NAVY MAINTENANCE

Fleet Support May Be Needed As Ship Repair Requirements Decline

GAO

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

National Security and
International Affairs Division

B-250485

November 18, 1992

The Honorable Sean O'Keefe
The Acting Secretary of the Navy

Dear Mr. Secretary:

This report addresses the Navy's efforts to determine and maintain the ship repair industrial base. We found that the Navy needs to reassess its future ship repair requirements with a view toward reducing the current capabilities to the most cost-effective level to meet future peacetime needs while also allowing the Navy to meet reasonable contingency requirements.

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

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

Please contact me on (202) 275-6504 if you have any questions. The major contributors to this report are listed in appendix II.

Sincerely yours,

Richard Davis

Richard Davis
Director, Navy Issues

Executive Summary

Purpose

The Navy is responsible for establishing and maintaining a cost-effective and responsive industrial base, both government and privately owned, to support peacetime requirements and respond to wartime ship repair requirements. Because of the projected decline in the size of the Navy fleet and the likelihood of significant excess capacity in Navy and private shipyards, GAO assessed the Navy's efforts to determine and maintain the ship repair industrial base.

Background

The United States has over 500 shipyards of all sizes. For purposes of mobilizing for war or other national emergencies, the ship repair industrial base includes 8 U.S. public shipyards that are owned and operated by the Navy, 3 overseas ship repair facilities that are owned and operated by the Navy, and 108 private shipyards that meet the Maritime Administration's mobilization base criteria of being large enough to build or repair ships that are at least 400 feet long and that have access channels that are at least 12 feet deep.

During fiscal years 1985 through 1991, the Navy spent almost $32 billion on ship maintenance and modernization (repair) work. Of this amount, about 64 percent was spent in the eight public shipyards and the three overseas ship repair facilities. However, one public shipyard is scheduled to close at the end of fiscal year 1996 and one overseas ship repair facility is scheduled to close by the end of calendar year 1992. The remaining 36 percent was spent in private shipyards pursuant to a policy where at least 30 percent of the work is set aside for private shipyards.

Results in Brief

The Department of Defense (DOD) generally has shifted its planning focus from a single global scenario to an array of regional scenarios. In recognition of decreased peacetime ship repair requirements in future years, the Navy plans to reduce the size of the public shipyard work force by about one-third by fiscal year 1995. However, the shipyards have been directed to continue to base their mobilization planning on a protracted, worldwide war because DOD and Navy headquarters have not provided planning guidance for regional threat scenarios.

In view of the disintegration of the former Soviet Union and other changes in Eastern Europe, the Navy needs to reassess its future ship repair requirements with a view toward reducing the current capabilities to the most cost-effective level to meet future peacetime needs while also allowing the Navy to meet reasonable contingency requirements. The Navy

should use more realistic planning estimates and the reassessment of requirements as a basis for considering whether to recommend closing more public shipyards.

Principal Findings

Peacetime Maintenance Requirements Will Decrease

Future peacetime maintenance requirements will decline because of the reduction in the number of ships in the fleet and the shift to less maintenance intensive ship designs. The number of Navy ships decreased from a high of 568 ships in fiscal year 1987 to 526 ships in fiscal year 1991, and it is projected to decrease to 451 ships by fiscal year 1995. The ship repair budget has declined from $5.5 billion in fiscal year 1985 to $3.8 billion in fiscal year 1991.

In response to decreased peacetime ship repair requirements, the Navy plans to let free market forces prevail in the private shipyards and to make personnel reductions in the public shipyards. The number of private shipyards capable of drydocking large Navy ships has decreased from 55 shipyards in 1985 to 45 shipyards in 1991. Still, the Navy believes the remaining shipyards have adequate capability to execute the future peacetime maintenance program. In addition to closing one public shipyard (Philadelphia), the Navy projects that the public shipyard work force will decrease from 61,000 employees in fiscal year 1991 to 39,000 employees in fiscal year 1995.

Wartime Planning Scenarios Are Outdated

The Chairman, Joint Chiefs of Staff, and the Secretary of Defense have noted the shift in defense posture from containing the spread of communism and deterring former Soviet aggression to a more diverse, flexible strategy that is regionally oriented. The shift has provided the opportunity to meet threats at lower levels and lower costs.

In spite of the change in the overall defense posture, the shipyards have continued to use a protracted, worldwide, conventional war scenario in planning for shipyard wartime requirements. The shipyards also are basing the requirements on a force structure of more than 560 ships rather than the projected fleet of 451 ships. Navy officials stated the shipyards are using the global war scenario and the larger fleet because the planning guidance for regional conflicts was still being developed.

By planning on this basis, the Navy has overstated the amount of wartime activity—ship activations, maintenance availabilities, and battle damage repairs—the shipyards will need to undertake. As a result, the Navy may plan to maintain more capability than will be needed.

The Base Closure and Realignment Act of 1990, as amended, requires that by March 1993 the Secretary of Defense submit recommendations of further reductions in the Department's infrastructure. The Navy is analyzing data, including judgments on the military need for public shipyards, as part of that process.

Recommendations

GAO recommends that the Secretary of the Navy assess ship repair requirements using a regional threat scenario and reduced fleet size and use the results of this assessment as the principal basis for his recommendations to close or realign public shipyards.

Agency Comments

DOD agreed that a reduced fleet size should be used in mobilization planning and that regional threat scenarios are important for determining future ship repair capacity needs. However, DOD stated that a regional threat scenario should not be the only factor for determining ship repair requirements or deciding to close or realign shipyards. DOD added that the reconstitution of forces to meet a new or resurgent global threat also is a factor.

GAO agrees that the Navy should not ignore a resurgent global threat and has modified its recommendation. However, GAO continues to believe that a regional threat scenario should be the principal basis for determining future ship repair requirements. DOD's complete written response appears in appendix I.

Contents

Abbreviations

DOD Department of Defense
GAO General Accounting Office

Introduction

Department of Defense (DOD) policy, as outlined in DOD Directive 4005.1 (Industrial Preparedness Program), requires that DOD's components (Army, Air Force, Navy, and Marine Corps) make plans and take actions necessary to establish and maintain a cost-effective and responsive industrial base to support peacetime, wartime, or other contingency military requirements.

The industrial base consists of the private and public resources capable of sustaining the production and depot-level maintenance of essential military items. Depot-level maintenance is that type of maintenance generally requiring a greater industrial capability than possessed by either organizational or intermediate level activities. Large scale maintenance and repairs are performed, and alterations and modifications that improve a ship's military and technical capabilities are accomplished at depot-level facilities.

During fiscal years 1985 through 1991, depot-level maintenance and modernization (generally referred to as repairs) of Navy ships were accomplished in 8 public shipyards, 3 overseas ship repair facilities, and on a yearly basis, 31 to 43 private shipyards. Work on complex ships, such as submarines, carriers, and other nuclear-powered surface ships, was usually done in public shipyards. Work on less complex ships, such as auxiliary and amphibious ships, was usually done in private shipyards. The work at private yards generally was awarded on the basis of shipyard location and low bid or low offer. The work done in the eight public shipyards was assigned on the basis of shipyard location, work load, and work force skill levels.

In fiscal year 1974 appropriation legislation, the Congress placed a 70 percent ceiling on the dollar amount of repair work that could be reserved exclusively for public shipyards. This legislation was enacted to ensure that the private shipyards would get at least 30 percent of the work load. Current legislation contains no such restriction. However, DOD Directive 4151.1 requires the Navy to continue providing private shipyards with at least 30 percent of the depot-level ship repair funding.

In fiscal year 1985, the Congress created a program to test acquiring ship repair work through competition between public and private shipyards. Since that time, about 9 percent of the ship repair funding has been spent in the program, with 4 percent going to the public shipyards and 5 percent going to the private shipyards. Navy officials stated that, pursuant to a

defense management report decision, they plan to expand the competition program to 20 percent of the repair funding by fiscal year 1997.

Objectives, Scope, and Methodology

Our objectives were to evaluate the Navy's efforts to determine its ship repair mobilization needs and to maintain the industrial base required to meet those needs. Specifically, we (1) determined the existing ship repair industrial base in terms of physical plants, locations, and staff sizes; (2) identified the distribution of past Navy ship repair work; (3) assessed the Navy's reaction to the declining ship repair budgets; and (4) evaluated the Navy's past and current ship repair mobilization planning.

We interviewed Navy officials and examined documents and pertinent data at Navy headquarters; Pacific and Atlantic fleet commands; surface ship and submarine type commands; four public shipyards (Charleston, South Carolina; Norfolk, Virginia; Long Beach, California; and Pearl Harbor, Hawaii); and seven Supervisor of Shipbuilding, Conversion, and Repair offices (San Diego and Long Beach, California; Pascagoula, Mississippi; Charleston, South Carolina; Portsmouth, Virginia; Pearl Harbor, Hawaii; and Jacksonville, Florida). We also examined documents and discussed the ship repair industrial base with representatives of the Maritime Administration, U.S. Department of Transportation; the Shipbuilders Council of America; the Office of the United States Trade Representative; and two private shipyards.

To determine the existing ship repair industrial base in terms of physical plants, locations, and staff sizes, we analyzed and summarized the Maritime Administration's annual report entitled Report on Survey of U.S. Shipbuilding and Repair Facilities. We also analyzed and summarized its data base listing of U.S. shipbuilding and ship repair yards.

We summarized data from a Navy listing of all depot-level ship repair availabilities[1] started in fiscal years 1985 through 1991 by shipyard and fiscal year to identify the distribution of past Navy availabilities.

To assess the Navy's reaction to declining ship repair budgets, we discussed ship repair planning with Navy officials and examined pertinent documents regarding current and projected actions as the result of the declining budgets. We reviewed DOD Directive 4151.1, dated July 15, 1982;

[1]Assignment of a ship to a repair activity for maintenance and modernization is called an availability.

DOD Directive 4005.1, dated November 26, 1985; and a revised draft of the latter policy directive.

To evaluate past and current Navy ship repair mobilization planning, we examined the Navy's (1) last completed production base analysis dated January 1989 and (2) time table for completing the current production base analysis. We also examined the Navy Capabilities and Mobilization Plan updated in August 1990, the Naval Sea Systems Command's Logistics Support and Mobilization Action Plan dated October 1991, the Joint Strategic Capabilities Plan dated November 1991, and the DOD Base Closure and Realignment Report dated April 1991.

We performed our review between November 1991 and August 1992 in accordance with generally accepted government auditing standards.

Existing Ship Repair Capabilities and Work Load

Current Industrial Base

As of December 1991, the ship repair industrial base consisted of 8 public shipyards, 3 overseas ship repair facilities, and 108 private shipyards capable of repairing ships longer than 400 feet. All Navy surface combatant ships are longer than 400 feet. Table 2.1 shows the capabilities of these shipyards in 1991.

Table 2.1: Overall Ship Repair Industrial Base

Type	Number of shipyards	Shipyard employment	Number of drydocks[a]	Feet of piers
Public	8	60,965	35	67,358
Overseas	3	7,160	8	21,302
Private	108	113,363	83	281,219
Total	**119**	**181,488**	**126**	**369,879**

[a]Drydocks that cannot accommodate ships longer than 400 feet are not included.

Public Shipyards

The Navy's eight public shipyards are Charleston, South Carolina; Norfolk, Virginia; Philadelphia, Pennsylvania; Portsmouth, New Hampshire; Long Beach, California; Mare Island, California; Pearl Harbor, Hawaii; and Puget Sound, Washington. However, the Philadelphia shipyard is scheduled for closure at the end of fiscal year 1996. Table 2.2 provides summary information on the public shipyards at the end of fiscal year 1991.

Table 2.2: Capability of Public Shipyards

Shipyards	Number of employees	Number of drydocks	Feet of piers	Nuclear repair capability	Carrier drydocking capability
Atlantic Fleet					
Charleston	7,260	4	8,016	Yes	No
Norfolk	11,295	6	6,730	Yes	Yes
Philadelphia	7,402	5	23,113	No	Yes
Portsmouth	7,073	3	2,200	Yes	No
Pacific Fleet					
Long Beach	4,049	3	7,454	No	Yes
Mare Island	6,639	4	7,700	Yes	No
Pearl Harbor	5,156	4	2,470	Yes	Yes
Puget Sound	12,091	6	9,675	Yes	Yes
Total	**60,965**	**35**	**67,358**		

In addition to the drydocks at the public shipyards, the Navy has a drydock at the San Diego Naval Station that is used by the private shipyards when repairing Navy ships, and two drydocks at the Trident Refit Facilities that are used when repairing submarines. The Navy also has 27 floating drydocks that are 400 feet or more. Of these, 12 are leased or to be leased to U.S. private shipyards or foreign shipyards, 2 are at the overseas ship repair facilities, 1 is assigned to the Charleston Naval Shipyard, 1 is inactive, and the other 11 are at various naval stations.

Overseas Ship Repair Facilities

The Navy's three overseas ship repair facilities are located in Yokosuka, Japan; Subic Bay, Philippines; and Guam. However, the Subic Bay facility is scheduled for closure by December 31, 1992. Of the two large floating drydocks at Subic Bay, one has been sent to Yokosuka and the other has been sent to Pearl Harbor. Table 2.3 provides summary information on the overseas repair facilities at the end of fiscal year 1991.

Table 2.3: Capability of Overseas Ship Repair Facilities

Facility	Number of employees	Number of drydocks[a]	Feet of piers
Yokosuka	1,848	5	9,302
Subic Bay	4,301	2	7,065
Guam	1,011	1	4,935
Total	**7,160**	**8**	**21,302**

[a]Drydocks that cannot accommodate ships longer than 400 feet in length are not included.

The ship repair work at the three ship repair facilities includes planned maintenance on the 20 ships homeported in the Western Pacific and emergent repairs on ships deployed from the United States. None of these facilities are nuclear repair capable. Yokosuka is the only ship repair facility that can drydock an aircraft carrier.

Private Shipyards

According to a Navy report dated April 1991, the overall size of the U.S. shipbuilding and ship repair industrial base included over 500 shipyards of various sizes ranging from large to small. Of these shipyards, 108 private shipyards met the Maritime Administration's mobilization base criteria for inclusion in its annual report as major U.S. private shipbuilding and repair facilities. To meet these criteria, a shipyard must be large enough to build or repair ships that are at least 400 feet long and have access channels with a minimum water depth of 12 feet.

The 108 private shipyards are located around the country and have varying capabilities. The Maritime Administration classified each of these private shipyards in one of three levels:

(1) Shipbuilding: Facilities that have at least one shipbuilding position capable of accommodating a minimum ship length of 400 feet. With few exceptions, these facilities are also major repair facilities with drydocking capability.

(2) Repair (with drydocking): Facilities that can drydock ships 400 feet in length and over. These facilities may also be capable of constructing vessels less than 400 feet in length.

(3) Topside repair: Facilities with sufficient pier space for topside repair of ships 400 feet in length and over. These facilities may also be capable of constructing or drydocking vessels less than 400 feet in length.

Table 2.4 summarizes the Maritime Administration's classification of the 108 private shipyards and their regional locations.

Table 2.4: Capability of Private Shipyards

Region	Shipbuilding	Full repair	Topside repair	Total
East Coast	5	16	21	**42**
Gulf Coast	6	6	22	**34**
West Coast	4	7	9	**20**
Great Lakes	5	1	2	**8**
Hawaii	•	1	1	**2**
Alaska	•	1	•	**1**
Puerto Rico	•	1	•	**1**
Total	**20**	**33**	**55**	**108**

Shipyards too small to meet any of the above criteria are classified as level 4 in this report.

None of the private shipyards on the West Coast are capable of drydocking an aircraft carrier, while three of the private shipyards on the East Coast are capable of doing so. These shipyards are Newport News Shipbuilding and Dry Dock Company, Newport News, Virginia (Newport News Shipbuilding); Boston Marine Industrial Park, Boston, Massachusetts; and General Marine Diesel Corporation of New York, Brooklyn, New York. Only

two of the private shipyards do nuclear ship repair work and both are on the East Coast. Newport News Shipbuilding repairs both nuclear surface ships and nuclear submarines and can do nuclear refueling of both surface ships and submarines. General Dynamics' Electric Boat Division, Groton, Connecticut (Electric Boat), repairs only submarines and does not do any refueling.

Distribution of Past Navy Work

During fiscal years 1985 through 1991, 64 percent of depot-level ship repair funds were spent in the public sector and 36 percent was spent in the private sector. Table 2.5 shows the data by fiscal year.

Table 2.5: Ship Repair Costs From Fiscal Years 1985 to 1991

Dollars in millions

		Percent	
Fiscal year	**Costs**	**Public**	**Private**
1985	$5,455.5	66	34
1986	4,688.2	64	36
1987	5,237.1	67	33
1988	3,874.7	66	34
1989	4,287.7	58	42
1990	4,648.3	63	37
1991	3,783.7	63	37
Total	**$31,975.2**	**64**	**36**

During this time period, the Navy started 1,549 depot-level repair availabilities. Of these availabilities, 482 were performed in the 8 public shipyards, 102 were performed in the 3 overseas ship repair facilities (for a total of 584 in public shipyards), and 965 were performed in 62 private shipyards. Table 2.6 summarizes the data by fiscal year.

Table 2.6: Summary Information on Ship Repair Availabilities

Fiscal year	Number of ships in fleet[a]	Number of availabilities	Availabilities performed by public sector	Availabilities performed by private sector
1985	545	223	88	135
1986	555	206	73	133
1987	568	242	94	148
1988	565	211	74	137
1989	566	238	80	158
1990	546	234	93	141
1991	526	195	82	113
Total		**1,549**	**584**	**965**
Percent		100	38	62

[a]At end of fiscal year.

Table 2.7 shows the distribution of the 482 depot-level availabilities started in the public shipyards during fiscal years 1985 through 1991.

Table 2.7: Ship Repair Availabilities Performed by Public Shipyards

Shipyard	Number of availabilities		
	Nuclear	Nonnuclear	Total
Charleston	45	37	**82**
Norfolk	55	49	**104**
Philadelphia	•	20	**20**
Portsmouth	49	1	**50**
Long Beach	•	44	**44**
Mare Island	53	4	**57**
Pearl Harbor	28	40	**68**
Puget Sound	54	3	**57**
Total	**284**	**198**	**482**

Table 2.8 shows the distribution of the 102 depot-level availabilities performed by the overseas ship repair facilities during fiscal years 1985 through 1991.

Table 2.8: Ship Repair Availabilities Performed by Overseas Ship Repair Facilities

Facility	Number of availabilities
Yokosuka	68
Subic Bay	9
Guam	25
Total	**102**

Of the 965 depot-level availabilities started by the private shipyards during fiscal years 1985 to 1991, sufficient data was available to classify the distribution of 867 availabilities under Maritime Administration criteria. Table 2.9 shows the distribution.

Table 2.9: Ship Repair Availabilities Performed by Private Shipyards

Classification	Number of shipyards	Number of availabilities
Level 1, shipbuilding	13	117
Level 2, full repair	21	439
Level 3, topside repair	16	256
Level 4, small	12	55
Total	**62**	**867**

The 55 availabilities performed by the small shipyards were done either at Navy facilities or at rented private facilities. Most of the 62 private shipyards had fewer than 500 employees. Of the 62 private shipyards used by the Navy during fiscal years 1985 to 1991, 12 shipyards were out of business as of December 31, 1991.

Ship Repair Requirements Will Decrease

The number of public and private shipyards the Navy will need to accomplish peacetime maintenance requirements will decline because of the reduction in the number of ships in the fleet and the shift to less maintenance intensive ship designs. The Navy's ship repair budget generally has been on a downward trend. The Navy is planning to meet the reduced ship repair requirements by (1) permitting free market forces to determine which of the private shipyards will remain open, (2) scheduling one public shipyard for closure, and (3) reducing work force levels at the public shipyards.

Reasons for the Reduced Requirements

The downward pressure on DOD and Navy repair budgets, fleet size, and ship design all have contributed to the reduction in ship repair needs. The Navy's ship maintenance and modernization budgets have declined and, with the reality of budgetary constraints, are likely to continue declining. The Navy spent about $5.5 billion in fiscal year 1985 for ship maintenance and modernization. By fiscal year 1991, the amount had dropped to $3.8 billion, and for fiscal year 1993 the requested amount was $3.7 billion.

The number of Navy ships declined from a high of 568 in fiscal year 1987 to 526 at the close of fiscal year 1991. The Navy projects that by the end of fiscal year 1995 the number of Navy ships will decline to 451.

The Navy's older surface combatant ship classes, with maintenance-intensive boiler technology, are being replaced by less maintenance-intensive gas turbine technology. Gas turbine engines are being used in FFG-7 Oliver Hazard Perry class guided missile frigates, DDG-51 Arleigh Burke class destroyers, DDG-993 Kidd guided missile class destroyers, DD-963 Spruance class destroyers, and CG-47 Ticonderoga class missile cruisers. Navy officials stated that future ships also will be designed to require less maintenance.

The Navy's Reaction to the Decreased Requirements

In response to the decreased ship repair requirements, the Navy plans to let free market forces prevail in the private shipyards and make personnel reductions in the public shipyards.

Private Shipyards

The Navy has permitted free market forces to determine which of the private shipyards will remain open. As the overall size of the ship repair budget has decreased, the amount going to the private shipyards has decreased. Between fiscal years 1985 and 1991, the funds spent in private shipyards decreased from $1.9 billion to $1.4 billion a year. During this period, private shipyard repairs averaged 36 percent of the overall Navy ship repair budget. The percentage ranged from 33 percent in fiscal year 1987 to 42 percent in fiscal year 1989.

The private U.S. shipbuilding and ship repair industrial base is in decline because of the reduction in Navy work and because most commercial work is being done in other countries. Therefore, U.S. shipyards capable of repairing large ocean-going ships are increasingly dependent on the Navy for work. In 1991, the 45 ship repair yards capable of drydocking ships longer than 400 feet were 10 fewer than there were in 1985. During the same period, the number of drydocks decreased from 101 to 83.

In a January 1991 report on the U.S. industrial outlook, the Department of Commerce stated that U.S. ship repair capacity was substantially underused, creating an environment of intense competition. The report also stated that there has been an increase in the repair of foreign flag cruise ships, but this is an exception, and that many U.S. ship repairers would be out of business without the Navy's ship maintenance and modernization program.

In an April 1991 statement before the House Committee on Armed Services, the President of the Shipbuilders Council of America stated that shipyards engaged in ship repair will see their work diminish as the Navy reduces its force levels from 559 ships in fiscal year 1987 to 450 ships in fiscal year 1995. He stated that, for an industry almost totally dependent on the Navy for its survival, this budgetary change will be catastrophic and more shipyards will close and more jobs will be lost. He concluded that the future of private shipyards engaged in naval ship repair is bleak.

The Navy's view is different than the Shipbuilders Council's. In response to congressional direction, the Navy issued three reports between fiscal years 1989 and 1991 on the effects of the Navy shipbuilding and repair programs on the shipyards and supporting industrial base. The Navy reported that the private U.S. shipbuilding and ship repair base and supporting industries are expected to have adequate but declining capability to execute the Navy's fiscal years 1991 to 1997 peacetime maintenance program. The Navy noted, however, that it was unlikely that the industrial

base would be able to support all emergent shipwork in a timely manner during a protracted war or a significant regional conflict. Elsewhere, DOD has stated that it does not anticipate these types of conflicts. Our concerns about the Navy's planning process are discussed in chapter 4.

Public Shipyards

As a result of the decline in ship repair requirements, the Navy will close the Philadelphia Naval Shipyard and reduce the size of the work force at the other public shipyards.

Pursuant to the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510), the Philadelphia Naval Shipyard is scheduled to close by the end of fiscal year 1996. The DOD justification for closure was that substantial ship reductions and changes in the planned force structure would lead to reductions in ship repair requirements and termination of the carrier service life extension program. Closure of a public shipyard was necessary to balance the Navy's industrial work force with this reduced work load.

By the end of 1992, the overseas ship repair facility at Subic Bay also will close. According to Navy officials, this closure should have little effect on the work load of other shipyards because no Navy ships were homeported at Subic Bay and the repair facility was only doing emergent repairs.

In addition to closing the shipyard and the ship repair facility, the Navy plans to significantly reduce the size of the work force at the public shipyards. The work force declined from 78,986 employees at the end of fiscal year 1983 to 60,965 employees at the end of fiscal year 1991. The Navy expects the work force to decline to 39,241 employees at the end of fiscal year 1995.

The Navy May Be Planning for Excess Ship Repair Capacity

Although DOD generally has shifted its wartime planning focus from a single monolithic global scenario to an array of regional scenarios, the Navy has continued to base its ship repair industrial base planning on the global scenario. The last completed Navy production base analysis, dated January 1989, and the July 1992 mobilization planning being done at the public and private shipyard levels are based on a protracted, worldwide, conventional war scenario and a force structure much larger than the current planned fleet of 451 ships. Such planning is inconsistent with DOD's acknowledgement that global warfare is no longer a likely scenario.

As a result, the Navy may be planning to maintain more ship repair capacity than it will need to meet future peacetime and wartime requirements. The Navy should use more realistic plans to determine what capacity it will need as part of its ship repair industrial base. Further, the Navy should be using these updated planning estimates in its analyses leading to the DOD recommendations to the Base Closure and Realignment Commission, due in March 1993.

Overall DOD Planning Is Based on Regional Conflicts

DOD defines mobilization as the act of preparing for war or other emergencies through assembling and organizing national resources. Mobilization also is the process by which the armed forces are brought to a state of readiness for war or other national emergency.

In general, DOD recognizes that the chances of a global war are limited. In the National Military Strategy of the United States, dated January 1992, the Chairman, Joint Chiefs of Staff, noted the shift in defense posture from containing the spread of communism and deterring Soviet aggression to a more diverse, flexible strategy that is regionally oriented. He stated that because of the changes in the strategic environment, the threats the United States expects to face are regional rather than global.

In congressional testimony in January 1992, the Chairman pointed out that DOD has changed the planning focus from a single global scenario to an array of regional scenarios. Similarly, the Secretary of Defense testified in January 1992 that because the United States now faces neither a global threat nor a hostile power dominating a region critical to U.S. interests, the United States has the opportunity to meet threats at lower levels and lower costs. He stated that the United States can respond in a graduated manner to preclude the reemergence of a global threat.

The change to a regional defense orientation has been reflected in some specific DOD studies. For example, in a January 1992 study on mobility requirements for sealift, airlift, and prepositioning assets, DOD used the following scenarios in addressing regional crises set in 1999.

- Regional contingency in the Middle East or Persian Gulf.
- Regional contingency on the Korean Peninsula.
- Regional contingency in Europe.
- Regional contingency in Southeast Asia.
- Regional contingency in the Western Hemisphere.
- Two concurrent regional contingencies beginning sequentially.

Ship Repair Planning Still Based on Global Conflict

As of July 1992, the Navy was still using a protracted, worldwide, conventional war scenario and a larger fleet in planning for wartime shipyard requirements. According to Navy officials, a global war scenario is used because the planning guidance for regional conflicts is still being developed.

The two major mobilization planning processes that directly affect the shipyards are (1) production base analysis and (2) mobilization planning, which is done in accordance with DOD's Joint Strategic Capabilities Plan. The production base analysis is used to assess the capability of the industrial base to fulfill national defense strategy requirements during peacetime and wartime. The planning for the Joint Strategic Capabilities Plan is near-term mobilization planning that is done in concert with operational planning.

Production Base Analysis

DOD's industrial base program consists of the plans and actions to establish and maintain an industrial base capable of fulfilling national defense requirements during peacetime and over a wide range of crises or emergency situations, including war. The production base analysis process, a major part of the program, includes the balancing of peacetime, surge, and mobilization requirements with production and repair capabilities; identifying current and potential production bottlenecks and constraints; developing programs, strategies, or actions to eliminate those impediments; and prioritizing those programs or actions making the best use of available resources. According to Navy officials and a draft DOD directive, this process is supposed to operate on a 2-year cycle beginning on November 1 of each odd-numbered year and ending on October 31 of the next odd-number year. The most recent report on the production base

analysis was issued in January 1989. The analysis that should have been completed in October 1991 was never started because of the fast changing world events, but the Navy does have an analysis underway that was started in November 1991.

The January 1989 production base analysis provides an assessment of the shipbuilding industrial base to meet ship activation, regular repair, battle damage repair, and new construction requirements of the Navy, the Coast Guard, and the Maritime Administration during a protracted, major, conventional war scenario. A total of 115 public and private shipyards with adequate facilities to accommodate Navy and merchant ships 400 feet or more in length, ship beams of 68 feet, and access channel depths of at least 12 feet were included in the analysis. These shipyards had a combined total of 201 drydocks, 211 shipbuilding positions, and 407 berthing positions. The analysis concluded that the inability of the U.S. shipbuilding industry to compete with foreign shipbuilders for merchant vessel construction and under use of the private ship repair capacity caused by a lack of demand would continue to erode the industry. However, the analysis stated that ship repair mobilization requirements could generally be met by the ship repair industrial base that existed at that time. No attempt was made to identify unneeded shipyard capacity.

The Navy started a new production base analysis in November 1991. As of May 1992, the Navy had compiled a list of items that are critical in waging a war and was developing a list of the items' manufacturers. However, the Navy was waiting for DOD to provide the threat scenario to be used in the production base analysis before proceeding further. According to Navy officials, the new analysis will be coordinated with the Army and the Air Force and will provide better information on the production base than past analyses. The production base analysis, if done in accordance with the planned cycle, will be completed by the end of October 1993. The analysis will be used in developing the program objective memorandum that will be used in developing the fiscal year 1996 budget to be submitted to the Congress in January 1995.

Joint Strategic Capabilities Plan

The Joint Chiefs of Staff prepare a Joint Strategic Capabilities Plan biennially. The plan provides planning guidance to accomplish tasks and missions that are needed to meet national security objectives and is based on near-term military capabilities. In conjunction with the joint plan, the Chief of Naval Operations prepares a Navy Capabilities and Mobilization Plan and the commanders of the Naval Sea Systems Command and other

commands prepare a Logistics Support and Mobilization Plan. On the basis of the latter plan, each public shipyard and Supervisor of Shipbuilding, Conversion and Repair office, which oversees the work private shipyards perform, prepares a mobilization plan.

In June 1990, the Joint Strategic Capabilities Plan for fiscal years 1991 and 1992 was issued. On the basis of this plan, the Chief of Naval Operations issued its plan in August 1990, and the Naval Sea Systems Command issued its plan in October 1991. The public shipyards and the Supervisor of Shipbuilding, Conversion and Repair offices currently (July 1992) are planning on the basis of these plans and the January 1989 production base analysis. The scenario for the mobilization planning is a protracted, worldwide, conventional war with a 1980's force structure. The Naval Sea Systems Command plan provides the wartime work load requirements for a fleet of more than 560 ships and, for each shipyard and office, lists these requirements by type (new construction, ship activation, battle damage, maintenance availability, etc.), class of ship, and number of ships.

In November 1991 the Joint Chiefs of Staff issued the Joint Strategic Capabilities Plan for 1993 to 1995, using the regional conflict scenario. The Chief of Naval Operations' follow-on plan is expected to be issued in November 1992, and the Naval Sea Systems Command plan will be issued sometime later.

In the meantime the public shipyards and the Supervisor of Shipbuilding, Conversion and Repair offices are continuing to plan on the basis of a global war. In a March 1992 memorandum, the Commander of the Naval Sea Systems Command noted that the November 1991 Joint Strategic Capabilities Plan reflected a change in the national military strategy from reliance on a forward deployed presence to counter the threat of a global war to a capability to rapidly deploy augmenting military power from the United States to respond with varying degrees of force to regional contingencies. However, the Commander also noted that the Joint Strategic Capabilities Plan provides that the United States must maintain the capacity to reconstitute a large, effective defense capability to deter or defeat a new or resurgent global threat.[1] The memorandum went on to indicate that the global war scenario should be used as the basis for planning.

[1]The Joint Strategic Capabilities Plan did not specify the extent to which shipyards, both private and public, should be retained at higher than peacetime or regional contingency levels to support this reconstitution capability.

Global War Scenario Overstates Requirements

While the exact numbers are classified, basing the ship repair mobilization planning on a protracted, worldwide, conventional war scenario with a 1980's force structure rather than on a regional crisis scenario with a 451-ship force structure overstates the mobilization needs. The greater threat and the longer duration of a protracted, worldwide war results in projections of more ship activations, maintenance availabilities, and battle damage repairs than a regional crisis scenario. Basing the mobilization requirements on a force structure of more than 560 ships rather than on 451 ships also results in overstating requirements.

Navy Plans to Meet Reduced Requirements

While maintaining seven public shipyards, the Navy is planning to respond to reduced requirements by reducing the number of employees at each shipyard. This plan may not be the most efficient way to respond to the reduced requirements. For example, fewer public shipyards could accommodate the number of employees projected for fiscal year 1996. Table 4.1 compares the 1996 projection with the employment at the end of fiscal years 1985 and 1991. Except for the Philadelphia shipyard closure, the Navy plans to reach the fiscal year 1996 work force level by making across the board reductions at each of the seven remaining shipyards.

Table 4.1: Public Shipyard Employees in Fiscal Years 1985, 1991, and 1996

	Fiscal year		
Shipyard	**1985**	**1991**	**1996**
Charleston	8,373	7,260	4,694
Norfolk	12,645	11,295	10,146
Philadelphia	10,089	7,402	0
Portsmouth	8,422	7,073	4,552
Long Beach	6,502	4,049	3,365
Mare Island	9,872	6,639	6,030
Pearl Harbor	6,654	5,156	3,762
Puget Sound	11,815	12,091	9,084
Total	**74,372**	**60,965**	**41,633**

Base Closure Process

The Defense Base Closure and Realignment Act of 1990 (P.L. 101-510) established a process for DOD to study and recommend specific actions to reduce its infrastructure. As part of that process, DOD recommended and the Congress agreed in 1991 to close the public shipyard at Philadelphia. The act, as amended, requires that DOD, by March 15, 1993, submit another list of recommended bases to be closed or realigned. The Navy is

analyzing data to determine whether it should propose to DOD to close any more public shipyards as part of the next round of base closure recommendations.

Some Navy officials believe that fewer public shipyards are needed. In a March 1992 report, the director of naval nuclear propulsion stated that a thorough review of shipyard capabilities versus requirements for nuclear-powered submarine servicing through the rest of this decade showed an absolute requirement for the Norfolk shipyard on the East Coast and the Puget Sound shipyard on the West Coast because of their large drydock capacities and special facilities. He also stated that, by optimizing the assignment of scheduled work on the basis of drydock facilities and experienced teams of workers, there is enough planned work to sustain the equivalent of five of the six nuclear qualified public shipyards. Long Beach is the only public shipyard not nuclear qualified. The director stated further that inactivating rather than refueling the early SSN-688 Los Angeles class submarines through 1998 would reduce the annual work load by the equivalent of an additional public shipyard.

Conclusions

The threat scenarios being used in various levels of Navy mobilization planning are not consistent. Some plans are based on a protracted, worldwide, conventional war scenario while others are based on a regional crisis scenario. Because of the changes in the former Soviet Union and Eastern Europe, DOD no longer considers a protracted, worldwide, conventional war threat scenario reasonable.

Because the current mobilization planning for the public and private shipyards is based on a global war and a much larger fleet than anticipated, the planning is of little value in projecting ship repair mobilization requirements and could result in the Navy's maintaining more capability than will be needed. Use of a regional crisis scenario is more reasonable for planning and would result in more realistic future ship repair requirements. This scenario also would be consistent with the regionally oriented military strategy presented by the Chairman, Joint Chiefs of Staff, and the Secretary of Defense.

The Navy should be evaluating the need for all seven remaining public shipyards as part of its input for the Secretary of Defense's March 1993 report to the Base Closure and Realignment Commission. The large planned decreases in employment at the public shipyards would leave an overall work force that would seem to be easily accommodated at fewer

shipyards. However, we believe that if the Navy uses its current estimates of the capacity needed to meet future peacetime and wartime requirements—those based on the global war scenario—it may be retaining more capacity than it would need.

Recommendations

We recommend that the Secretary of the Navy direct the Commander, Naval Sea Systems Command, to use a regional threat scenario and reduced fleet size as major factors in mobilization planning for ship repair requirements. We also recommend that the Secretary use the results of plans based on the regional threat scenario as a principal basis for his recommendations to close or realign public shipyards.

Agency Comments and Our Evaluation

DOD agreed that a reduced fleet size should be used in mobilization planning and that regional threat scenarios are important for determining future ship repair capacity needs. However, DOD stated that a regional threat scenario should not be the only factor for determining ship repair requirements or deciding to close or realign shipyards. DOD added that the reconstitution of naval forces to meet a new or resurgent global threat also should be considered.

We agree that regional threat scenarios should not be the sole basis for determining future ship repair requirements and did not intend to convey this impression in our recommendations. To eliminate any confusion, we have revised our recommendations to state that regional threat scenarios should be major, but not sole, factors in determining ship repair requirements or deciding to close or realign shipyards. Our concern is that the Navy has neglected regional threat scenarios in planning for future wartime ship repair requirements and instead has concentrated on the global threat. We are also concerned that the Navy does not have an analytical basis for recommending that, to support the reconstitution effort, it maintain more repair capacity than it would need in peacetime or to respond to regional contingencies. Planning on this basis could result in maintaining more capability than will be needed. In contrast, the Chairman, Joint Chiefs of Staff, has stated that the United States will not retain the forces required for a global conflict but will know what it takes to build up to the necessary force levels.

DOD also questioned why we focused on depot-level ship repair capabilities and did not consider the importance of intermediate ship repair capabilities. We concentrated on the depot level of maintenance because

this level is specifically cited in the DOD directive (4005.1) providing the policies and procedures for the industrial preparedness program. In addition, the Navy states that the greatest industrial capability resides within the depot level of maintenance.

Comments From the Department of Defense

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, DC 20301-8000

4 NOV 1992

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

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report entitled, "NAVY MAINTENANCE: Fewer Shipyards May Be Needed As Ship Repair Requirements Decline" (GAO Code 394428)/OSD Case 9177). The Department concurs or partially concurs with the principal GAO findings and partially concurs with the recommendations of the draft report.

Navy ship repair and maintenance are, in fact, accomplished by public and private shipyards, Intermediate Maintenance Activities, and Shore-based Intermediate Maintenance Activities. The Shore-based Intermediate Maintenance Activities, by Navy definition, include TRIDENT submarine refit facilities that accomplish a significant amount of work. Therefore, a complete picture of the Navy ship repair and maintenance capabilities would require consideration of more than depot level ship repair.

The draft report recommendations revolve around the recommended exclusive use of a regional conflict in the calculation of ship repair requirements. The Department agrees that ship repair requirements should include the regional conflict scenario. Although specific parameters have not yet been determined, the impact of reconstitution of naval forces to meet a new or emergent threat should be considered.

DoD comments on the draft report are provided in Enclosure A. Further annotations to the draft report are provided in Enclosure B. The Department appreciates the opportunity to respond to the draft report.

Sincerely,

Colin McMillan

Enclosures

**GAO DRAFT REPORT - DATED AUGUST 27, 1992
(GAO CODE 394428) OSD CASE 9177**

"NAVY MAINTENANCE: FEWER SHIPYARDS MAY BE NEEDED AS SHIP REPAIR REQUIREMENTS DECLINE"

DEPARTMENT OF DEFENSE COMMENTS

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FINDINGS

FINDING A: Existing Ship Repair Capabilities and Work Load. The GAO reported that, for purposes of mobilizing for war or other national emergencies, the ship repair industrial base includes eight U.S. public shipyards and three overseas ship repair facilities owned and operated by the Navy, and 108 private shipyards that meet the Maritime Administration's mobilization base criteria. (The GAO listed the overall ship repair industrial base, and the capabilities of public shipyards, public ship repair facilities, and private shipyards in report tables 2.1, 2.2, 2.3, and 2.4, respectively.) The GAO also reported that, in the fiscal year (FY) 1974 appropriations legislation, the Congress placed a 70 percent ceiling on the dollar amount of repair work that could be reserved exclusively for public shipyards. The GAO noted that, while current legislation requires no such restriction, DoD Directive 4151.1 requires the Navy to continue to provide private shipyards with at least 30 percent of the ship repair funding. In addition, the GAO reported that the amount spent yearly on ship repairs dropped from a high of $5.5 billion in FY 1985 to a low of $3.8 billion in FY 1991, as the number of ships in the fleet dropped from 568 in FY 1987 to 526 in FY 1991. The GAO found that, during FY 1985 through FY 1991, about 64 percent of the amount the Navy spent on ship maintenance and modernization work was spent in the Navy facilities. (The GAO listed annual ship repair costs, total availabilities, and availabilities at public shipyards, overseas ship repair facilities, and private shipyards, in report tables 2.5, 2.6, 2.7, 2.8, and 2.9, respectively.) The GAO further noted that one public shipyard is scheduled to close at the end of FY 1996 and one overseas ship repair facility by the end of calendar year 1992. The GAO also observed that in FY 1985 the Congress created a program to test acquiring ship repair work through competition between public and private shipyards. The GAO noted that, according to Navy officials, pursuant to a Defense Management Report decision, they plan to expand the competition program to 20 percent of repair funding in FY 1997. (pp. 2-21/GAO Draft Report)

Now on pp. 2-16.

DOD RESPONSE: Concur.

Now on p. 17.

FINDING B: Ship Repair Requirements Will Decrease. The GAO concluded that the number of shipyards the Navy will need to accomplish its peacetime maintenance requirements will decline because of the reduction in the number of ships in the fleet and the shift to less maintenance-intensive ship designs. The GAO noted the downward pressure on DoD and Navy repair budgets, fleet size, and ship design all have contributed to the reduction in ship repair needs. For example, the GAO observed that, by the end FY 1995, the number of Navy ships in the fleet will decline to 451. The GAO also observed that the older Navy surface combatant ship classes, with maintenance-intensive boiler technology, are being replaced by less maintenance-intensive gas turbine technology. The GAO also noted that gas turbine engines are being used in the FFG-7 OLIVER HAZARD PERRY class guided missile frigates, the DDG-51 ARLEIGH BURKE class destroyers, the DDG-993 KIDD class guided missile destroyers, the DD-993 SPRUANCE class destroyers, and the CG-47 TICONDEROGA class missile cruisers. (pp. 22-23/GAO Draft Report)

DOD RESPONSE: Concur. The total combined number of naval and private shipyards the Navy will need to accomplish its peacetime maintenance requirements will decline. The differences between nuclear-powered ship repair and repair of conventionally powered surface ships should be noted. Nuclear-powered ship repair has a significantly higher degree of complexity than repair of conventionally powered surface ships. Most conventionally powered surface-ship repair is performed in private shipyards, while most of the Naval shipyard workload is the more complex submarine and nuclear-powered surface ship repairs. There is not a one-to-one correlation between the decreasing overall ship repair requirements and the resultant ship repair workload in either naval or private shipyards.

FINDING C: The Navy Reaction to Decreased Requirements—Private Shipyards. The GAO found that the Navy has permitted free market forces to determine which of the private shipyards will remain open. The GAO observed that, as the overall size of the ship repair budget has decreased, the amount of work going to the private shipyards also has decreased. The GAO noted that, between FY 1985 and 1991, the funds spent in private shipyards decreased from $1.8 billion to $1.0 billion a year. The GAO concluded that the private U.S. shipbuilding and ship repair industrial base is in decline because of the reduction in Navy work and because most commercial work is being done in other countries. The GAO further concluded, therefore, that those U.S. shipyards capable of repairing large oceangoing ships are increasingly dependent on the Navy for work. The GAO pointed out, for example, that between 1985 and 1991, the number of ship repair yards capable of drydocking ships longer than 400 feet decreased from 55 to 45. The GAO noted a January 1991 report on the U.S. industrial

Now on pp. 17-19.

outlook, prepared by the Department of Commerce, which stated that U.S. ship repair capacity was substantially underused--thereby creating an environment of intense competition. In addition, the GAO reported that, in April 1991, the President of the Shipbuilders Council of America stated that shipyards engaged in ship repair will see their work diminish as the Navy reduces its force levels--i.e., from 559 ships in FY 1997 to 450 ships in FY 1995--making a bleak future for private shipyards engaged in naval ship repair. The GAO noted that, nevertheless, the private U.S. shipbuilding and ship repair base and supporting industries are expected to have adequate but declining capability to execute the Navy FY 1991 - FY 1997 peacetime maintenance program. (pp. 23-25/GAO Draft Report)

DOD RESPONSE: Concur. Private shipyard workload is likely to decline as overall Navy repair budgets and corresponding workload declines. The GAO correctly noted that only two of the 108 private shipyards are capable of performing nuclear work, and both of those are on the East Coast. Nuclear ship repair work currently comprises over 50 percent of the total Navy ship repair workload. In addition, most of the available worldwide commercial ship work, which could be used to sustain private shipyards, is being performed outside of the United States.

Now on p. 19.

FINDING D: The Navy Reaction to Decreased Requirements--Public Shipyards. The GAO reported that, in addition to closing the Philadelphia Naval Shipyard and the repair facility at Subic Bay, the Navy will reduce the size of the work force at the other public shipyards significantly. The GAO noted that the work force declined from a total of 78,986 employees at the end of FY 1983 down to 60,947 employees at the end of FY 1991. The GAO further noted that the Navy expects the work force to decline to 39,241 employees at the end of FY 1995. The GAO observed that, even at the 1983 level, the public shipyards generally operated on only a one shift, 5 day a week basis. (pp. 26-27/GAO Draft Report)

DOD RESPONSE: Partially concur. While the GAO is correct regarding workforce decline, the GAO has incorrectly stated that most naval shipyards generally operated on only a one-shift, five-day-a-week basis. Naval shipyards work on a multi-shift basis with weekends worked as necessary. It is important to note that planned force levels are translated into ship repair workload. The naval shipyard employment levels are then sized to meet that portion of the repair workload anticipated for public shipyards.

Now on pp. 20-21.

FINDING E: Overall DoD Planning is Based on Regional Conflicts. The GAO reported that, in general, the DoD recognizes the chances of a global war are limited. The GAO observed that in the National Military Strategy of the United States, dated January 1992, the Chairman, Joint Chiefs of Staff, stated that the threats the United States expects to face are regional rather than global. In January 1992, the GAO observed the Secretary of Defense similarly testified that, because the United States now faces neither a global threat nor a hostile power dominating a region critical to U.S. interests, the United States has the opportunity to meet threats at lower levels and lower costs. In addition, the GAO noted that, according to the Secretary, the United States can respond in a graduated manner to preclude the reemergence of a global threat. The GAO did recognize that the change to a regional defense orientation has been reflected in some specific DoD studies. (pp. 29-30/GAO Draft Report)

DOD RESPONSE: Partially concur. While the GAO is correct that the Department recognizes the chances of a global war are limited, the reconstitution requirement is mandated by DoD policy decisions.

FINDING F: Ship Repair Planning Still Based on Global Conflict. The GAO asserted that, as of June 1992, the Navy was still using (1) a protracted, worldwide, conventional war scenario and (2) a larger fleet in planning for wartime shipyard requirements. The GAO stated that, according to Navy officials, the Navy is still using a global war scenario because the planning guidance for regional conflicts is still being developed. The GAO found that there are two major mobilization planning processes that directly affect shipyards--(1) the production base analysis, and (2) mobilization planning.

- Production Base Analysis. The GAO explained that the DoD industrial base program consists of the plans and actions to establish and maintain an industrial base capable of fulfilling national defense requirements during peacetime and over a wide range of crises or emergency situations, including war. According to the GAO, a part of the industrial base program is production base analysis. The GAO explained that, according to Navy officials and a draft DoD directive, this process is supposed to operate on a two-year cycle. The GAO noted, however, that the most recent report on the production base analysis was issued in January 1989; the analysis that should have been completed in 1991 was never started because of the fast changing world events. The GAO found that the January 1989 production base analysis provided an assessment of the shipbuilding industrial base required during a protracted, major, conventional war scenario. As noted by the GAO, the 1989 analysis stated that ship repair mobilization requirements could

generally be met by the ship repair industrial base that existed at that time. The GAO pointed out that the Navy started a new production analysis in November 1991, which--if completed by the end of October 1993--will be used in developing the FY 1996 budget submitted to Congress in January 1995.

- Joint Strategic Capabilities Plan. The GAO further explained that, biennially, the Joint Chiefs of Staff prepare a Joint Strategic Capabilities Plan. As reported by the GAO, the Joint Strategic Capabilities Plan for FY 1991 and 1992 was issued in June 1990; based on this plan, the Chief of Naval Operations issued its plan in August 1990 and the Naval Sea Systems Command issued its plan in October 1, 1991. The GAO noted that the scenario for the mobilization planning, based on these plans, is a protracted, worldwide, conventional war with a 1980s force structure. The GAO observed, however, that the Naval Sea Systems Command plan provided wartime workload requirements for a fleet of 550 to 560 ships. The GAO also observed, in November 1991, the Joint Chiefs of Staff issued the Joint Strategic Capabilities Plan for FY 1993 to FY 1995, using the regional conflict scenario The GAO further observed that, in a March 1992 memorandum, the Commander of the Naval Sea Systems Command noted the change in the national military strategy from a global to a regional conflict scenario. The GAO noted that the Commander stated the United States must maintain the capacity to reconstitute a large, effective defense capability to deter or defeat a new or resurgent global threat; therefore, the global war scenario should be used as the basis for planning.

The GAO concluded, therefore, that the threat scenarios being used in various levels of Navy mobilization planning are not consistent--i.e., some plans are based on a protracted, worldwide, conventional war scenario, while others are based on a regional crisis scenario. The GAO concluded that, by stating ship repair mobilization planning should be conducted on the basis of a protracted, worldwide, conventional war scenario with a 1980s force structure rather than on a regional crisis scenario with a 451-ship force structure--overstates the mobilization needs and could result in the Navy maintaining more capability than will be needed. And finally, the GAO concluded that basing mobilization requirements on a force of 550 to 560 ships rather than on 451 ships further results in overstating requirements. (pp. 30-35/GAO Draft Report)

Now on pp. 21-24.

DOD RESPONSE: Partially concur. The Department agrees with the importance of using regional threat scenarios for determining future ship repair capacity needs. The Department does not, however, agree that a regional threat scenario should be the only factor for determining future ship repair capacity needs. Additional factors,

such as reconstitution requirements, are used in determining future ship repair capacity needs.

FINDING G: Navy Plans to Meet Reduced Requirements. The GAO reported that the Navy is planning to respond to lower requirements by reducing the number of employees at each shipyard, while still maintaining seven public shipyards. The GAO concluded that this plan may not be the most efficient way to respond to reduced requirements and suggested that fewer public shipyards could accommodate the number of employees projected for FY 1996. (In report table 4.1, the GAO compared the FY 1996 projection with employment at the end of FY 1985 and FY 1991.) The GAO reported that the Navy is analyzing data to determine whether it should propose closing any more public shipyards as part of the next round of base closure recommendations. The GAO observed some Navy officials believe that fewer public shipyards are needed, as noted in a March 1992 report by the Director of Naval Nuclear Propulsion. The GAO referenced several statements by the Director, as follows:

- a thorough review of shipyard capabilities versus requirements showed an absolute requirement for the Norfolk and Puget Sound shipyards through the rest of the decade;
- by optimizing the assignment of scheduled work on the basis of drydock facilities and experienced teams of workers, there is enough planned work to sustain the equivalent of five of the six nuclear qualified public shipyards; and
- inactivating rather than refueling the early SSN-688 Los Angeles class submarines through 1998 would reduce the annual work load by the equivalent of one additional public shipyard.

The GAO concluded that the Navy should be evaluating the need for all seven remaining public shipyards as part of its input for the April 1992 Secretary of Defense report to the Base Closure and Realignment Commission. The GAO asserted that if the Navy uses its current estimates of the capacity needed to meet future peacetime and wartime requirements--i.e., those based on the global war scenario--it may be retaining more capacity than it would probably need. (pp. 35-38/GAO Draft Report)

Now on pp. 24-25.

DOD RESPONSE: Partially concur. The Navy constantly reviews its available capacity, both personnel and facilities, to meet its requirements. As requirements have decreased, the Navy reduced employment levels and one naval shipyard is scheduled for closure in 1996. One of those reviews includes military effectiveness, and a series of studies have been conducted on naval shipyard capacity. Those studies include a risk assessment of the ability of the naval

shipyards to execute their missions with fewer shipyards. Those studies have been submitted to and discussed extensively with the Under Secretary of the Navy Shipyard Advisory Board, and will be considered as part of the Base Realignment and Closure process. The Department does not, however, agree that a regional threat scenario should be the only factor for determining future ship repair capacity needs. The requirement for reconstitution is a factor in determining future ship repair capacity needs.

RECOMMENDATIONS

Now on p. 26.

RECOMMENDATION 1: The GAO recommended that the Secretary of the Navy direct the Commander, Naval Sea Systems Command, to use a regional threat scenario and reduced fleet size in mobilization planning for ship repair requirements. (pp. 38-39/GAO Draft Report)

DOD RESPONSE: Partially concur. The Department agrees that a reduced fleet size should be used in mobilization planning for ship repair requirements--and that is being done. The Department does not, however, agree with the use of only regional threat scenarios. The requirement for reconstitution is also a factor in ship repair requirements planning.

Now on p. 26.

RECOMMENDATION 2: The GAO recommended that the Secretary of the Navy use the results of plans based on the regional threat scenario as a basis for his recommendations on shipyards to be closed or realigned. (p. 39/ GAO Draft Report)

DOD RESPONSE: Partially concur. The decision to close or realign shipyards may include the results of plans based on a regional threat scenario. The requirement for reconstitution is also a factor in determining future ship repair capacity needs. Studies of those needs include a risk assessment of the ability of the naval shipyards to execute their missions with fewer shipyards. Those studies have been submitted to and discussed extensively with the Under Secretary of the Navy Shipyard Advisory Board, and will be considered as part of the Base Realignment and Closure process.

Major Contributors to This Report

National Security and International Affairs Division, Washington, D.C.	Norman Rabkin, Associate Director James Murphy, Assistant Director
Los Angeles Regional Office	Dennis DeHart, Evaluator-in-Charge Elinor Yerkes, Site Senior James Nolan, Evaluator