DOCUMENT RESUME

05u55 - [B0685607]

Implications of the Mational Security Council Study *0.5.
Maritime Strategy and Maval Porce Requirements* on the Future
Ship Force. PSAD-78-6A; B-163058. March 7, 1978. 31 pp. + 9
appendices (25 pp.).

Report to the Congress; by Blaer B. Staats, Comptroller General.

Issue Area: Pederal Procurement of Goods and Services (1990); Federal Procurement of Goods and Services: Procurement of Only Needed Quantities of Goods (1901); Science and Technology (2000).

Contact: Procurement and Systems Acquisition Div. Budget Punction: Mational Defense (050); Mational Defense: Weapon Systems (057).

Organization Concerned: Central Intelligence Agency; Department of the Mavy; Department of Defense; National Security Council.

Congressional Relevance: Congress; House Committee on Armed Services; Senate Committee on Armed Services.

The Secretary of Defense requested an indepth study of U.S. maritime strategy and long-term naval requirements. The National Security Council study examined future Navy ship requirements on the basis of J.S. defense policies, Navy missions and role, and Soviet military capabilities and strategies. It also discussed future requirements in light of increasing costs and anticipated technological breakthroughs. The study was reviewed to clarify issues that relate to the size of the naval force and to evaluate the recommendations. Pindings/Conclusions: The study left the following important issues unresolved: Should the Mavy continue to rely on the carrier for offensive capability? Could and should forward deployment of high-value forces be accomplished with less valuable assets? Why does the study assign a large number of ships to protect naval shipping? Why rre general-purpose forces being sized and structured for conventional warfare even though the Soviet Union can, and possibly intends to, conduct a nuclear war? Were the analyses the study used in determining future naval force levels too pessimistic? and Why did the study propose future naval force levels on the basis of currently programed forces? If these issues had been considered in the study, they would have materially affected its outcome. Accordingly, these issues should be examined before any decisions are made on the future naval force size and composition. Recommendations: The appropriate congressional committees should hold extensive exploratory hearings to examine the impact of these issue on the future naval force size and composition. (RRS)

()b)

BY THE COMPTROLLER GENERAL

Report To The Congress

OF THE UNITED STATES

Implications Of The National Security Council Study "U.S. Maritime Strategy And Naval Force Requirements" On The Future Naval Ship Force

This unclassified version of a classified report discusses the role, missions, and capabilities of the Navy's general-purpose forces, assesses the National Security Council Study and its effect on the fiscal year 1978 shipbuilding program; addresses issues for consideration by those who approve programs for new weapon systems; and identifies those issues critical to the development and programing of the future Navy ship force.





COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 2054.

B-163058

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

This report is an unclassified version of a SECRET report (PSAD-78-6, Dec. 19, 1977) to the Congress on the issues surrounding the implications of the National Security Council Study "U.S. Maritime Strategy and Naval Force Requirements" on the future naval ship force. The report has been made unclassified by deleting all classified information.

The report discusses the significant factors influencing ship force size and composition and identifies the key issues for congressional attention. We recommend that the appropriate congressional committees hold extensive exploratory hearings to examine the Navy's missions--particularly in the event of a major conflict with the Soviet Union. Of particular importance is the question of optimizing the force structure for the primary threat situations.

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).

We are sending copies of this report to the Director of the Central Intelligence Agency, the Acting Director of the Office of Management and Budget, the Assistant to the President for National Security Affairs, and the Secretaries of State and Defense.

Comptroller General of the United States

COMPTROLLER GENERAL'S REPORT '10 THE CONGRESS

IMPLICATIONS OF THE NATIONAL SECURITY COUNCIL STUDY "U.S. MARITIME STRATEGY AND NAVAL FORCE REQUIREMENTS" ON THE FUTURE NAVAL SHIP FORCE

DIGEST

Recognizing that the Navy's fiscal year 1977 shipbuilding budget did not fully answer continuing questions about the future size and composition of the naval ship force, the Secretary of Defense requested an indepth study of U.S. maritime strategy and long-term naval requirements. This study, known as the National Security Council study, specifically

- --examines future Navy ship requirements on the basis of U.S. defense policies, Navy missions and roles, and Soviet military capabilities and strategies and
- --discusses future requirements in light of increasing costs and anticipated breakthroughs in technology.

Completed in January 1977, the study formed the basis for the 1978 fiscal year 5-Year Shipbuilding Program--leading to a 600-ship Navy, and centering around 12 large-deck carriers to be operated through the 1990s.

GAO reviewed the study to clarify those issues that relate to the size of the naval force and to evaluate the recommendations being made. GAO found that the study left unresolved the following important issues.

- --Should the Navy continue to rely on the carrier for offensive capability? The Navy may be structuring a carrier-oriented force that would be best suited for power projection and for peacetime and minor conflicts instead of a force built for its major rcle-protecting sea lines of communication. (See ch. 4.)
- --Could and should forward deployment of highvalue forces be accomplished with less

valuable assets? Forward deployment could expose high-value forces to high-intensity cruise missile and aircraft attacks. (See ch. 5.)

- --Why does the study assign a large number of ships to protect naval shipping? There is reason to believe that sea-line interdiction is not a primary Soviet intention and will not be attempted until U.S. carrier and strategic submarine forces are neutralized. (See ch. 5.)
- --Why are general-purpose forces being sized and structured for conventional warfare even though the Soviet Union can, and possibly intends to, conduct a tactical nuclear war? (See ch. 5.)
- --Were the analyses the study used in determining future naval force levels too pessimistic? (See ch. 5.)
- --Why did the study propose future force levels on the basis of currently programed forces and not address such issues as whether surface ships may provide direct support more cost effectively than nuclear attack submarines? (See ch. 5.)

CONCLUSIONS AND RECOMMENDATION

GAO believes that if these issues had been considered in the study, they would have materially effected its outcome. Accordingly, these issues should be examined before any decisions are made on the future naval force size and composition. Without procuring any additional carriers, the Navy could continue to have more than 10 aircraft carriers operational through the 1990s. The study considers this level adequate for basic sea control in a North Atlantic Treaty Organization War.

The appropriate congressional committees should hold extensive exploratory hearings to examine the impact of these issues on the future naval force size and composition. Of particular importance is the question of getting the best force structure for primary threat situations.

AGENCY COMMENTS

In commenting on this report, the National Security Council stated that the questions GAO raised are legitimate and will likely prove valuable, not only to the Congress in its consideration of the fiscal year 1979 (and beyond) presidential budgets, but also to the Department of Defense as it continues its force planning and budget development afforts. The Council also stated that it would be inappropriate to comment in detail because its study was a product of the previous administration, and the current administration is developing a position on defense posture on the basis of a recently completed review of U.S. military strategy and forces.

The Department of Defense provided a partial reply and stated that it is in the process of examining many of the unresolved issues addressed in the report that could significantly influence naval force planning. The results of these efforts are to be considered in future decisions by the current administration. (See apps. VII to Ix.)

Contents

		Page
DIGEST		i
CHAPTER		
1	INTRODUCTION From battleship to carrier Major shipbuilding decisions Scope of review	1 1 3 4
2	TODAY'S NAVY Navy missions, functions, and roles Size and composition of today's Navy Navy's assessment of capability Naval force sizing The Navy's recommended shipbuilding program	5 5 6 7 7
3	THE NSC STUDYORIGIN, RESULTS, AND OUR ASSESSMENT NSC study origin NSC study results Our assessment of the NSC study	10 10 10 12
4	NAVY FORCE STRUCTURE: THE USE OF CARRIERS AND POSSIBLE ALTERNATIVES Carrier-centered Navy Multipurpose use of carriers Aircraft carrier alternatives	13 13 15 17
5	FACTORS INFLUENCING NAVY FORCE SIZING Soviet strategy Campaign analyses used by the NSC study Using future forces as currently programed	22 22 25 26
6	CONCLUSIONS AND RECOMMENDATION Conclusions Recommendation Agency comments	29 31 31 31
APPENDIXE	es s	
I	Today's Navy	32
II	How the Navy sizes its forces	36

APPENDIXE	s	Page
III	NSC study-recommended 5-Year Shipbuilding Program	43
IV	Force level projections	44
V	Questions surrounding the Navy's acquisi- tion of its planned force structure	45
٧I	Carrier service life extension program	47
VII	Agency commentsNational Security Council	51
VIII	Agency commentsOffice of Hanagement and Budget	53
IX	Agency commentsAssistant Secretary of Defense	55
	ABBREVIATIONS	
ASW	antisubmarine warfare	
CIA	Central Intelligence Agency	
CNO	Chief of Naval Operations	
CTOL	conventional takeoff and landing	
CVV	conventionally powered carriers	
DOD	Department of Defanse	
DPQ	Defense Planning Questionnaire	
NATO	North Atlantic Treaty Organization	
NISC	Naval Intelligence Support Center	
NSC	National Security Council	
OASD (P&E)	Office of the Assistant Secretary of Defense (Planning and Evaluation)	
OSD	Office of the Secretary of Defense	
SATG	surface action task group	

SLEP service life extension program

SLOC sea lines of communication

URG underway replenishment group

VSS VSTOL Support Ship

VSTOL vertical short takeoff and landing aircraft

CHAPTER 1

INTRODUCTION

The size of the U.S. Navy has declined from about 980 ships in 1968 to about 480 ships in today's fleet. Much of this decline resulted from a decision by the former Chief of Naval Operations (CNO) to retire many old ships and aircraft and thereby free funds for fleet modernization.

The 5-Year Shipbuilding Program recommended by a National Security Council (NSC) study reverses the decline and leads to an increase of the active fleet to about 600 ships by 1990. The Department of Defense (DOD) and the Congress believed the study would be an indepth examination to determine the size and composition of the future Navy. Consequently, we reviewed the study to clarify those issues influencing naval force size and to evaluate the recommendations made.

FROM BATTLESHIP TO CARRIER

For years the battleships were the core ships in naval warfare; they had superior range, firepower, mobility, and defensive strength (heavily armored and highly compartmentalized). They were optimized for winning ship-against-ship gun battles.

Many thought the battleship era would end with the advent of aircraft and their deployment from carriers. The Navy, however, continued to defend battleships as the only certain means of repelling an attack by existing foreign navies.

The debate was finally settled, and the battleship's fate was sealed by the events of World War II. The Pearl Harbor attack crippled the U.S. Pacific battleship fleet, but the aircraft carriers survived the attack and won the naval war. The capability and flexibility of aircraft overwhelmed the battleship—an easy target for aircraft bombs and tonpedoes. Subsequently, battleships were phased out and the modern carrier task group became the central force of today's general—purpose 1/U.S. Navy. (See fig. 1.)

^{1/}Naval forces exclusive of strategic nuclear forces.



A VIEW OF THE SIXTH FLEET TASK FORCE STEAMING IN FORMATION IN THE MEDITERRANEAN SEA.

The cruise missile--a threat to the carrier's future?

Some naval observers believe that today's cruise missile presents a threat to the aircraft carrier that parallels the battleship's former vulnerability to aircraft. The cruise missile's low-angle approach makes it difficult to detect. When launched in significant numbers, cruise missiles can overwhelm the carrier task force's defenses because of the difficulty of simultaneously tracking and targeting a large number of incoming missiles. Because cruise missiles can be launched from aircraft, submarines, or surface ships, there are many geographical areas where U.S. carriers would be operating in a high-threat environment. A carrier's ability to withstand a high-intensity cruise missile attack in this environment is seriously questioned by recent DOD studies.

The Navy has countered this argument with statements about the carrier's survivability and has proposed new weapons systems to increase its capability to withstand a high-intensity attack. Carrier vulnerability has serious implications for U.S. naval power. Because of their high cost, there are only 13 carriers now in the active fleet. The loss of these carriers would leave the remaining general-purpose naval forces with little air cover and limited offensive capability.

MAJOR SHIPBUILDING DECISIONS

The United States is embarking on a major shipbuilding program which is planned to increase its active fleet by over 100 ships in 13 years. An informed decision must be made about whether to continue the carrier-dominated Navy or look for alternatives to carry out the Navy's mission. The Office of the Secretary of Defense (OSD) initiated the MSC study, recognizing that future naval requirements were an issue warranting the attention of NSC and the President. The study addressed the carrier's vulnerability and the need for cost-effective alternatives.

The next several years mark a transition period for the Navy. The shipbuilding program undertaken now will influence the U.S. naval force structure into the 21st century. Because OSD intended the NSC study to be an extensive review of naval strategy, threat, and risk elements of naval force requirements, we expected that the study would provide a base for deciding the size and composition of the U.S. Navy for the 1980s and 1990s.

Consequently, we reviewed the NSC study to clarify issues that relate to naval force structure and sizing and evaluated the NSC recommendations.

SCOPE OF REVIEW

We reviewed the NSC study and Navy analyses and documents related to general-purpose naval forces. We interviewed officials from NSC, OSD, the Joint Chiefs of Staff, the Department of the Navy, the Department of State, the Office of Management and Budget, and the Central Intelligence Agency for additional information and clarification. Their comments on the issues presented in this report have been incorporated. We also reviewed the status of private shipyards with officials of 10 east and west coast yards.

CHAPTER 2

TODAY'S NAVY

The Navy in December 1976 consisted of 474 ships, including 13 aircraft carriers. The Navy believes that with this force level it has a slim margin of superiority over the Soviet Union in situations involving the most vital U.S. interests. Because the Navy also believes that the Soviet Union will gain superiority in about 5 to 10 years, it has developed a shipbuilding program designed to increase force levels and meet the Soviet threat at a prudent level of risk. This program would continue to invest in a few high-cost, high-capability carriers with an increased number of assets dedicated to working in a task group.

NAVY MISSION, FUNCTIONS, AND ROLES

The Navy is the principal force used to achieve and maintain maritime superiority on which the Nation relies. Its mission is to be prepared to conduct prompt and sustained combat operations at sea and defeat any force that curtails free use of the seas. (See app. I for a detailed description of the Navy's mission, functions, and roles.)

Navy functions

The Navy performs four functions to achieve its mission. Two of these--sea control and power projection--are wartime functions.

Sea control is the fundamental function of the Navy; it connotes control of designated air, surface, and subsurface areas. It does not require simultaneous control over all waters but is exercised where and when needed. Sea control is achieved by engaging and destroying hostile aircraft, ships, and submarines at sea or by deterring hostile actions by the threat of destruction.

Power projection operations primarily use tactical air and naval gunfire in direct support of land operations and/or amphibious forces used in land assault operations. Power projection and sea control are interrelated because sea control is necessary in areas where power is to be projected, and, conversely, power projection may be needed to assist efforts to control the sea.

The second two functions--presence and crisis management--are peacetime functions. Presence is the

nonhostile use of naval forces to support U.S. foreign policy. Crisis management is the use of naval forces to stabilize critical situations to avoid escalation into war.

Navy roles

In the functional exercise of its mission, the Navy is responsible for:

- -- Providing a strategic nuclear deterrence.
- --Providing naval components of U.S. overseas deployed forces to support allies and protect U.S. interests.
- --Assuring the security of the sea lines of communication (SLOC) 1/

SIZE AND COMPOSITION OF TODAY'S NAVY

The Navy in December 1976 2/ consisted of 474 active ships structured as follows:

- --13 large-deck carriers.
- --26 cruisers.
- --62 destroyers.
- --64 frigates.
- ~~75 attack submarines.
- --41 ballistic missile submarines.
- --62 amphibious ships.
- -- 8 patrol gunboats
- --3 minesweepers.
- --120 auxiliary ships.

Most naval forces normally operate in task groups. There are four types of task groups: carrier task groups, underway replenishment groups, amphibious task groups, and convoys. The carrier task group, consisting of an aircraft carrier, its accompanying surface combatants (destroyers, cruisers, frigates), and attack submarines, is the Navy's primary offensive force. Because carrier task groups are routinely deployed from their home bases, underway replenishment groups (URGs), consisting of support ships

^{1/}Selected sea routes for commerce.

^{2/}The Navy's 5-Year Shipbuilding Program, released in the President's budget for FY 1978, proposes constructing or converting 178 ships.

that supply oil, ammunition, and supplies, are required. An amphibious task group consists of landing/amphibious assault ships and accompanying surface combatants for shore assaults. A convoy is a block of merchant ships accompanied by friendly surface combatants.

The aircraft carrier largely determines the number of ships in the fleet. A study has shown that during wartime (DELETED) surface combatants and up to two attack submarines are needed to support each aircraft carrier; (DELETED) URGs are required to support the 12 deployed carrier talk groups; and (DELETED) surface combatants are needed to defend each URG.

NAVY'S ASSESSMENT OF CAPABILITY

The Navy believes its force has a slim margin of superiority over the Soviet Union in scenarios involving the most
vital U.S. national interests. Despite the present margin,
the Navy believes that, at the current improvement rate of
the Soviet naval capability, the balance of maritime superiority will favor the Soviet Union within the next 5 to 10
years if the United States simply maintains the current
force structure.

NAVY FORCE SIZING

The Navy assesses its force capabilities by a complex series of analyses that consider various strategies by the United States and its potential enemies in several planning scenarios. The result is a net assessment of the maritime balance in each functional warfare task, identifying deficiencies in future forces and indicating the level of risk inherent in current programs.

During the force-sizing process, at least three different force levels, each of differing risk, are developed. The first two force levels, accepting minimum and prudent risks, are not fiscally constrained and are used as planning tools. The third force level (the acceptable risk level) is a fiscally constrained force achievable at a higher level of risks than the other two force levels. (See app. II for a detailed description of the force-sizing process.)

THE NAVY'S RECOMMENDED SHIPBUILDING PROGRAM

The Navy recommended a 5-Year Shipbuilding Program in February 1976 that reflected its view on force levels needed to correct identified deficiencies and carry out its mission

at a prudent risk level. This program was part of the Navy's input to the NSC study.

The Navy's program emphasizes a carrier-centered Nav	γу.
It proposed a (DELETED) large-deck carrier force level	
reduce risks in carrying out the mission. The Navy's pro	
gram also included more surface combatants and attack sub) –
marines to support military task forces and convoys. The	>
NSC study's estimate for this program was	
(DELETED) (per year in constant fiscal year	
1977 dollars), (DELETED) annual increase ov	/er
the fiscal year 1976 program approved by the Secretary of	=
Defense.	

The Navy's proposed program would create the following changes to current force levels:

	Navy recommer force le		
Carriers: Large-deck car- riers Vertical short takeoff and	13	13	
landing (VSTOL) carriers (note a)	-	2	
Surface combatants: Antiair warfare- equipped Other	_ 152		_
Submarines: Sea launched bal- listic missile	41 75	(DE	ar empo l
Attack Amphibious ships	62	(DE	CLETED)
Mine countermeasure: Ships	3		
Support ships	128		
Total	474		

a/Capable of operation from restricted shipboard spaces because they do not require launch and recovery systems of current aircraft carriers.

The Navy's recommended ship force structure is not unlike the current composition. The United States would invest in a few high-cost, high-capability carriers and increase the number of assets dedicated to working in a task group structure, thereby continuing the carrier-centered Navy. At a prudent risk level, it contains more ships in 1990 than the NSC-recommended ship force.

CHAPTER 3

THE NSC STUDY--ORIGIN, RESULTS, AND OUR ASSESSMENT

In January 1976 the Secretary of Defense requested an indepth study of U.S. maritime strategy and long-term naval requirements. He recognized that the Navy's fiscal year 1977 shipbuilding budget did not fully answer continuing questions about the Navy's future size and composition. Carrier costs were an integral part of these questions. The study was conducted by DOD for NSC and coordinated by the staff of the Office of the Assistant Secretary of Defense, International Security Affairs. It was completed in January 1977 and became the basis for the fiscal year 1978 5-Year Shipbuilding The study admitted, however, that important issues that could have major implications for the future optimum force level were not resolved. We believe that, if considered in a force level review, these issues might alter the carrier-centered Navy and the number and type of ships now seen as required.

NSC STUDY ORIGIN

Facing fiscal constraints in late 1975, OSD and the Navy decreased the fiscal year 1977 shipbuilding and conversion Navy budget request rather than cut back other Navy programs. OSD recognized, however, that a study of the future size and composition of the Navy was required. Because the Navy is built around its aircraft carriers, questions focused on the carrier's future role. A carrier's cost--the fourth Nimitzclass, nuclear-powered carrier and its airwings were expected to cost close to \$7 billion--coupled with its increasing vulnerability to Soviet cruise missiles, caused examination of viable alternatives to the large-deck carriers. In January 1976 OSD requested the Navy to develop a 5-Year Shipbuilding Program at a prudent level of risk. The study group briefed the President and NSC three times. The paper was completed in January 1977; it was approved by the President and accepted by all NSC members. Its official title is "U.S. Maritime Strategy and Naval Force Requirements," and it is informally known as the NSC study.

NSC STUDY RESULTS

The NSC study presents a position on the future military environment, foundations for U.S. defense policies, maritime implications of the Soviet challenge, factors in developing a U.S. maritime program, and general Navy force requirements. Within this framework, it then presents (1) five future ship

force levels, (2) each levels' capability to perform the sea control and power projection functions, and (3) the likelinhood of defeating the Soviet threat. The force levels differed in the number of large-deck carriers (from 10 (DELETED) and resultant total number of ships (cruisers, destroyers, submarines, auxiliaries, etc.). By fall 1976 these five force levels were refined into three future force level options. In January 1977 the President decided on a fiscal year 1978 5-Year Shipbuilding Program that was drawn from these options. It initiates a 570-ship level by 1985 and about a 590-ship level by 1990, 1/compared with today's 474 ships.

The shipbuilding program 2/ provides that 157 ships will be built, including two medium-sized carriers, 10 antiair warfare destroyers, 58 frigates, and 44 support ships. It did not request the expected fourth Nimitz-class, nuclear-powered carrier. Instead, the President, recognizing the cost, vulner-ability, and technology questions, requested two medium-sized, conventionally powered carriers (CVV) designed to accommodate VSTOL aircraft. Navy believes, however, that reliance on the yet unproven VSTOL aircraft is too great a risk and that CVV should be capable of accommodating both conventional takeoff and landing (CTOL) 3/ and VSTOL aircraft.

The shipbuilding program includes initial funds for extending the service life of the Navy's four Forrestal-class carriers. Without the service life extension, the Navy would not be able to maintain 12 large-deck carriers through the latter years of this century. The NSC study considers 12 large-deck carriers necessary to meet war and peacetime commitments. Also, it considers that 10 large-deck carriers are adequate for basic sea control in a NATO war. (See app. VI for discussion of the service life extension program.)

OUR ASSESSMENT OF THE NSC STUDY

The NSC study was to be an indepth examination of future Navy force requirements based on U.S. defense policies;

^{1/}See apps. III and IV for the 5-Year Shipbuilding Program and estimated force levels.

^{2/}President Carter's budget did not substantially change this shipbuilding program.

^{3/}When operated from sea-based platform, they require catapult-assisted launch and arresting gear for shipboard recovery.

Navy missions, functions, and roles; and Soviet military capabilities and strategies. The study was expected to emphasize breakthroughs in technology and their potential importance to the naval balance.

Although the study discussed new technology, it assumed that sea-based aircraft and the carrier's special utility for performing peacetime functions were indispensible and, hence, limited consideration of carrier alternatives. Land-based aircraft, missile technology, and remotely piloted vehicles were not seriously considered because they did not conform to the assumptions. As a result, the study recommended a continuation of the carrier-centered Navy. Further, the NSC study identified other important issues which it did not fully address--Soviet strategies, nuclear war at sea, and forward deployment. We believe that if these issues had been addressed, they could have major implications on the size and composition of the study's recommended force. (See chs. 4 and 5.)

CHAPTER 4

NAVY FORCE STRUCTURE:

USE OF CARRITRS AND POSSIBLE ALTERNATIVES

		*			
		(DELETED)			
carrier woul	d essentially	eliminate	the Navy	The loss	

carrier would essentially eliminate the Navy's primary attack capability.

The NSC study outlines this concern, citing the high cost of carriers and the continuing improvement of anticarrier weapons, sensors, and vessels technology by the Soviet Union. The study discusses alternatives to the largedeck carriers; yet, in developing a shipbuilding program, it does not consider these alternatives (e.g., land-based aircraft, long-range cruise missiles, and remotely piloted vehicles.) We be leve that before additional investments are made in new aircraft carriers, a thorough examination should be made of the aircraft carrier and its multimission capabilities, as well as possible alternatives.

CARRIER-CENTERED NAVY

The aircraft carrier has become the principal tactical weapon system through which the Navy carries out its primary function of assuring the free use of the seas. Not only are the carriers high-capability ships, but they are also highcost ships. The procurement costs of a follow-on, Nimitzclass carrier and its airwings are estimated to be \$7 bil-(See fig. 2.) This excludes the cost of ships which must opera a with the carrier to optimize its effectiveness. Despite the usefulness of the aircraft carrier in the full range of naval missions, its cost precludes buying more than the Navy's current 13 carriers. The NSC study estimated that the shipbuilding budget would average (DELETED) billion a year (in fiscal year 1977 dollars) for the rext 15 years to build a Navy centered around (DELETED) large-deck carriers by 1990, an increase of (DELETED) | billion over the fiscal year 1977 shipbuilding budget. Total 15-year costs to support a Navy centered around (DELETED) carriers would be about (DELETED) billion.



A VIEW OF THE NUCLEAR-POWERED AIRCRAFT CARRIER USS NIMITZ,CVN-88.

MULTIPURPOSE USE OF CARRIERS

Carriers have helped the U.S. fleet exploit the advantages of aircraft for carrying out naval missions. In particular, sea-based aircraft have provided the U.S. fleet with extended surveillance capability, long-range striking power, tactical flexibility, and reduced reliance on overseas bases. The following sections will explain how the special capabilities of aircraft carriers have been used to carry out naval functions.

Peacetime presence

The NSC study states that the U.S. maritime strategy must consider forces able to

- --maintain U.S. political-military presence under noncrisis conditions,
- --fulfill commitments, and
- --demonstrate U.S. ability to project power an a crisis.

These forces are tangible evidence of U.S. interest in the physical security of our allies and of U.S. capability for contributing to that security. The forces signal U.S. interest in the security of areas where other forms of U.S. military power cannot readily be maintained in peacetime. They provide a counterweight to the military presence of the Soviet Union and remind both the Soviets and others of an American capability to react to aggression.

The aircraft carrier is particularly suited for the peacetime presence function. The NSC study claims that the aircraft carrier has become established throughout the world as a symbol of American naval might. The carrier's size and capability make it the most impressive of ment of the Navy; its power projection capability enables it to respond with military force should a crisis occur.

Crisis management

Naval forces can be positioned in international waters in the vicinity of a crisis, ready to respond but without having to request overflight or landing rights or violate the sovereign rights of any nation. The United States has employed naval forces to support its policy objectives in crisis management or contingency roles on at least 43 occasions since 1960. Aircraft carriers may be uniquely

important in this mission because there may be no land-based alternatives for deploying aircraft. For example, a former CNO said that, in three of the four crises during his term, the Air Force was totally incapable of playing a role due to a lack of access to airfields. Only carrier avi tion could aid these crises.

NATO war

Sizing	the	carrier	force	(DELETED		
			The Nav	y's principa	l task in a	NATO war
wonig g	e se	ea contr	ol to s	ecure SLOCs.	The princ	ipal threat
to acco	mpl	ishing t	he cont	rol mission	is the Sovi	et submarine
force.	U.S	. sea c	ontrol	forces, cons	isting of a	ttack sub-

According to the Navy, primary emphasis is given to

The NSC study, however, defines no major sea control role for the carrier in a NATO conflict. Rather, the carrier's contribution would be to oppose air threats and less important Soviet surface threats.

marines, mines, land-based aircraft, and the undersea surveillance system, would establish barriers to detect and

The NSC study suggests using carriers to launch strikes against enemy forces and to support amphibious operations. The carrier-particularly such large-deck carriers as the Nimitz--is the most effective naval asset for launching strikes against enemy forces. These strike operations efficiently use the large number of aircraft which are based on the carrier.

Although the carrier would contribute to all Navy tasks in a NATO war, it appears that it may have only a limited contribution to the Navy's primary task—sea control—in that it may be better equipped to perform the secondary task of power projection.

Carrier deployment

destroy Soviet submarines.

Because the U.S. national military strategy is a forward defense strategy, U.S. naval forces are routinely forward deployed; that is, maintained overseas, great distances from the United States and ready to respond to needs. The Navy's forward deployed forces are to (1) support allies, (2) protect overseas commerce, (3) respond to crises, (4) defeat the initial attack in a general war, and (5) move the defenfensive perimeters away from the continental United States.

The United States keeps four aircraft carrier task groups forward deployed—two in the Pacific and two in the Mediterranean. Generally, it takes at least three carriers to maintain one forward deployed, so this generates a total requirement for 12 carriers. The NSC study concludes that any shipbuilding program should, at minimum, sustain roughly current levels of forward deployment and attendant presence/crist management capabilities.

Threat to carriers in a NATO war

an ma	The Soviet Union has developed an anticarrier force of clear submarines, open-ocean capable surface combatants, I long-range bombers that can attack our carrier force in my areas of the world, especially those areas within 1,00 les of the Soviet Union.
	(DDLEMBD)
	(DELETED)

AIRCRAFT CARRIER ALTERNATIVES

Despite their vulnerability, four carriers are routinely forward deployed, often where they are most susceptible to a

cruise missile attack from the Soviets or third-world countries. The NSC study states that:

"Dramatically increasing costs for large-deck air-craft carriers and continuing improvement of anti-carrier weapons, sensors and vessel technology as well as possible use of nuclear weapons by the enemy make it imperative to consider possible alternative means for retaining these capabilities (of large-deck aircraft carriers) in our seapower arsenal. While it is prudent to look to continuation of our present sea-based air in the near term, it is also important to dedicate substantial resources to the research and development process to examine alternatives to large deck carrier systems."

Although the NSC study does discuss some possible alternatives to the large-deck carrier, its analysis of alternative force levels does not consider using some of these alternatives instead of existing systems. Consequently, the shipbuilding program recommended by the NSC study still endorses a carrier-centered Navy. The only major change attempted was an accelerated development of new ways to put air power to sea. We will discuss some of these alternatives to large-deck carriers which may be able to perform some carrier missions more effectively. Land-based aircraft, missiles, remotely piloted vehicles, small carriers, and VSTOL carriers are possible options that should be seriously examined before buying more carriers to fulfill these missions.

Land-based aircraft

When the NSC study examined what force structure would be needed to accomplish the Navy's mission in a worldwide conflict with the Soviet Union, it only considered the currently programed contributions of land-based air to the sea war. Since land-based aircraft are not assigned a priority mission for contributing to the naval war, their relative benefits and liabilities, compared to aircraft carriers, were not examined.

The NSC study outlines possible contributions of land-based aircraft to a NATO war to destroy enemy antiship missile carrying aircraft and surface combatants. Land-based aircraft could set up a defense barrier in the North Atlantic; control the Soviet bomber, missile, and surface ship threats in the Mediterranean; defend the minimal points of the Pacific SLOC; and defend the oil SLOC from Alaska to the continental United States. Long-range aircraft could also

attack Soviet surface combatants, sow mines, and attack land bases that threaten the Navy's sea control role. According to the NSC study, however, the use of land-based aircraft to support the sea war will be constrained by their dependence on fixed bases and by the higher priority requirements to support the land war.

Land-based aircraft, for example, could replace seabased aircraft in antisubmarile warfare. Studies have consistently shown that, for the existing base structure, it is less costly to provide antisubmarine warfare (ASW) 1/ air cover to North Atlantic and Pacific convoys with land-based patrol aircraft than with carrier VSTOL, or conventional aircraft.

Another possible contribution by land-based aircraft is founded on technological improvements in the range and payload of subsonic aircraft. These aircraft could be used for long-range transits over oceans without depending on politically sensitive and militarily vulnerable overseas bases. They could be tailored for ASW, antiair warfare, antisurface warfare, or escort operations. The overall cost effectiveness has not been evaluated, but the cost is expected to be comparable to similar-sized aircraft. Referred to as "Big Momma," this land-based multipurpose naval aircraft has been funded for further feasibility studies. The Office of the Assistant Secretary of Defense (Planning and Evaluation) (OASD(P&E)) considers it to be a low-to-moderate risk. though such a concept may not completely replace the carrier, it may limit the number of carriers required. aircraft could be available during 1990-95.

Missile technology

The NSC study discusses possible missiles use for future strike operations. With technical improvements expected between 1980 and 1985, these could be launched from surface ships, submarines, and aircraft, and thereby reduce sole reliance on carrier-based aircraft for long-range strikes.

Remotely piloted vehicles

Carrier aircraft provide long-range surveillance. In the future, surveillance for ships and low-speed aircraft may be accomplished by remotely piloted vehicles with small, light-weight sensor platforms. The NSC study estimates that this technology will be available between 1980 and 1990.

^{1/}The destruction or neutralization of enemy submarines.

Smaller carriers

The basic carrier sea control mission in a NATO war does not require the sortic capability of a large-deck carrier when operating outside intense Soviet air threats. Consequently, a study done as a part of the NSC study suggested alternative, smaller sea control carriers designed especially for this role (with fighters and ASW aircraft but few attack aircraft), limited from operating in high-threat areas.

VSTOL carriers

It now appears possible to design VSTOL aircraft capable of operating from relatively small platforms because they do not require the catapults and arresting gear carriers operating CTOL aircraft require. VSTOL aircraft suffer size and cost penalities in comparison to their CTOL counterparts. However, where the number of VSTOL aircraft needed is small enough for the carrier to be less than 30,000 tons, the savings in carrier costs may outweigh higher aircraft costs.

VSTOL technology would help the United States to disperse its sea-based air capability among more ships. These ships would probably be smaller, less expensive, and less capable than large-deck carriers. The NSC study recommendation to build smaller conventionally powered VSTOL carriers retains a carrier-centered Navy, but it does ameliorate the problem of placing our most capable assets on a few high-cost platforms. By spreading the fleet's cost and capability among a larger number of platforms, the total force vulnerability might decrease. (See fig. 3.)



A VSTOL AIRCRAFT BEING LAUNCHED FROM THE ?LIGHT DECK OF THE AMPHIBIOUS ASSAULT SHIP U.S.S. GUAM.

CHAPTER 5

FACTORS INFLUENCING NAVY FORCE SIZING

How much is enough? This issue is be addressed in force-level sizing. Even if most analysts agreed on the type of Navy--carrier-centered or otherwise--there is still the question of how many assets are needed to do the job.

The NSC study judged issues, such as Soviet strategy, length of war, results of campaign analyses, and use of future forces as currently programed, to influence its recommended shipbuilding program and the future Navy size. We believe that these issues should be evaluated before future composition decisions are made.

SOVIET STRATEGY

Is SLOC interdiction a primary Soviet objective?

Assumptions about Soviet intentions and capabilities,
particularly in a NATO war, affect the force size the Navy
needs to counter the threat.
(DELETED) They agreed that the primary Soviet
objectives in a NATO war consist of
<u> </u>
(DELETED)
<u> </u>

(DELETED)	If this is the
case, the United States may not neededicated to protecting naval ships We recognize that neglecting	ping.
ity to interdict SLOC	che bovice onion o oupus
(DELETED)
Will the Soviet Union wage	

U.S. naval forces are primarily sized and structured for a conventional conflict with the Soviet Union. However, the NSC study states that the size and shape of the Navy would probably differ if it were assumed that a war with the Soviet Union might also include a nuclear phase.

nuclear or conventional war?

The NSC study admits the shortsightedness of discussing only conventional warfare and suggests the possibility of tactical nuclear war.

The current naval forces are not well designed for tactical nuclear warfare because of the few high-value ships and the mutual dependence of the task group. A naval official said that although the United States is not designing its naval forces for nuclear warfare, individual ships are able to withstand nuclear effects (DELETED) and that U.S. forces also practice nuclear tactics.

Dispersal of assets among many platforms is considered to be a good defense against nuclear attack, but this is difficult to accomplish with a carrier-centered task force. We well informed that if under nuclear attack, the task force would increase its distance between ships to decrease individual unit vulnerability, but it must still operate together for mutual support and offensive capability.

^{1/}SEAMIX-I

val force C study o	ing that t structure utlines to	has	not be	en suff	icient:	ly stu	died, th
re:							
			(DELET	ED)			

Although the Navy states that it must size and structure its forces by capabilities, it feels that the Soviets do not intend to wage a tactical nuclear war even though they have the capability to do so. Both navies can fight a tactical nuclear war but, according to a Navy official, the U.S. Navy does not believe that the Soviet Union intends to escalate to nuclear weapons (despite intelligence indicators).

(DELETED)

We believe the Navy should study the effect of a tactical nuclear war on the size of naval forces. If study shows it to be a valid force-sizing factor, it should be considered in determining future force levels.

Length of war

The assumption about the length of a NATO war that the United States may be engaged in is an influential forcesizing factor. In a short war, naval power projection could be important to the war effort, but sea control operations

would not. An extended conflict, on the other hand, would necessitate massive resupply, most of which would be sealifted.

Thus the assumption about the length of a NATO war has
an impact on Navy size. If a NATO war is short
(DELETED)
naval forces would not be needed to perform
their primary function of protecting SLOC. However, being
able to support an extended war increases U.S. options for
responses. It may also deter the Soviet Union from initiat-
ing a conflict that may extend longer than it is capable of fighting. Nevertheless, the possibility of either a short or
a long war should be considered in determining force levels.
a rong war bhould be considered in determining lorde levels.
CAMPAIGN ANALYSES USED BY THE NSC STUDY
Campaign analyses are Navy tools used to assess the
aggregate capability of U.S. and enemy forces in scenarios
considered useful for force planning. These campaign anal-
yses typically pit one nation's force against another's in a
series of engagements, postulate strategy and tactics, and
then compute losses on each side. There are numerous assump-
tions in these analyses that direct the results and trends.
A CNO official stated that the NGO attacks and
A CNO official stated that the NSC study used two Navy campaign analyses $1/$, done in the early 1970s, as criteria
for forcing sizing.
(DELETED) In both of
these studies, many of the assumptions that underlie the re-
sults are pessimistic positions on the evaluation of the con-
flict which may have led the study to recommend higher force
levels than necessary. Some of these assumptions follow:
(DELETED)
,,

1/SEAMIX I and NARAC-G.

(DELETED)

The assumptions embraced by these campaign analyses greatly influence the expected outcome. Although it generally cannot be disputed that the Soviet Union can pursue many of these tactics, it is not reasonable to assume that for force planning purposes they will all occur simultaneously. According to CASL(PaR), the combined assumptions produce an overly pessimistic view of relative U.S.-Soviet capabilities in a NATO war.

USING FUTURE FORCES AS CURRENTLY PROGRAMED

It is infeasible to completely redesign the Navy because about 70 percent of today's fleet will still be active in fiscal year 1990. Consequently, when the Navy examines the naval force structure, it increases or decreases the fleet on the basis of today's assets.

This type of examination typically looks only at employment of forces as currently programed. Using forces as currently programed tends to perpetuate the status quo of force structure rather than exploring and implementing new ways of accomplishing the Navy's mission. Some promising alternatives currently under study are mentioned in the NSC study, but the actual examination of force levels reverts to traditional employment patterns. Two specific instances that affect naval force sizing where the NSC study used forces as currently programed are the requirement to continue to forward deploy the current number of carriers and the use of attack submarines in a direct support role. A discussion of the effect of these assumptions on the raval force recommendation made by the NSC study follows.

Forward deployment

The NSC study specifically assumed that aircraft carriers must continue to be forward deployed and proposed a large-deck carrier force level of 12, at least through 1990, to meet both peacetime and wartime requirements.

Because the number of aircraft carriers greatly influences the size of the remainder of the fleet, assuming

aircraft carriers were needed for forward deployment largely predetermined the study's outcome. By using an initial assumption that requires a carrier force level that is adequate to meet both peacetime and wartime responsibilities, the NSC study precluded serious consideration of noncarrier alternatives for these missions. Analysis of future ship force requirements should consider alternatives to current forces for both peacetime and wartime roles.

Naval observers have identified other options that can reduce demands on aircraft carriers to meet forward deployment commitments. Surface action task groups (SATGs) formed around lower value ships could assure the presence/crisis management mission in lesser threat areas. The Navy envisioned the strike cruiser (CSGN) and the VSTOL support ship (VSS) as possible considerations for SATGs. The amphibious assault ship (LHA) should also be considered for this mission because DOD directed in 1974 that LHA be used interchangeably with the carrier. Although the Navy states that LHA and carrier are not equally capable ships and cannot be considered interchangeable, the presence mission does not always require the carrier's high capability. Another proposed alternative is more flexible forward deployment patterns. For example, the readiness of the carrier force will increase if one of the two carriers forward deployed in the Mediterranean would be available for excursions into the Atlantic, participation in NATO exercises, and increased participation in U.S. readiness exercises.

A third option would be to attempt to locate additional overseas bases for forward-deployed carriers. To assure adequate fleet readiness, the Navy has as its goal peacetime forward deployment rotation ratios of no worse than 1 to 3. Under this concept, each ship will spend no more than one-third of its operating phase forward deployed and the period between deployment would be twice the length of each forward deployment.

The need for 12 aircraft carriers to support forward deployments could be reduced if more carriers were home ported in foreign countries. For example, the carrier Midway is home ported in Yokosuka, Tapan.

(DELETED)

similar forward deployment ratio might be expected for the second carrier if that carrier were home ported in a country in the Western Pacific.

U.S. policymakers should examine the tradeoffs associated with forward deployment of forces (particularly carriers) before continuing U.S. commitments. Designing an affordable fleet that can simultaneously meet the demands of peacetime presence, crisis management, and a worldwide war is a formidable challenge for the Navy. New ways to perform each of these roles must be considered to design the most effective future Navy.

Using attack submarines in the direct support role

Another example where the NSC study uses forces as currently programed when other alternatives are available is the use of nuclear attack submarines in the direct support role. The NSC study assumes that attack submarines will continue to be employed in carrier task groups or other high-value surface ship formations for long-range detection of enemy submarines.

Recent studies and exercises show
(DELETED)
The question is raised whether surface ships
armed with the light airborne multipurpose system and tacti-
cal towed-array sonar, could provide direct support more
cost effectively than nuclear attack submarines.

Because of this assumption that nuclear attack submarines would continue to be used in the direct support role,

(DELETED) nuclear attack submarines
appeared in the NSC force-alternative analysis. The NSC study
group did not consider the evidence that nuclear attack submarines in the direct support role may not be the most costeffective alternat; .

CHAPTER 6

CONCLUSIONS AND RECOMMENDATION

The U.S. Navy has declined from 980 ships in 1968 to about 480 ships today. This force level is considered by the Navy and the NSC study to provide a slim margin of superiority over the Soviets and that without a program to increase force levels, this superiority will be lost in about 5 to 10 years.

The NSC study, which forms the basis for the Navy's 1978 fiscal year 5-Year Shipbuilding Program provides for a force level of about 600 ships by 1990. This force level is not unlike today's force structure in that it is centered around 12 carrier task groups.

In developing its force level, NSC left unresolved certain important issues.

--Should the Navy continue to rely on the carrier for its offensive capability in view of its high cost and vulnerability to antiship cruise missile attacks? The NSC study recommends continuing the pattern of a large-deck, carrier-centered Navy. Their few numbers, however, make them prime targets for cruise missiles.

(DELETED)

Because of its vulnerability, a large carrier may survive for a short time in a conflict. If this is true, the Navy may be structuring a force that would be best suited for power projection and for peacetime and minor conflicts instead of a force built for its major role--protecting SLOC. The study outlines this concern and cites the high cost of the carrier and the continuing improvement of anticarrier weapons, sensors, and vessel technology by the Soviet Union. Alternatives to the carrier are identified in the study but are not considered in developing the shipbuilding program.

--Could forward deployment of high-value forces be accomplished with less valuable assets, both monetarily and militarily? Forward deployment could expose highvalue forces to high-intensity cruise missile attacks. If forward deployment is necessary politically and militarily, then alternate methods for accomplishing forward deployment that would place less valuable assets in the forward position should have been considered in the study.

Why does the study assign a large num	
protect naval shipping? The study as	
cause the Soviet Union is capable of a military resupply of Europe by SLOC in	
will do so. However,	
(DELETED)	
	If this is

the case, the U.S. Navy may not need as many forces dedicated to protecting naval shipping.

- Tured for conventional warfare even though the Soviet Union can, and possibly intends to, conduct a tactical nuclear war? The NSC study acknowledged that the Soviet Union has the capability and training to use nuclear weapons at sea. Nevertheless, the study did not consider nuclear war when developing its recommended force. A naval force developed to fight both a conventional and nuclear war would differ in size and type from the force recommended by the NSC study. Specifically, dispersal of assets among many platforms is considered to be a good defense against nuclear attack. This would be difficult to accomplish, however, with the carrier-centered Navy defined by the study.
- --Were the analyses the study used in determining future naval force levels too pessimistic? The NSC study used campaign analyses characterized by OASD(P&E) as overly pessimistic. The conclusions reached on the basis of these analyses resulted in decisions on naval forces which may be more extreme than warranted.
- --Why did the NSC study assume continued use of future forces only as currently programed? This action tends to perpetuate the status quo of the force structure rather than explore and implement new ways to accomplish the Navy's mission. Two examples where the study used forces as currently programed are the requirements to forward deploy the current number of carriers and the use of attack submarines in direct support of high value units. Both of these assumptions precluded consideration of some promising alternatives which include land-based aircraft, remotely piloted vehicles, and VSTOL carriers.

CONCLUSIONS

In effect, the NSC study recommends a shipbuilding program that may not meet the future threat in a cost-effective manner. The study depicts a future Navy still centered around carrier task groups, despite the admission of the high cost and vulnerability of carriers. We believe that, if these issues had been considered in the study, they would have affected its outcome. Accordingly, these issues should be examined before any decisions are made on the future naval force size and composition.

The decisions on future force levels are important enough to warrant reliance on current and near-term forces, even if at a somewhat greater level of risk, until an examination is made of the major issues which influence force size and composition. By waiting another year or two until all issues are thoroughly studied, procurement of an optimum force structure could be initiated without committing the Navy to an inflexible force—a situation that may result if the recommended shipbuilding program is started now. Without procuring any additional carriers, the Navy will continue to have more than 10 carriers operational through the early 1990s, a level the study considers adequate to perform the basic sea control function in a NATO war.

RECOMMENDATION

We recommend that the appropriate congressional committees hold extensive exploratory hearings to examine the impact of these issues on the future naval force size and composition. Of particular importance is the guestion of getting the best force structure for the primary threat situations.

AGENCY COMMENTS

NSC declined to furnish substantive comments on this report on the grounds that the NSC study assumptions and conclusions were those of a previous administration.

NSC did state that the questions we raised are legitimate, and will likely prove of value not only to the Congress in its consideration of the fiscal year 1979 (and beyond) presidential budgets, but also to DOD as it continues its force planning and budget development efforts.

DOD also did not provide specific comments on the report. A partial reply stated that it is in the process of examining many of the unresolved issues addressed in the report that could significantly influence naval force planning. The results of these efforts are to be considered in future decisions by the current Administration.

TODAY'S NAVY

U.S. NATIONAL MILITARY STRATEGY AND NAVY MISSION

The U.S. national military strategy is a forward defense strategy necessitated by the U.S. geographical and political situation. The Navy carries out its mission within the national military strategy. The Navy mission, as set forth in United States Code, title 10, is to be prepared to conduct prompt and sustained combat operations at sea and defeat any force that curtails the free use of the seas.

NAVY ROLES

In the functional exercise of its mission responsibilities within the national military strategy, the Navy has three main roles: strategic deterrence, overseas deployed forces, and SLOC security.

Strategic deterrence

Strategic deterrence is provided by the high level of survivability of the fleet ballistic missile submarine force.

Overseas deployed forces

The Navy provides operationally ready forces as naval components of overseas deployed U.S. forces to support allies and protect U.S. interests. These fleet elements are deployed to locations where they can rapidly support forward-positioned U.S. ground and air forces and U.S. allies. From a foreign policy standpoint, the forward-deployed forces maintain U.S. political-military presence under noncrisis conditions and demonstrate U.S. power in crisis situations.

Because of the unique character of international waters, naval forces can operate in a considerably different fashion from ground- and land-based air forces. In any situation short of actual hostilities any nation has access to international waters. Therefore, naval forces can be positioned in international waters in the vicinity of a crisis, ready to respond, but without having to request overflight or landing rights or violate the sovereign rights of any nation.

We were informed that the only formal U.S. treaty commitment to forward deploy naval forces is with NATO. The NATO commitment is based on the Defense Planning Questionnaire (DPQ) and is reviewed, and can be changed, every year.

(DELETED)

The Navy routinely stations two of these

APPENDIX I APPENDIX I

carrier task groups in the Atlantic and two in the Mediterranean.

Our commitments to forward deploy naval forces in the Western Pacific are based on the commanders-in-chief requirements to support various contingency plans. Although these force requirements are not formal treaty commitments like the NATO DPQ commitment, they are approved at the Joint Chiefs of Staff/Secretary of Defense level. Included in the Western Pacific commitment are two aircraft carriers.

Under normal peacetime conditions, about one-third of the naval operating forces is deployed overseas to the 6th Fleet in the Mediterranean and the 7th Fleet in the Western Pacific as operationally ready. A second third of the active forces, also operationally ready, is assigned to the 2d Fleet with responsibilities in the Atlantic and Carribbean and the 3d Fleet based on the west coast of the United States and Hawaii. The remaining third of the fleet is in a reduced operational status, undergoing routine maintenance and conducting basic training.

Security of SLOC

The Navy's third role is to assure the security of SLOC. This security is provided by naval forces exercising their sea control function to assure security of SLOCs between the United States and its overseas-deployed forces, between the United States and its allies, and the lines of sea commerce linking the United States and its allies with the sources of the world's critical raw materials, particularly energy, on which the economic survival of the free world depends.

NAVY FUNCTIONS

The Navy pursues two wartime and two peacetime functions within the national military strategy. The wartime functions are sea control and power projection.

Sea control

Sea control is the Navy's fundamental function and connotes control of designated air, surface, and subsurface areas. Sea control does not imply simultaneous control over all international waters, but is a relatively selective function, being exercised only where or when needed.

Sea control is a prerequisite to all other naval operations. An effective sea control capability:

APPENDIX I APPENDIX I

-- Provides secure operating areas for projection of power, such as amphibious or carrier strike operations.

- --Assures the buildup and resupply of allied forces in a theater of operations.
- --Protects commercial shipping critical to the country's economic well-being and vitality.
- --Enhances survivability of strategic deterrent by impeding hostile ASW operations.

There are two types of sea control: strategic and tactical. Strategic sea control consists of operations to engage and destroy hostile forces at some distance from the units to be protected. Such operations consist of amphibious operation seizure of enemy forward bases or other key areas by long-range missile or air strikes on enemy naval and air bases, barrier operations in choke points along the enemy's access routes from enemy bases to the sea, and "hunter-killer" operations to destroy the enemy's naval combat forces.

Tactical operations are conducted by naval units for self-protection or in defense of supported forces engaged in other operations. Examples include task force antiship, antiair, and antisubmarine operations; close support of amphibious and underway replenishment forces; perimeter protection of the amphibious objective area; and convoy escort.

Power projection

The second wartime naval function is power projection, which is the projection of naval power ashore. The primary power projection assets in the general-purpose Navy are tactical aircraft, naval guns, and amphibious forces.

The functions of sea control and power projection are interrelated. Some degree of sea control is necessary in the area where power is to be projected and, conversely, power projection aids U.S. efforts to control the sea.

Presence and crisis management

The Navy's peacetime functions are presence and crisis management. Presence is the use of naval forces in a non-hostile environment to support U.S. foreign policy. Crisis management is the use of naval forces to stabilize critical situations before they escalate into war.

APPENDIX I APPENDIX I

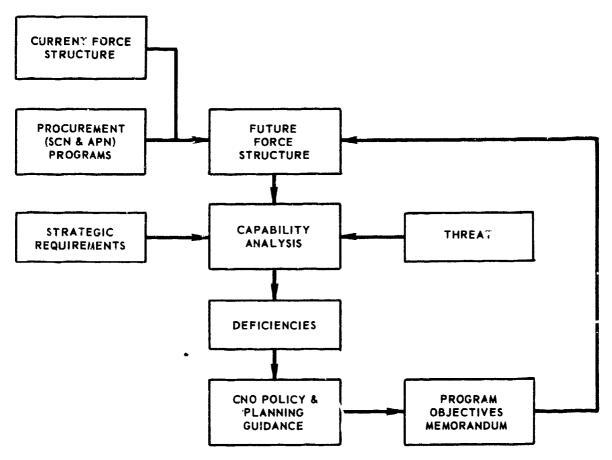
Peacetime forward deployed forces have presence and crisis management as their primary functions. As a form of presence, the forward-deployed forces serve several purposes. They reassure U.S. allies by providing tangible evidence of a U.S. interest in their physical security and a U.S. capability for contributing to their security. They signal U.S. interest in the security of areas where other forms of U.S. military power cannot be maintained in peacetime. They provide a counterweight to the Soviet Union military presence and remind both the Soviet Union and coastal states of an American interest in, and a capability to react to, aggression. In a crisis, these forces can serve as a stabilizing element by deterring aggressive acts and forcing the contending parties to consider the possibility of future U.S. military action to protect its own interest and the interests of friendly governments.

Peacetime and wartime functions cannot be considered separately. To present a credible force, naval forces performing the presence and crisis management functions must also have the capacity to follow through with power projection and sea control operations, should the situation so require.

APPENDIX II APPENDIX II

HOW THE NAVY SIZES ITS FORCES

Because the Navy cannot replace the entire useful fleet with the most current, cost-effective ships, it must plan to improve and build upon the current inventory. Considering the strategic requirements and future threat, the Navy analyzes its projected force structure, identifies deficiencies, and programs changes to meet deficiencies. This process works as follows:



Principal Navy responsibilities in the national military strategy are to

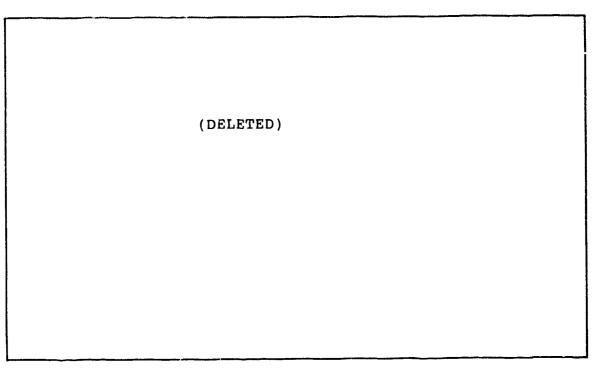
- --provide for a strategic nuclear deterrence,
- --provide the naval components of overseas-deployed U.S. forces to support allies and to protect national interest, and
- --insure SLOC security.

This review was limited to the U.S. general-purpose naval force; hence, we will only be concerned with the latter two responsibilities.

PLANNING SCENARIOS

DOD has developed five scenarios to create a general- purpose, force-sizing equation and to assist in assuming	-
capabilities and gauging risks.	\neg
(DELETED)	
STRATEGIC REQUIREMENTS	ك
Defense guidance directs that U.S. general-purpose na	va]
forces will be sized for commitment	7
(DELETED)	
Parametric limitations have been alleged	
Parametric limitations have been placed on U.S. naval forces to correspond in capability to U.S. vital interests	<u>.</u>
(DELETED)	

APPENDIX II APPENDIX II



Defense guidance also stipulates that Navy forces be sized and structured for a _____(DELETED) NATO war. It is presumed that, ______(DELETED) _______ the U.S. economy will be able to support any further conflict on a continuing basis.

THREAT

Another factor that influences force structure is threat, defined to be the opposing military force and weapons technology that the Navy might encounter in carrying out its responsibilities. To assess the threat, the Navy examines the potential enemy's military strategy, weapon systems, technology, current and projected military strength, and specific employment capabilities.

The Navy annually prepares the "Net Assessment of the United States and Soviet Navies," which discusses the missions of both navies and compares the ability of each to carry out its missions when cpposed by the other. The net assessment compares the numbers and types of platforms of the United States and the Soviet Union and the procurement trends of each navy. The balance between these forces is assessed by examining campaign analyses.

The most severe threat to the United States comes from the Soviet Union, but the threat posed by smaller, thirdworld nations must also be considered in force planning for APPENDIX II APPENDIX II

peacetime presence and crisis management as well as power projection.

CAPABILITY ANALYSIS

Capability analysis is a determination of the U.S. Navy's ability to carry out its mission (strategic requirements) with its projected force in the face of threat. The degree of assurance of success is termed "risk" and is expressed in terms of confidence of success in a particular scenario, the speed that success can be achieved, or the simultaneity in which a number of campaigns can be conducted.

To assess the risk of an engagement or campaign, one must make assumptions about such variables as strategic objectives and tactics employed, mobilization warning time, deployment, participation of other nations, availability of bases and overflight rights, who initiated the conflict, the extent of initial damage, nuclear escalation policies, relative military effectiveness, and intelligence information and its influence on the strategies of both sides. These variables are altered in different scenarios to determine various risk levels.

During the force-sizing process, at least three different force levels, each of differing risk, are developed. Two are developed by the Joint Chiefs of Staff. One is a minimum-risk force sized to be unequivocally superior but could be built only in a fiscally unconstrained environment. The objective force level developed by the Joint Chiefs of Staff is a higher, prudent-risk force generally able to prevail in most conflicts. Finally, the Navy develops a fiscally constrained force level, the programed force, usually fever ships, assessed to be an acceptable risk level. Acceptable risk level means that, while U.S. forces could be expected to prevail in areas of vital U.S. concern, the operations will probably be sequenced in priority of importance and may take longer to succeed.

It is noteworthy that the missions and threats are identical for each case, but depending on the desired degree of confidence of success, the force size changes dramatically. Conversely, increases in force levels will not necessarily enable the United States to prevail in a particular area but they will reduce the risk involved in accomplishing certain tasks. An example of this is the Navy's fiscal year 1978 assessment of U.S. sea control capabilities for each DOD guidance case with different size navies.

			l
			1
1			
1			
ļ			
l			
l			
1			
i			
	/ Di	ELETED)	
!	(D)		
1			
1			
1			
4			
3			
í			
1			
1			
Į.			
1			
1			

APPENDIX 11 APPENDIX 11

ELIMINATING DEFICIENCIES IN U.S. FORCES

The above force-planning process identified deficiencies in the projected force structure. Usually, the deficiencies are tied to functional warfare areas (e.g., antisubmarine warfare, antiair warfare, or antisurface ship warfare). Forces or weapons systems are programed within fiscal guidance to address the deficiencies. For example,

(DELETED) the Navy has requested antiair warfare ships for its 5-year defense program for multitracking and multitargeting of cruise missiles.

CNO admits that important uncertainties and judgments play an integral part to this process. The final and most difficult step is to determine the number, type, and mix of ships and aircraft needed to correct deficiencies in U.S. forces and minimize risks, keeping in mind the requirement to maintain balanced force levels and fiscal realism. If the proper strategy is projected, threats assessed correctly, and risks identified correctly, uncertainty can be minimized and naval requirements can be established.

NATO and the force-planning process

The United States, along with Belgium, Canada, Denmark, the Federal Republic of Germany, France, Greece, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Turkey, and the United Kingdom, compose NATO. Organization members agreed that an armed attack against one or more members in Europe or North America shall be considered an attack against all. The U.S. Navy considers the NATO-member navies when planning U.S. force levels, but no direct relationship exists between NATO naval inventories and U.S. force-level planning. The differences in roles, the difficulty of coordinated force-level planning, and political uncertainties preclude a one-to-one tradeoff between U.S. and NATO naval forces.

NATO members generally have small navies that are not a capable as the U.S. Navy. The United Kingdom and France are the only countries with carriers accommodating CTOL aircraft	
in their fleets.	
(DELETED)	

APPENDIX II APPENDIX II

(DELETED) However, NATO forces regularly participate in naval exercises with the U.S. Navy and will coordinate operations with U.S. forces in a NATO war.

Navy officials state that NATO members maintain independence in their planning, programing, and budgeting for defense systems. There is no coordinated identification of naval deficiencies and, consequently, no programing of ships to improve the NATO fleet. Each NATO country assigns different priorities to naval spending. Furthermore, many NATO countries expect the greater part of a NATO war, if it should start, to be a land war based in central Europe and devote much of their defense budget to air and ground forces.

In addition,

(DELETED)

Although there is little uncertainty whether NATO countries will commit their forces in the event of a full-scale attack by the Warsaw Pact countries, the NATO countries' force commitment in other contingencies is not as certain. Force commitment is a political decision, and some governments may delay due to internal opposition.

NCS STUDY REC	STUDY RECOMMENDED	5-YEAR SH	SHIPBUILDING	PROGRAM		• •
	FY 1978	FY 1979	FY 1986	FY 1981	FY 1982	Total FY 1978-82
Strategic nuclear submarines (Trident)	~	,	^	~	0	α
Nuclear attack submarines	ı	•	ı	•	ı	o
(SSN-688)	7	-	7	p=4	2	œ
VSTOL carriers (CVV)	,	-	ı	-	ı	7
Carrier SLEP (note a)	•	ı	(1)	ı	(1)	(5)
Cruisers (CSGN)	ı	-	ı	1	, –	5,7
Antiair warfare destroyers						ı
(DDG 47)	7	1	m	m	m	10
Frigates (FFG)	11	11	12	12	10	95
Frigates (FFG X)	ı	ı	i	-	-	~
Mine warfare	ı		9	· vc	vo	· •
Amphibious (LSD 41)	•	~	1	~	m	
Support	σ,	12	12	∞	m	44
Other conversions	(1)	•	(9)	(9)	(9)	(19)
Total: New construction	25	29	36	36	31	157
Conversions/ SLEPs	(1)	1	(7)	(9)	(7)	(21)
Cost (FY 1977 dollars (billions))		ISG)	(DELFTED)			
Cost (Then-year dollars (billions))						

a/SLEP-Service life extension program.

APPENDIX IV APPENDIX IV

FORCE LEVEL PROJECTIONS

(FISCAL YEAR END)

Active fleet	1977	1980	1985	1990 (<u>note a</u>)
Submarines:				
Strategic nu-				
clear (note b)	41		/ DD	.,
Attack/nuclear attack	78		(DELETED	"
attack	70	<u> </u>	70	
Carriers:				
Large deck air-				
craft carriers	1.0	1.0	12	10
(note c)	13	13	13 1	12 3
CVV	-	_	1	3
Surface combatants:		<u> </u>	 	 1
Cruisers	27			
Destroyers	66			
Frigates	64			
Patrol Ships	7			
				l
Amphibious	63			İ
URG (note d)	39			
			(DELET	ED)
Auxiliary (note d)	69			-
Mine warfare	3			
maka 1	470	1		1
Total	4/0			
		L		

a/Projected ship numbers only; exact numbers and types of ships are dependent on future shipbuilding decisions.

b/Beyond 1980, numbers subject to SALT II agreements.

c/Includes carriers undergoing SLEP.

d/Excludes 29 URG and minor fleet support ships in Military
Sealift Command.

APPENDIX V APPENDIX V

QUESTIONS SURROUNDING THE NAVY'S ACQUISITION OF

ITS PLANNED FORCE STRUCTURE

The Navy's 5-Year Shipbuilding Program, released in the President's fiscal year 1978 budget, proposes constructing or converting 178 ships—the first step in achieving a 600—ship Navy by the 1990s. This will require an increase in shipbuilding from the 1966 to 1976 10—year average of about 19 ships a year to about 36 ships a year. U.S. shipyards have the capacity to construct ships at this rate. However, the 600—ship goal will probably not be met in the time estimated by the Navy unless continuing problems are resolved.

PAST AND PRESENT PROBLEMS

Since the mid-1960s the number of ships delivered to the Navy has declined, as have the number of shipyards constructing ships. Costs and delivery delays increased, skilled personnel were in short supply, equipment was delivered late, and the desire of certain shipbuilders to work with the Navy declined.

The Navy has shown that the major shipyards have adequate physical capacity to build all types of ships. During our review, shipbuilders expressed a desire to build ships for the Navy despite past dissatisfaction with Navy contracts. However, shortages of critical skilled personnel still exist and it appears that equipment delivery problems have not been completely solved.

STEADY NAVY AND COMMERCIAL WORK A SOLUTION

Officials of most major shipyards expressed a desire for an authorized, multiyear shipbuilding program. They said the fluctuating shipbuilding market makes it difficult for shipbuilders to attract capital investment, retain personnel, plan the use of available capacity, and place orders for contractor—or Government—furnished equipment. Some believe a firm shipbuilding program would help stabilize the industry and thus attract capital investments and reduce employment fluctuations. A stabilized labor force would contribute to increased productivity through better retention of skilled workers and improved learning curves for new programs.

Various levels of the Navy expressed similar views. The Naval Sea Systems Command believes an authorized 5-Year Navy Shipbuilding Program would be a vital first step in improving the shipbuilding industry. Navy programs have

APPENDIX V APPENDIX V

consistently failed to provide the industry with a stable workload. Historically, the results have been reduced productivity, additional costs, and delays in ship deliveries. The Naval Sea Systems Command agrees with shippard officials in that, regardless of the level, the shipbuilding industry can be maintained and productivity improved only if a consistent workload is provided.

CNO cited similar advantages to a long-term shipbuilding plan and recommended that legislation for a 5-year shipbuilding authorization provide flexibility for annual updating to reflect unpredictable factors such as changes in threat, changes to national strategy and priorities, advances in technology, and changing conditions in the shipbuilding industry. He further testified that this type of balanced construction program is absolutely essential to maintain an adequate naval force in terms of quality, numbers, and types of ships.

We considered the possibility of a long-term shipbuilding program in a previous report, "Government Support of the Shipbuilding Industrial Base," (E-118779, Feb. 12, 1975). The report stated:

"Instability of workload affects both the facilities and labor of the shipbuilding industry. Modernization of facilities requires investment which entails more risk if there are important variations in workload. The cost and productivity of labor is affected adversely by undependability of future work."

We concluded:

"It would seem desirable, therefore, that Government support of the shipbuilding industry provide, among other objectives, a more steady and predictable volume of business."

At present, however, the future shipyard workload is uncertain. The Navy's estimates, which consider the Navy's 5-year plan and new commercial work, show that the ship construction workload will remain level in the near term and then decline. Additional commercial construction could result from a cargo preference act. If legislated, this act would require that up to 30 percent of U.S. oil imports be transported in American built and operated vessels after 1980, an increase from the current 5 percent.

CARRIER SERVICE LIFE EXTENSION PROGRAM

The 5-Year Shipbuilding Program recommends the concept of service life extension for Forrestal and subsequent classes of aircraft carriers. The Navy designed SLEP 1/ to prevent retirement of four aircraft carriers due to reach the end of their 30-year design life between 1985 and 1989. With service life extensions, the Navy's active-carrier force level will be maintained above 10 carriers through the 1990s.

(DELETED)

MECHANICS OF A 15-YEAR SERVICE LIFE EXTENSION

According to Navy plans, Forrestal-class carriers will undergo service life extensions enabling 15 additional years of operation. As a result, these carriers will be deployable into the 21st century.

A SLEP detailing a repair and replacement package has been developed for the Forrestal-class carriers. As a result, in fiscal year 1980, the U.S.S. Saratoga will be the first carrier to undergo service life extension at the Philadelphia Naval Shipyard. Service extensions will be performed about every 2 years thereafter. A service extension program for Kitty Hawk- and Enterprise-class carriers is now being studied.

The 15-year SLEP will provide additional shipyard labordays to expand the level of hull, mechanical, and electrical repairs normally accomplished during a complex overhaul. The Forrestal-class SLEP calls for completion of past hull and structural repairs that were deferred because of fiscal and time constraints. These items are not considered priority during complex overhauls. According to the Navy, auxiliary system repairs, including vent system renewals and major replacements of piping systems, account for a most one-fourth of the service extension package. Wires and cable replacements not expected to last the additional 15 years will also be accomplished during service extensions.

^{1/}A program to extend the life of Forrestal and later classes of carriers. This concept envisions extensive and indepth overhaul and refurbishing of basic hull, machinery, electrical, and electronic systems, to extend the service life of each carrier 15 years.

The time required to complete each carrier's service life extension work is 28 months--22.5 months for service life extension work, 4.5 months for fleet modernization alterations, and 1 month for addition1 shipyard support.

According to Navy projections, service life extension for the first Forrestal-class carrier will cost \$421 million, calculated in 1980 dollars. The total Forrestal program will cost an estimated \$1.91 billion which includes escalations for work to be performed in later years.

Estimated Total Cost For First Service Life Extension

	(millions)
Labor and materials Contract escalation Naval Ships Engineering	\$297 67
Center support Future characteristic changes Military personnel cost	12 41
Total	\$ <u>421</u>

A 5-YEAR SERVICE LIFE EXTENSION--FEASIBLE AND LESS COSTLY

The 15-year service life extensions have the disadvantage of committing the Navy to large-deck carriers beyond the year 2000. This approach results in a carrier force lacking the flexibility for responding to new technology and changing threats. Some form of service life extension will be needed to prevent block retirements in the short run, but a shorter, less expensive service life extension period should be considered. For example, a program that extends the service of Forrestal-, Kitty Hawk-, and Enterprise-class carriers for 5 rather than 15 years maintains 12 large-deck carriers in the fleet until 1990. The Navy would have to rely on the Midway while carriers are undergoing the service life extension work. (See chart, p. 50.)

A Navy official said that a 5-year service extension for Forrestal-class carriers could be accomplished by adding about 100,000 labor-days (3 months) to the average 14-month complex overhaul period. Success of the 5-year life extension approach would require continuance of fleet modernization program alterations and no reductions in maintenance levels as the carriers age. According to the Navy, one of the reasons carriers are expected to last only 30 years is

that maintenance levels are reduced around the 22d year of service life. In fact, a Navy service life extension study stated that the 30-year decommissioning benchmark for carriers was an assumption for which no hard engineering support could be obtained. The study concluded that service life extensions could result from adopting procedures to reduce repair deferrals and accomplish a greater percentage of identified repair requirements during complex overhauls. The Navy is examining this approach for the Kitty Hawk-class carriers.

A 5-year service life extension for the Forrestal-class carriers would cost less than the currently planned 15-year version, although they would require a onetime increment of repairs because of past repair deferrals. Labor requirements could be greatly reduced.

The NSC study group was willing to accept the risk and possible need to adjust peacetime carrier deployments associated with the availability of less than 12 deployable large-deck aircraft carriers during the SLEP period to reap the benefits of promising technology such as VSTOL. The Navy, evolving the CVV to a CTOL-VSTOL ship, apparently believes that this risk is unacceptable. The Congress must decide how to best balance the funds between proven ways of accomplishing traditional Navy tasks and exploration of new concepts to meet changing naval threats and requirements.

FUTURE CARRIER FORCE LEVELS

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	2015- 2019
Midway (note a)				x					
Roosevelt	:	X							
Coral Sea			X						
Forrestal			0	•		•			
Saratoga			0	•		•			
Ranger			0	*		•			
Independe.ice			0	*		•			
Kitty Hawk			0	•		•			
Constellation	ì		0	•		•			
Enterprise			0	•		•			
America				0					
Kennedy					0				
Nimitz						0			
Eisenhower	F						0		
Vinson		F						0	

 $\underline{a}/\text{Maintained}$ in ready reserve and can be available for contingencies until 1990.

<u>Key</u>

- X approximate retirement date
- 0 30th year of service life
- * 5-year SLEP
- # 15-year SLEP
- F enters fleet

APPENDIX VII APPENDIX VII

NATIONAL SECURITY COUNCIL WASHINGTON, D.C. 20506

September 14, 1977

Mr. Victor L. Lowe Director, General Government Division United States General Accounting Office Washington, D.C. 20548

Dear Mr. Lowe:

Dr. Brzezinski asked me to reply on behalf of the National Security Council to your request for comments on your draft paper entitled Implications of the National Security Council Study -- U.S. Maritime Strategy & Naval Force Requirements -- on the Future Naval Ship Force.

We believe it would be inappropriate for the NSC to comment in detail on your draft study or to speculate at this time regarding the future naval force structure for the following reasons:

- (1) The NSC study you have critiqued was a product of the previous administration. We have not made our decision as to whether or not we will support the findings of the sarlier study; any defense by us of the previous NSC effort would, therefore, be unproductive.
- (2) The present Administration has just completed its comprehensive review of US military strategy and force posture. The impact of this review and the subsequent Presidential Decisions has not yet been fully felt in our defense posturing process. (For example, a new Defense Guidance document is being prepared by DOD which may negate portions of your Appendix 2.) It would, therefore, be premature for us to try to translate US strategy into naval force structure at this time, although DOD is working to this end in developing its FY 79 budget.
- (3) Finally, DOD is conducting a comprehensive, in-house "Naval Force Planning Study," tentatively scheduled for completion in January. We would not want to preempt that study. (I would imagine that DOD will certainly address the five "conclusions" you present on pages 46-48 of your study.)

APPENDIX VII APPENDIX VII

In sum, we are not prepared at this time to comment on your study -which would appear to be overtaken by events insofar as its data is
concerned. We do feel, however, that the questions you raise are
legitimate, and will likely prove of value not only to Congress in its
consideration of the FY 79 (and beyond) Presidential Budgets, but also
to DOD as it continues its force planning study and budget development
efforts.

Sincerely,

Charles Stebbins
Security Analysis



EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20593

Sept. 12, 1977

Mr. Victor L. Lowe Director, General G< vernment Division U.S. General Accounting Office Washington, D. C. 20548

Dear Mr. Lowe:

Thank you for the opportunity to comment on your draft report, "Implications of the National Security Council Study — U.S. Maritime Strategy and Naval Force Requirements — on the Future Naval Ship Force."

We would like to make the following observations concerning the general thrust of the report:

- The assumptions and conclusions of the 1976 NSC Study are those of one administration at a particular point in time. With the change of administration, it can be expected that assumptions will be reviewed and force goals may be altered. To cite one change that has already taken place, the strike cruiser proposed by the Ford Administration has been replaced by President Carter with a less complex ship, an Aegis equipped version of the Virginia class cruiser.
- Shipbuilding planning is by nature an incremental affair. The only firm commitment in any five year shipbuilding plan is to the first budget year. Thus, the 1978 five-year plan is no more the start of a major shipbuilding program than the 1977 five-year plan was, or the 1979 plan will be.
 - While fixed long-term plans are attractive in theory, in practice each President, each year, must have the flexibility to adapt major investment programs, such as shipbuilding, to changing economic and national security conditions. Similarly, it is unlikely that the Congress would be comfortable with a long-term fixed commitment to major hardware procurement that avoided the annual authorization/appropriation process.
- The Navy's individual units are too expensive to permit the maintenance of forces overly specialized for any one type of conflict. The navy which must be able to carry out the presence/crisis management function is the same navy which has to be capable of successfully waging a conventional NATO Case I war, and is also the navy which would have to fight a tactical nuclear war at sea if that were to occur. The question is not whether to optimize naval forces for any one mission or type of war, but rather, to seek a force capable in many different types of situations at least risk.

APPENDIX VIII APPENDIX VIII

We also have the following, more specific, comments:

- Page i, para 2; page 14, para 1; page 15, para 2: The NSC Study was completed in November 1976, not January 1977. The latter date is when the study was sent to Congress.
- Glossary: Harpoon is an air-to-surface and subsurface-to-surface, as well as surface-to-surface, missile.
 - NARAC-G and SEAMIX I are more properly characterized 2.5 "campaign analyses" rather than "mission effectiveness studies."
- Page 1, para 4: The reference to the 13 year lull in shipbuilding is misleading.

 The carriers which performed so well in the early years of World War II, for example, were authorized prior to the start of the war.
- Page 8, para 3: Underway replenishment groups consist of support ships and surface escorts.
- Page 16, para 2: The FY 1978 five-year program was informed by, but not drawn from, the three options in the NSC Study. The options were put together in April 1976 for illustrative purposes only.
 - The FY 1978 plan included 58, not 56, frigates (56 FFG 7 class, 2 new class).
- Page 23, para 3: The carrier role in AAW and ASUW is currently essential to Case I sea control; it is not accurate to say that the NSC study defines no major sea control role for the carrier.
- Page 30, para 2: Total vulnerability decreases only if each of the smaller carriers is as well (or bette.) protected as the larger carrier. A decrease in total force vulnerability implies that the total number of escorts would have to be increased, leading to increased total costs.
- Page 32: As a general observation, if the carrier is deemphasized or withdrawn from a Case I war, Soviet submarines and other assets would be available early in the war to attack SLOCs.
- Page 70: A long-term shipbuilding plan is useful only if all budget players (including Congress) refrain from tampering with it and if ship contracts can be allocated to yards.

I hope that the above comments are of use. If you have any questions regarding them, please feel free to call me.

Edward R. Jayne II
Associate Director for
National Security and
International Affairs

MALL



ASSISTANT SECRETARY OF DIFFENSE WARRINGTON, D.C. 20001

Oct. 25, 1977

Mr. Richard W. Gutmann
Director, Procurement and
Systems Acquisition Division
U.S. General Accounting Office
414 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Gutmann:

This is a partial reply to your request for review and comment on the draft GAO report dated August 16, 1977 entitled "Implications of the National Security Council Study -- U.3. Maritime Strategy and Naval Force Requirements -- on the Future Faval Ship Force" (OSD Case #4694).

As you are aware, the NSC study represents the views and recommendations of the previous administration regarding U.S. strategy and naval force requirements. It provided a useful overview of the political and strategic context within which naval forces were structured. It also suggested several potentially valuable areas for further research.

As highlighted in the draft GAO report, the derivation of specific programs from broad premises is a complex process. The shipbuilding program recommended in the NSC study was just one of several possibilities. It incorporated many judgments as to the level and composition of naval forces which would have been consistent with the previous administration's policies. While it provided a useful discussion of considerations relevant to naval planning, the recommended program was essentially structured as a compromise among administration policies, Navy goals, fiscal constraints and known Congressional preferences. The current administration has a clear responsibility to take a fresh look at all aspects of naval force planning.

The draft GAO report concludes that many important areas that could significantly influence naval force planning were not adequately addressed by the NSC study. GAO recommends deferring implementation of the NSC-recommended five-year shipbuilding program and delay of new carrier procurement until these areas are more fully analyzed. The major recommendations contained in the GAO report are, in fact, being implemented. The Department is in the process of examining many of these areas in ongoing studies and analyses. The results of these efforts will be considered in future decisions by the current administration on carrier force levels, carrier size and characteristics, and other naval force structure issues.

APPENDIX IX APPENDIX IX

Numerous areas of the report warrant correction or detailed comment. This partial reply is being provided in order to comply with the desired early response requested in your letter of August 16, 1977. A copy of the draft report is attached with security classification markings as requested.

Sincerely,

Fred P. Wacker Assistant Secretary of Dofense

Fred A. Wacker

Enclosure