An additional factor tending to erode the reported saving is the fact that MARAD maintenance work schedules have not been worked out for combatant ships. It is believed that a moderate-sized combatant has an area just in its complicated superstructure which equals the work-load of the average commercial type MARAD ships. Furthermore, it is likely that training of MARAD maintenance personnel in procedures for a variety of unfamiliar combatant hulls would certainly have an impact cost not now considered by GAO.
- c. Recommendation 2. Move the Army craft at Rio Vista to Vallejo. It is possible for INACTSHIPFAC Vallejo eventually to berth the Army's

19 watercraft now at Rio Vista in wet storage, but not the 250 craft stored on land.

- d. Recommendation 3. Close the Stockton berthing area and move the vessels to Vallejo or Suisun Bay.
- 1. Although consolidation of the Stockton Annex with the Vallejo Facility might be desirable, it is feasible only if nonretention ships are removed from Vallejo, additional ships are disposed of from Stockton and provision is made to retain working pier space at Vallejo for inactivation, activation, stripping, and supply overhaul tasks. Stockton is, however, the only fresh water berthing site for reserve ships on the West Coast, and the Navy may have need for this type of berthing site at some future time. Therefore, the Navy should retain the option to berth inactive ships at Stockton in case of need.
- 2. Assumption by MARAD Suisun Bay of maintenance, preservation, security and associated administration of the ships at Vallejo would create untold administrative complications since the Facility is a tenant of the Mare Island Naval Shipyard and has no administrative space other than that provided by a station ship. If consolidation with Stockton should take place and if the station ship were removed to allow pier space for the ships from Stockton, MARAD would be faced with constructing a building for office and storage space, providing a barge, or hauling equipment and materials from its base at Suisun Bay. The cost impact of these factors should also be considered.
- e. Recommendation 4. Study the feasibility and effects on costs from consolidating functions of other Army, Navy and MARAD inactive fleet sites. In view of the foregoing comments, the Navy does not consider that additional study is required concerning consolidation of inactive fleet sites. Operations at all Navy and MARAD facilities other than Orange, Texas should remain as they are now, except that the ships berthed at Stockton should eventually be relocated to either INACTSHIPFAC Vallejo or NDRF, Suisun Bay as berthing space becomes available.

In summary, the Army nonconcurs with the findings, conclusions, and recommendations except study of the feasibility of possible consolidations of other Army, Navy, and Marine inactive fleet sites. The Navy is considering action at Orange, Texas which would permit effecting the GAO recommendations relative to this site. Furthermore, the Navy recommends that the proposed transfer of functions at Stockton, Vallejo, and Suisun Bay be accomplished in a phased sequence to allow for disposal of excess ships and craft, preparation of final berthing, coordination of administrative

APPENDIX I

changes and to facilitate orderly scheduling of operations by both MARAD and the Navy.

In view of the above, after the General Accounting Office has had the opportunity to review these comments, representatives of the Department of Defense welcome the opportunity to discuss this proposal further with your office. We are prepared to participate in implementing your proposal to the optimum extent which is economical and practicable.

Sincerely,

BARRY J. SHILLITO

Assistant Secretary of Defense (Installations and Logistics)



THE ASSISTANT SECRETARY OF COMMERCE Washington, D.C. 20230

JUL 7 1971

Mr. Max A. Neuwirth Associate Director Civil Division General Accounting Office Washington, D. C. 20548

Dear Mr. Neuwirth:

This is in reply to your letter of April 29, 1971, requesting comments on a draft report entitled "Savings Available By Transferring Function of Preserving Army and Navy Reserve Fleet Ships To The Maritime Administration".

We have reviewed the comments of the Maritime Administration and believe that they are appropriately responsive to the matter discussed in the report.

Sincerely yours,

Attachment



THE ASSISTANT SECRETARY OF COMMERCE Washington, D.C. 20230

JUN 2 1971

Mr. Max A. Neuwirth
Associate Director, Civil Division
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Neuwirth:

This is in reply to your letter of April 29, 1971, which forwarded copies of a proposed report to the Congress on the review by the General Accounting Office of the feasibility of consolidating activities involved in managing the inactive ship fleets of the Maritime Administration (MarAd), Department of Commerce; the Department of the Navy; and the Department of the Army.

The Draft Report and its conclusions and recommendations have been reviewed and MarAd reiterates its earlier expression that it is most receptive to the idea of working with the Department of the Navy and the Department of the Army in the achievement of the proposed consolidation of reserve fleet functions.

In our previous comments salient factors were discussed which continue to bear directly on the matter. It is considered that the Draft Report is comprehensively informative and that the Agencies concerned can proceed without delay to develop the particulars of consolidation as initially recommended. It would seem appropriate that study be made concurrently of the feasibility of consolidating other similar activities.

The capability of MarAd Reserve Fleet personnel to assume the tasks of deactivation and preservation of Naval Vessels is a matter of record, and it is not envisioned that any of the organizational or technical problems which have been mentioned will be insurmountable. Close liaison with Naval inactive Ship Facilities in connection with the deactivation of significant numbers of Naval Ships during the past two (2) years has broadened the MarAd Reserve Fleet's knowledge, understanding, and proficiency in handling Naval Vessels. With reference to Army boats and watercraft, it

is understood that only those in wet storage would be transferred to a MarAd managed fleet site. No serious problem is envisioned in this regard since MarAd Fleet personnel routinely operate and care for similar watercraft as they are utilized at Reserve Fleet sites. It would be necessary only to become oriented to any special Army storage requirements for watercraft.

Funding during the transitional phase of consolidation is considered to be the most sensitive and critical factor in the proposal. MarAd is unable, within its present and projected Reserve Fleet Budgets, to assume any of the expense of ship transfers from one site to another, the preservation of additional ships, the procurement of preservation supplies and equipments, or increases in work force levels. It will be necessary for the expenses of vessel transfers to be borne by the Army or Navy as appropriate, and any deactivation and preservation care and work force increase to be handled by suitable reimbursement by the Department in whose interests services are performed. This requirement for funding assistance will continue until MarAd is able, within annual budget cycles, to request and be authorized sufficient funds in a future budget to adequately finance its expanded Reserve Fleet role.

The Maritime Administration will be pleased to participate with the Army and Navy in further study of the proposed initial consolidations in order to identify the details and the particular tasks of each in the achievement of the Draft Report's recommendations and the attainment of the economies the proposed consolidation of Reserve Fleet activities can conceivably produce.

Sincerely,

A. E. GIBSON

for Maritime Affairs

PRINCIPAL OFFICIALS

OF DEPARTMENTS OF DEFENSE,

ARMY, NAVY, AND COMMERCE

RESPONSIBLE FOR ADMINISTRATION OF ACTIVITIES

DISCUSSED IN THIS REPORT

Tenure of office
From To

DEPARTMENT OF DEFENSE

SECRETARY OF DEFENSE:

Melvin R. Laird Jan. 1969 Present

DEPUTY SECRETARY OF DEFENSE:

David Packard Jan. 1969 Present

DEPARTMENT OF THE ARMY

SECRETARY OF THE ARMY:

Robert F. Froehlke July 1971 Present Stanley R. Resor July 1965 June 1971

DEPARTMENT OF THE NAVY

SECRETARY OF THE NAVY:

John H. Chafee Jan. 1969 Present

DEPARTMENT OF COMMERCE

SECRETARY OF COMMERCE:

Maurice H. Stans Jan. 1969 Present

Tenure of office
From To

<u>DEPARTMENT OF COMMERCE</u> (continued)

ASSISTANT SECRETARY OF COMMERCE

FOR MARITIME AFFAIRS (note a):

Andrew E. Gibson Dec. 1970 Present

MARITIME ADMINISTRATOR (note a):

Andrew E. Gibson Mar. 1969 Present James W. Gulick (acting) June 1966 Mar. 1969

^aThe Merchant Marine Act of 1970 (84 Stat. 1018), which created the position of Assistant Secretary of Commerce for Maritime Affairs, provided that the Assistant Secretary also be the Maritime Administrator.

Copies of this report are available from the U.S. General Accounting Office, Room 6417, 441 G Street, N W., Washington, D.C., 20548.

Copies are provided without charge to Members of Congress, congressional committee staff members, Government officials, members of the press, college libraries, faculty members and students. The price to the general public is \$1.00 a copy. Orders should be accompanied by cash or check.