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30

U.S. Naval Strategy in the 1970s

Selected Documents



John B. Hattendorf, D.Phil., Editor

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The amphibious assault ship USS Tarawa (LHA 1) operating an SH-60F Seahawk helicopter off San Diego, California, on 29 November 2006.

Photograph by Commander Richard D. Keltner, USN, reproduced by permission.

U.S. Naval Strategy in the 1970s

Selected Documents

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Foreword

U.S. Naval Strategy in the 1970s: Selected Documents, edited by John Hattendorf, is the thirtieth in the Newport Paper monograph series and the second in a projected four-volume set of authoritative documents on U.S. Navy strategy and strategic planning. The first volume in this series, *U.S. Naval Strategy in the 1990s: Selected Documents*, Newport Paper 27, also edited by Professor Hattendorf, appeared in September 2006. The current volume was originally intended to include documents relating to the development of the Navy's "Maritime Strategy" during the 1980s, but the bulk of relevant material has made it advisable to dedicate a separate volume to that period; this is due to appear shortly. A final volume will then cover documents from the 1950s and 1960s. When combined with Professor Hattendorf's authoritative narrative of the genesis and development of the "Maritime Strategy," *The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986*, Newport Paper 19, these volumes will provide for the first time a comprehensive picture of the evolution of high-level U.S. Navy (and to some extent U.S. Marine Corps) strategic thinking over the half-century following the end of World War II.

Many of the documents reprinted here were—and were intended to be—public statements. In all cases, however, these documents remain little known and mostly inaccessible, certainly outside the Navy itself. It is important to emphasize that they need to be read with careful attention to their historical and institutional contexts. They are in any case not always easy to interpret, and they differ substantially in the weight they carried at the time or later. For these reasons, we have felt it essential to present the documents accompanied by a general introductory essay that locates them in their appropriate contexts, as well as by brief commentaries on each providing additional pertinent information and attempting to assess their wider significances.

This project, it is hoped, will contribute importantly not just to our understanding of our recent naval history but also to the serious study of military institutions, strategy, and planning more generally. Also, it is worth noting that this material is of more than merely historical interest. The U.S. Navy (with its sister sea services, the Marine Corps and the Coast Guard) is currently on the verge of completing a major review of its naval and maritime strategy in a new era of protracted low-intensity warfare and growing global economic interdependence. This exercise, whatever the immediate result may prove to be, has unquestionably served the valuable purpose of stimulating serious

thought about fundamental strategic issues at many levels throughout the Navy. These volumes can be expected to be an important resource in a continuing process of strategic assessment and education as the Navy continues to adjust to a rapidly evolving security environment.

A handwritten signature in black ink, reading "Carnes Lord". The signature is fluid and cursive, with the first name "Carnes" written in a more compact, rounded style and the last name "Lord" written in a more elongated, flowing style.

CARNES LORD

*Director, Naval War College Press
Newport, Rhode Island*

Acknowledgments

The explanatory notes and introduction to this collection of documents from the 1970s and its predecessor on the 1990s, as will those of the forthcoming monograph on similar documents from the 1980s, represent an adaptation and extension of the information initially gathered by Captain Peter M. Swartz, USN (Ret.), of the Center for Naval Analyses (CNA), Alexandria, Virginia. He used this material in developing a PowerPoint presentation covering the history of the U.S. Navy's strategic documents over the thirty-seven years between 1970 and 2007. The version used for reference in this work was that presented at a 9 May 2007 Strategy Conference at CNA.*

Captain Swartz presented his briefing widely, extensively circulated it during its development, garnering new insight and information at each iteration over two and a half years. Additionally, in order to support my work in preparing this volume, the 2007 CNA Strategy Conference and an earlier one on 27 June 2006 devoted considerable time to the strategy documents included in this volume. I am particularly grateful to Captain Swartz for sharing with me his research materials and e-mail correspondence as well as for reviewing and critiquing drafts of sections of this book. In addition, I thank Rear Admiral Michael McDevitt and Christine Fox of the CNA Corporation for their permission and encouragement to use and elaborate upon these materials.

In essence, the introduction and the explanatory notes in this volume are a composite, the editor's attempt to reconcile the various recollections and comments of a variety of the participants who participated in writing these documents. As such, this work is only a limited contribution toward a complete and detailed history of naval thinking in this decade, a history that will need to be written in the light of the additional documents and materials that will progressively become available in the future for historical research and open publication.

Many people who participated in various stages of the writing and publication of these documents made constructive comments and provided additional information at the 2006 and 2007 CNA Strategy Conferences and in related correspondence. I am grateful to all who have provided their insights at various points, whether in the development of Captain Swartz's briefing, during the 2006 and 2007 CNA conferences, or in

* Peter M. Swartz, principal author, "US Navy Capstone Strategies & Concepts (1970–2007): Insights for the US Navy of 2007, Version of 9 May 2007," with graphics by Karin B. Duggin.

subsequent e-mail correspondence with me, including Mr. Dave Baker; Captain Roger Barnett, USN (Ret.); Captain Joe Bouchard, USN (Ret.); Captain Linton Brooks, USN (Ret.); Rear Admiral Tom Brooks, USN (Ret.); Commander Mitch Brown, USN (Ret.); Captain John Byron, USN (Ret.); Rear Admiral Bill Center, USN (Ret.); Dr. Greg Cox (CNA); Mr. Seth Cropsey; Commander Steve Deal, USN; Captain Dick Diamond, USN (Ret.); Commander John Dickmann, USN (Ret.); Commander Tom Disy, USN; Captain Will Dossel, USN (Ret.); Captain Mike Dunaway, USN (Ret.); Captain Jamie Foggo, USN; Dr. Norman Friedman; Dr. Hank Gaffney (CNA); Mr. Mike Gerson (CNA); Commander Neil Golightly, USNR (Ret.); Ms. Gia Harrington; Captain Robby Harris, USN (Ret.); Mr. Richard Haver; Captain Bradd Hayes, USN (Ret.); Rear Admiral Jerry Holland, USN (Ret.); Admiral James Holloway III, USN (Ret.); Dr. Tom Hone; Captain Wayne P. Hughes, Jr., USN (Ret.); Ms. Kate Lea (CNA); Captain Ed Long, USN (Ret.); Mr. Mike Markowitz (CNA); Captain Rod McDaniel, USN (Ret.); Rear Admiral Mike McDevitt, USN (Ret.), of CNA; Commander Bryan McGrath, USN (Ret.); Captain Kenneth McGruther, USN (Ret.); Mr. Anthony McIvor; Mr. Edward S. Miller; Captain Judy (Holden) Myers, USN (Ret.); Commander Paul Nagy, USN; Mr. Ron O'Rourke; Rear Admiral Frank Pandolfe, USN; Captain Jim Patton, USN (Ret.); Rear Admiral Bill Pendley, USN (Ret.); Dr. David Perin (CNA); Dr. Peter Perla (CNA); Hon. Robin Pirie; Mr. Norman Polmar; Dr. Bruce Powers; Dr. Mike Price (CNA); Mr. Fred Rainbow; Commander Steve Recca, USN (Ret.); Captain John Rodegaard, USN (Ret.); Dr. David A. Rosenberg; Captain Pat Roth, USN (Ret.); Mr. Jeffrey Sands; Captain Brian Scott, USN; Captain Larry Seaquist, USN (Ret.); Vice Admiral Joseph Sestak, USN; Dr. Francis Shoup; Captain Mike Simpson, USN (Ret.); Captain Ed Smith, USN (Ret.); Mr. Tim Smith; Commander Winton Smith, USN; Rear Admiral James Stark, USN (Ret.); Admiral James Stavridis, USN; Rear Admiral Joseph Strasser, USN (Ret.); Captain Bruce Stubbs, USCG (Ret.); Commander Ken Szmedt, USN; Captain Sam Tangredi, USN; Captain George Thibault, USN (Ret.); Vice Admiral Emmett Tidd, USN (Ret.); Vice Admiral Pat Tracey, USN (Ret.); Commander Jim Tritten, USN (Ret.); Dr. Scott Truver; Admiral Stansfield Turner, USN (Ret.); Dr. Harlan Ullman; Captain Gordan Van Hook, USN; Commander Stan Weeks, USN (Ret.); Mr. Mark Werner; Mr. Francis J. West, Jr.; Major General Tom Wilkerson, USMC (Ret.); Captain Jay Williams, USNR (Ret.); Colonel Bob Work, USMC; Captain Rob Zalaskus, USN.

At the Naval War College, I thank Captain Richard Suttie, USN, and Dr. Carnes Lord, who suggested that I undertake this series of volumes for the Naval War College Press; Mrs. Alice Juda, reference librarian in the College's Henry Eccles Library, who provided valuable assistance in locating copies of the documents published here; the editorial staff of the Naval War College Press; and Jo-Ann Parks, for composition and preparation for press.

Introduction

This work is part of a four-volume set of studies within the Naval War College Press's Newport Paper monograph series. A broad introduction to the history of strategic and doctrinal thinking within the U.S. Navy in the period between 1970 and 2000 is found in these Newport Papers; it may be useful to read them in the order in which they appeared rather than in the chronological order of the periods that they cover. Thus, the basis of this series begins with *The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986*.¹ That work is followed by the three separate volumes of documents, including this one, each devoted to one of three decades of the 1970s, 1980s, and 1990s.²

An Overview of the Decade

As the Vietnam War drew to a close and the Cold War entered a phase of détente, the decade of the 1970s opened for the U.S. Navy with a resurgence of thinking about naval strategy and the role of the Navy in American defense posture. While the emphasis during the 1950s and 1960s had been on nuclear deterrence, the experience of the Vietnam War and the rising number of local crises increasingly stressed the role of conventional arms. As Admiral Elmo Zumwalt took office as Chief of Naval Operations in 1970, he faced a situation in which the U.S. Navy's 750-ship fleet, a high proportion of which had been launched during World War II, was reaching the end of its useful life and needed to be replaced. At the same time, the Soviet Navy had been increasingly showing its presence on the world's oceans.³ In 1970, it made a dramatic statement with its exercise OKEAN '70 in which two hundred Soviet ships exercised simultaneously in the Atlantic, Pacific, and Indian oceans and the Mediterranean Sea. It was a vivid demonstration of the Soviet Union's naval capacity for global reach.

Zumwalt outlined the changes that he sought to make in this context in his "Project SIXTY" document, which set the stage for developments across the 1960s. While this plan looked forward, changes that had been set in motion during the late 1960s were just coming to fruition.

As these developments were taking place within the Navy, the United States and the Soviet Union showed some sign of movement in the Strategic Arms Limitation Talks (SALT I). Negotiations on this matter had begun in 1969 and in May 1971, when the first major breakthrough came in an agreement on antiballistic missile systems. As a further step in this regard, President Richard Nixon and the General Secretary of the Communist Party of the Soviet Union, Leonid Brezhnev, met in Moscow on 26 May 1972 to sign the Anti-Ballistic Missile Treaty, which remained in force until 2002 and established parity in these offensive and defensive systems. At the same time the two powers made several statements that helped to improve mutual relations, as well as the “Interim Agreement between the United States of America and the Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation of Strategic Offensive Arms.” In addition, on 25 May 1972, during Nixon’s visit to Moscow, Admiral of the Fleet Sergei G. Gorshkov and Secretary of the Navy John Warner signed an important naval agreement on prevention of incidents on the high seas and in the air-space above them (known as INCSEA).

As these discussions were in progress, the People’s Republic of China began to signal an interest in improving relations with the United States as part of an effort to guard against Soviet invasion. In response, in February 1972 President Nixon traveled to China, where he met with Mao Zedong and Chou En-lai, taking the first step toward creating normal diplomatic relations between the United States and China.

As a result of these international events, both China and the Soviet Union encouraged North Vietnam to come to terms with the United States in the Paris Peace Accords, which were signed on 27 January 1973, bringing the Vietnam War to an end. As Nixon later explained,

I had long believed that an indispensable element of any successful peace initiative in Vietnam was to enlist, if possible, the help of the Soviets and the Chinese. Though rapprochement with China and détente with the Soviet Union were ends in themselves, I also considered them possible means to hasten the end of the war. At worst, Hanoi was bound to feel less confident if Washington was dealing with Moscow and Beijing. At best, if the two major Communist powers decided that they had bigger fish to fry, Hanoi would be pressured into negotiating a settlement we could accept.⁴

In October 1973, during the Arab-Israeli War, warships of the U.S. Sixth Fleet and of the Soviet Fifth Eskadra faced off in one of the most dangerous naval crises of the Cold War. The Soviet Union threatened to intervene in the war unilaterally and conducted aggressive surveillance of U.S. naval forces in the Mediterranean.⁵

These events in international affairs were temporarily overshadowed in American domestic politics by the Watergate scandal, which was uncovered in October 1973 and ultimately led to Nixon’s resignation, in August 1974. Under President Gerald Ford, the United States continued the policy of détente, with Ford traveling to Vladivostok in

November 1975 to sign a joint communiqué on the SALT talks, visiting China in December 1975, and then joining the Soviet Union in the Helsinki Accords in August 1975.

While these broad events were taking place in terms of Cold War détente, however, competition between the Soviet Navy and the U.S. Navy continued to grow. The Soviet Union was clearly spending large sums to develop its conventional military and naval capabilities as the United States cut back in the wake of the Vietnam War. Even after the SALT agreement, the Soviets widely deployed nuclear-armed weapons and built up forces in Eastern Europe and the Far East, while aiding communist movements in Latin America, Asia, and Africa. While this was going on, the Soviet Navy increased its presence around the globe in a manner that the U.S. Navy saw as a challenge to American interests and American sea-control capabilities. Echoing its OKEAN '70 Exercise, the Soviet Navy held another, but smaller, exercise, OKEAN '75, with 220 ships operating in all the oceans. As part of this exercise, Soviet long-range bombers made simulated strikes against the United States.

The rise of the Soviet Navy quickly became the primary concern of American naval leaders, who, with the leaders of the other uniformed services, persistently pursued a national strategy that was essentially a maritime strategy involving overseas-deployed forces in Germany, Korea, and Japan. For the U.S. Navy, this meant keeping heavily armed carrier forces forward deployed and U.S. Marine expeditionary forces embarked in amphibious warfare vessels, ready to respond to crises and contingencies around the globe.

In this situation, the most important locus was Central Europe, especially the “inner German border,” dividing the Federal Republic of Germany from the German Democratic Republic, where Soviet and Warsaw Pact forces were massed. This theater remained the prime focus, closely bound to the NATO alliance and to allied participation.⁶ As a result, the ability of the U.S. Navy to support NATO forces was the first priority for the United States; the range of scenarios that this contingency presented in case of a war became the fundamental basis for American naval force planning. The situation required the Navy to control of the essential sea lines of communication to key areas in case of a war with the Soviet Union and the Warsaw Pact. The situation began to change into a global one, as Americans watched the Soviet Union begin steadily to build up forces in the Pacific, by the end of the decade turning the former American naval base at Cam Ranh Bay, Vietnam, into a major base for the Soviet Pacific Fleet.

As the U.S. Navy's leadership continued to develop its strategic concepts, doctrine, and contingency planning to meet this situation, at a time when the Navy was declining in size, in terms of personnel, aircraft, and ships, it became obvious that the service could not maintain its supremacy on a global basis. In February 1978, the Chief of Naval Operations, Admiral James L. Holloway III, testified to the House of Representatives

Armed Services Committee that in the event of war with the Soviet Union the U.S. Navy could not maintain complete superiority in the western Pacific or protect vital commercial shipping to allies in Japan and Korea. As Holloway later recalled in his memoir, "Supporting NATO was our first priority. With the continuing decline in our naval force levels, we had become a one-ocean navy."⁷ Nevertheless, on 1 January 1979, the Taiwan Relations Act became effective, requiring the Defense Department "to maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan."⁸

The following year, the situation became even more difficult as a new theater for American naval concern opened in Southwest Asia. In Afghanistan, President Jimmy Carter and his national security adviser, Zbigniew Brzezinski, began covert operations in 1979 to fund and to train antigovernment mujahideen forces. In response to the rising strength of this force, the Soviet Union intervened on 24 December 1979; it occupied the country for the next ten years.

In January 1978, while these events were taking place in Afghanistan, the Iranian Revolution began with strikes and protests against the government of the shah of Iran. The initial events were barely noticed in the United States. Following the shah's departure from Iran, the return of the exiled leader Ayatollah Khomeini from France, and the collapse of the Pahlavi dynasty in February 1978, a republic was established. Relations between the United States and the new Islamic Republic of Iran quickly deteriorated, and on 4 November 1979 students seized the U.S. embassy in Tehran. Although the seizure had not been a government-led event, the Iranian government announced its approval. As a result, fifty-two Americans were held hostage during intensive diplomatic negotiations that lasted for 444 days, until January 1981.

On 24 April 1980, President Carter ordered a secret joint military operation to rescue the hostages. In this operation, called EAGLE CLAW or EVENING LIGHT, eight CH-53 helicopters were launched from the USS *Nimitz* (CVN 68) in the Indian Ocean, while six C-130 aircraft carried special operations troops from the Marine Corps, Army, and Air Force. The mission failed completely. A formal joint-service investigation led by Admiral Holloway, by then retired, concluded that the failure of the operation had been due to inadequate use of the Department of Defense and Joint Chiefs of Staff organization, resulting in poor planning.⁹ The failure of the rescue attempt and the findings of the investigation led to significant changes in later years.

The U.S. Navy's Budget

During the 1970s, the Navy's overall budget fluctuated from a low of \$21 billion in 1971 to more than double at the end of the decade, with a high of \$47 billion in 1980 (table 1):

TABLE 1
Budget of the U.S. Navy, 1970–1980
Total Obligational Authority

1970	\$22,444,000,000
1971	\$21,731,000,000
1972	\$24,028,000,000
1973	\$25,350,000,000
1974	\$26,860,000,000
1975	\$27,934,000,000
1976	\$31,480,000,000
1977	\$36,538,000,000
1978	\$39,504,000,000
1979	\$41,694,000,000
1980	\$47,041,000,000

Source: Statistics for 1970 through 1977 are taken from "Appropriation Summary," in U.S. Navy Dept., *Historical Budget Data* (Washington, D.C.: Office of the Chief of Naval Operations, 1978), pp. 4–6. Statistics for 1978 through 1980 are taken from "Appropriation Summary," in U.S. Navy Dept., *Historical Budget Data* (Washington, D.C.: Office of the Comptroller, 1985), pp. 4–5. See the "Budget of the U.S. Navy, 1794 to 2004," *Navy Department Library*, www.history.navy.mil/library/online/budget.htm.

Force Levels

Meanwhile the active ship force levels of the fleet, dropped steadily from the high of 752 vessels in 1971 to a low of 530 in 1980 (table 2).

As the total number of ships declined, the total number of fleet combat aircraft also declined, from 3,457 on 31 March 1970 to 2,689 on 31 March 1980 (table 3).

Overall personnel strength dropped steadily from the 1970 total of 731,777 to the 1980 low of 525,096 (table 4).

Introduction of Major Naval Combat Systems

Even though the U.S. Navy was steadily declining in size throughout the 1970s, a number of new capabilities and changes were introduced during the decade. The long lead time required for implementation of complex weapons systems meant that many of the new capabilities introduced at the beginning of the 1970s had begun in the 1960s.

Among the new warships was a new class of command ships, beginning with the USS *Blue Ridge*, laid down in 1967 and commissioned in November 1970. The lead ship of a new class of nuclear-powered aircraft carriers, USS *Nimitz* (CVN 68), was laid down in

TABLE 2

U.S. Navy Active Ship Force Levels, 1970–1980

TYPE	30 JUNE 1970	30 JUNE 1971	30 JUNE 1972	30 JUNE 1973	30 JUNE 1974	30 JUNE 1975
Carriers	19	19	17	16	14	15
Cruisers	31	30	27	29	28	27
Destroyers	155	152	132	139	119	102
Frigates	47	61	66	71	64	64
Submarines	103	100	94	84	73	75
SSG/SSBNs	41	41	41	41	41	41
Command Ships	-	-	-	-	-	-
Mine Warfare	64	59	31	34	34	34
Patrol	15	17	16	14	14	14
Amphibious	97	95	77	65	65	64
Auxiliary	171	177	153	148	135	123
Surface Warships	249	262	225	239	211	193
Total Active	743	751	654	641	587	559

TYPE	30 JUNE 1976	30 JUNE 1977 ^a	30 SEPT 1978 ^b	30 SEPT 1979	30 SEPT 1980
Carriers	13	13	13	13	13
Cruisers	26	26	28	28	26
Destroyers	99	92	95	97	94
Frigates	64	64	65	65	71
Submarines	74	77	81	80	82
SSG/SSBNs	41	41	41	41	40
Command Ships	-	-	-	-	3
Mine Warfare	25	25	25	25	25
Patrol	13	6	3	3	3
Amphibious	65	65	67	67	63
Auxiliary	116	114	113	114	110
Surface Warships	189	182	188	190	191
Total Active	536	523	531	533	530

Notes:

a. This year marked the low point in total active ships during the 1970s.

b. Beginning with fiscal year 1978, the Defense Department fiscal year ran from 1 October through 30 September; previously it had run from 1 July to 30 June.

Source: "Navy Active Ship Force Levels, 1917–," Naval Historical Center, www.history.navy.mil/branches/org9-4.htm#1965.

1968 and placed in commission in 1975. The USS *Spruance* (DD 963) was the first of a new class of antisubmarine destroyers. The first gas-turbine-powered destroyer in the U.S. Navy, *Spruance* was laid down in 1972 and commissioned in 1975. USS *Tarawa* (LHA 1), laid down in 1971 and commissioned in 1973, was the lead ship in a new class

TABLE 3
Inventory of Active Aircraft

YEAR	TOTAL	ACTIVE	OPERATING	FLEET COMBAT
1970	9,412	7,926	6,581	3,457
1971	8,548	7,358	6,068	3,405
1972	8,033	6,836	5,752	3,106
1973	7,660	6,587	5,444	2,967
1974	7,639	6,256	5,129	2,777
1975	7,376	6,018	5,004	2,827
1976	7,122	5,782	4,829	2,781
1977	6,960	5,590	4,752	2,844
1978	6,667	5,414	4,354	2,596
1979	6,449	5,418	4,458	2,681
1980	6,382	5,435	4,419	2,689

Source: *Index for Allowances and Location of Navy Aircraft* for 31 March of each year, from 1970 to 1980, as recorded in chart 1 of each 31 March report. See "Index for Allowances and Location of Navy Aircraft Covering January 1969 through September 1980," *Naval Historical Center*, www.history.navy.mil/a-record/alna69-80.htm.

of five general amphibious assault ships that combined the functions of four different ship types of the World War II era. The first ship of a new class of nuclear-powered attack submarines, the USS *Los Angeles* (SSN 688), was laid down in 1972 and commis-

TABLE 4
U.S. Navy Personnel Strength, 1970–1980

YEAR	OFFICERS	NURSES	ENLISTED	OFFICER CANDIDATES	TOTAL
1970	82,565	2,283	643,164	6,048	731,777
1971	77,442	2,202	572,338	5,843	655,623
1972	74,208	2,254	524,205	5,774	604,187
1973	71,448	2,197	502,777	5,407	579,672
1974	68,250	2,527	483,257	5,021	556,528
1975	66,036	2,668	474,596	5,093	545,725
1976	64,110	2,570	460,161	4,938	529,209
1977	63,337	2,633	459,780	4,616	527,733
1978	62,890	2,606	458,710	4,915	526,515
1979	62,161	2,542	458,431	4,863	525,455
1980	62,648	2,640	457,459	4,989	525,096

Source: "Frequently Asked Questions: Personnel Strength of the U.S. Navy—1775 to Present," *Naval Historical Center*, www.history.navy.mil/faqs/faq65-1.htm.

sioned in 1976. Finally, the first of a new class of fifty general-purpose guided-missile frigates, the product of Admiral Zumwalt's initiatives from "Project SIXTY" to find a relatively inexpensive warship, was the USS *Oliver Hazard Perry* (FFG 7), laid down in 1975 and commissioned in 1976.

In the area of naval aircraft, the U.S. Navy began in 1970 the third main production line of Lockheed's Orion maritime patrol aircraft, the P-3C; at about the same time the definitive version of Grumman Aerospace's twin-engine Intruder attack aircraft was introduced, the A-6E, and its derivative with the same airframe, the Prowler electronic attack aircraft, the EA-6B. Also, the naval version of Sikorsky's CH-53 group of helicopters, the RH-53D mine-countermeasures helicopter, was introduced. The F-14 Tomcat anti-air-warfare aircraft entered service with the U.S. Navy in 1972 to replace the F-4 Phantom. Grumman's E-2C Hawkeye carrier-based, all-weather, tactical early-warning aircraft became operational in 1973. Then, in 1974, Lockheed's S-3 Viking antisubmarine-warfare aircraft entered service.

Among other new weapons and sensors, the U.S. Navy adopted the British-designed Mark 48 torpedo for operational use in 1972 to attack high-speed vessels and deep-diving submarines. In 1971, the Poseidon C-3 strategic long-range ballistic missile, also known as the UGM-73A, entered service to replace the Polaris missile carried by ballistic missile nuclear submarines. In its turn, the Trident C-4 (UGM-96A) missile replaced the Poseidon missile beginning in 1979. The improved Paveway II laser-guided bomb was introduced about 1976. In 1977 the Harpoon all-weather over-the-horizon antiship missile was introduced, with versions for use from aircraft, surface ships, and submarines. An improved version of the Sea Sparrow missile, which had seen extensive use during the Vietnam War, was introduced in 1976 as the AIM-7F.

General Changes

While this wide variety of improved warships and weapons were entering the fleet, two very important substantive changes took place that had far-reaching and long-term effects within the U.S. Navy and in the way the service thought and worked.

The first of these occurred in 1972–74 with Vice Admiral Stansfield Turner's revolutionary changes to the curriculum and research programs of the Naval War College, setting the U.S. Navy's senior institution for professional military education on a new course, with increasing influence and intellectual leadership. Establishing a large permanent academic faculty to work alongside the rotating uniformed faculty, Turner laid a long-lasting foundation that linked academic rigor in a graduate-level program to applied academic research, a combination that was to have increasing impact on the understanding and the development of strategic and operational ideas within the U.S. Navy.¹⁰

The second occurred in September 1977 when Admiral James L. Holloway III, as Chief of Naval Operations, issued a message to naval commanders in chief in the Atlantic, Pacific, and Europe that established a new battle-force organization for the Navy. In a dramatic change, Holloway set aside the long-standing fleet organization that had

centered on management by warship type commanders and shifted it to an operational basis that reflected “the missions, function, roles, and employment of the Navy.”¹¹ To this end, Holloway provided the following succinct definitions:

A battle force is defined as the standing operational task force organization of carriers, surface combatants and submarines assigned to numbered Fleets. A battle fleet is further subdivided into battle groups.

Battle groups are defined as integrated task groups capable of conducting offensive operations at sea against the combined spectrum of hostile maritime threats. A battle group would be a task group consisting of one carrier, two cruisers, four surface combatants, and one or two submarines operating together in mutual support with the task of destroying hostile submarine, surface, and air forces within the group’s assigned area of responsibility.¹²

Within the broad context of the multiple layers of change and development that were taking place within the U.S. Navy during the 1970s, the five documents selected for this volume represent the key statements of strategic and doctrinal thinking within the service. These five documents are very different in approach, style, and purpose; nevertheless, they all document gradual and consistent development of one very significant thread in American naval thinking during the Cold War.

Notes

1. John B. Hattendorf, *The Evolution of the U.S. Navy’s Maritime Strategy, 1977–1986*, Newport Paper 19 (Newport, R.I.: Naval War College Press, 2004).
2. John B. Hattendorf, ed., *U.S. Naval Strategy in the 1990s: Selected Documents*, Newport Paper 27 (Newport, R.I.: Naval War College Press, 2006); the present work, John B. Hattendorf, ed., *U.S. Naval Strategy in the 1970s: Selected Documents*, Newport Paper 30 (Newport, R.I.: Naval War College Press, 2007); and John B. Hattendorf and Peter M. Swartz, eds., *U.S. Naval Strategy in the 1980s: Selected Documents*, forthcoming Newport Paper.
3. For general works that include naval aspects of this decade, see Lyle Goldstein, John Hattendorf, and Yuri Zhukov, eds., “The Cold War at Sea: An International Appraisal,” special issue, *Journal of Strategic Studies* 28, no. 2 (April 2005); Norman Polmar, Eric Wertheim, Andrew H. Bahjat, and Bruce Watson, *Chronology of the Cold War at Sea 1945–1991* (Annapolis, Md.: Naval Institute Press, 1997); David F. Winkler, *Cold War at Sea: High-Seas Confrontation between the United States and the Soviet Union* (Annapolis, Md.: Naval Institute Press, 2002).
4. Richard Nixon, *No More Vietnams* (New York: Arbor House, 1985), pp. 105–107.
5. See Lyle Goldstein and Yuri Zhukov, “A Tale of Two Fleets: A Soviet Perspective on the 1973 Naval Standoff in the Mediterranean,” *Naval War College Review* 57, no. 2 (Spring 2004), pp. 27–63.
6. See Robert S. Jordan, *Alliance Strategy and Navies: The Evolution and Scope of NATO’s Maritime Dimension* (London: Faber, 1990).
7. Adm. James L. Holloway III, USN (Ret.), *Aircraft Carriers at War: A Personal Retrospective of Korea, Vietnam, and the Soviet Confrontation* (Annapolis, Md.: Naval Institute Press, 2007), p. 31.
8. Public Law 96-8, 96th Cong., 1st sess. (10 April 1979). See the text of the act at www.ait.org.tw/en/about_ait/tra.

9. Holloway, *Aircraft Carriers at War*, pp. 424–28.
10. John B. Hattendorf, B. Mitchell Simpson III, and John R. Wadleigh, *Sailors and Scholars: The Centennial History of the Naval War College* (Newport, R.I.: Naval War College, 1984), chap. 11.
11. “CNO Message 072108Z Dec 1977, copy of the original message provided by Admiral Holloway to Hattendorf, August 2007. The text of the message is printed in Holloway, *Aircraft Carriers at War*, pp. 388–89, along with his reminiscences of the circumstances of issuing it, pp. 386–90. This quotation is from paragraph 1 of the message.
12. “CNO Message,” paras. 5 and 6.

Project SIXTY

*“Project SIXTY” was Admiral Elmo Zumwalt’s plan of action for his four-year tenure as Chief of Naval Operations, 1 July 1970 to 29 June 1974. In March and April 1970, Secretary of Defense Melvin Laird and Secretary of the Navy John H. Chafee recommended to President Richard Nixon that Admiral Elmo R. Zumwalt, Jr., a surface warfare officer then serving as Commander, U.S. Naval Forces, Vietnam, succeed Admiral Thomas H. Moorer, a naval aviator, on his appointment to be chairman of the Joint Chiefs of Staff. Immediately on learning of his appointment, in mid-April 1970, Zumwalt began work on a plan that he named “Project SIXTY,” indicating his intention to have a plan of action that he could present to the Secretary of Defense and the Secretary of the Navy within his first sixty days in office. Zumwalt saw that the surface Navy had deteriorated in the previous decades and wanted a plan to rebalance the three separate arms of the Navy—surface, subsurface, and air—in order to counter more effectively the growing threat of the Soviet Navy.**

To head up his team dealing with “Project SIXTY,” Zumwalt selected Rear Admiral Worth H. Bagley, who was then commanding a destroyer flotilla.[†] Unable to obtain his services until he could be relieved of that assignment in August, Secretary of the Navy Chafee assigned his executive assistant, Captain Stansfield Turner, to fill in and to lay the groundwork for the project. Turner had just been selected for rear admiral and was slated to go to a flag officer sea assignment, but Zumwalt directed Turner instead to “write a strategy for the Navy.” When Turner asked him for further guidance on what*

* For the background, see Elmo R. Zumwalt, Jr., *On Watch: A Memoir* (New York: Quadrangle, 1976), pp. 60–87, 104–108, 126, 154, 177, 211, 284, 306–307, 340, 444, 475; Norman Friedman, “Elmo Russell Zumwalt, Jr.,” in *The Chiefs of Naval Operations*, ed. Robert William Love, Jr. (Annapolis, Md.: Naval Institute Press, 1980), pp. 365–79, 433–34. See also Jeffrey Sands, *On His Watch: Admiral Zumwalt’s Efforts to Institutionalize Strategic Change*, CRM-93-22 (Alexandria, Va.: Center for Naval Analyses, July 1993); “History of the Project 60 Effort” by Ens. D. A. Rosenberg, USNR-R, Op-965, 23 July 1982, typescript of original draft supplied by Dr. David Alan Rosenberg via Captain Peter M. Swartz, USN (Ret.).

[†] See *Reminiscences of Staff Officers to Admiral Elmo R. Zumwalt, Jr.*, vol. 1, Worth H. Bagley, interviewed by Paul Stillwell (Annapolis, Md.: Naval Institute Oral History, 1989), Naval Historical Collection, Naval War College, Oral History Collection, OH 122, pp. 233–34, 239–41, 243, 260, 263, 267–68, 313, 319.

he wanted, Zumwalt told him, “You write it, then let me see it.” Turner recalled that “it was a wonderful opportunity for a young rear admiral to write a strategy with virtually no guidance.” He obtained the assistance of a number of commanders to do some of the spadework and research involved. As his work progressed and became more widely known, the deputy chiefs of naval operations and other senior officers began “to offer help that wasn’t particularly helpful” but seemed designed to infiltrate the work. On 26 August, before leaving for his next assignment, Turner briefed his concept to flag officers in the CNO Conference Room. With this briefing he passed the basic concept on to Rear Admiral Worth Bagley, who made some changes—which, Turner later recalled, were largely in line with the initial ideas but contained more compromises than he would have liked. At the same time, Turner sent directly to Zumwalt some thirty or forty two-page decision papers for action. Zumwalt signed a substantial number of these, although some met strong opposition within the Office of the Chief of Naval Operations.

On 10 September 1970, seventy-two days after being in office, Zumwalt delivered the “Project SIXTY” briefing to Secretary of Defense Laird and Deputy Secretary of Defense David Packard. In the following week, on 16 September, Zumwalt sent a copy of this briefing to all flag and Marine general officers, “to guide your actions as well as to keep you aware of my thinking and to encourage your support as we move ahead.” ♦♦

* This and the following quotations in this paragraph are from a telephone conversation with Adm. Stanfield Turner, USN (Ret.), 27 July 2007.



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, D.C. 20350

IN REPLY REFER TO

Op-00:fs
Op-00 Memo 00334-70
SEP 16 1970

MEMORANDUM FOR ALL FLAG OFFICERS (AND MARINE GENERAL OFFICERS)

Subj: Project SIXTY

1. In July I told you that I would make an assessment of the Navy's capabilities and problems for a presentation to the Secretary of Defense in early September. With the benefit of your insights and assistance this task, Project SIXTY, has been completed. Secretary Chafee and I made the presentation on 10 September to Secretaries Laird and Packard and follow-on discussions with them are scheduled.
2. I consider that the substance of this presentation sets forth the direction in which we want the Navy to move in the next few years. The decisions that we make, and implement, at the command levels of the Navy should be consistent with these concepts. Further, I am passing this paper to the CNO Executive Panel, and its Programs Analysis Group, as the primary guideline for their deliberations in advising me on actions we should take and on the suitability of current programs. The Panel will consider the Project SIXTY paper as a dynamic statement of the direction that the Navy is to move and will adapt new concepts and ideas to keep the guidelines current and in-step with the threat and our best thoughts.
3. I am forwarding the Project SIXTY presentation to you, under cover of this letter, to guide your actions as well as to keep you fully aware of my thinking and to encourage your support as we move ahead.


E. R. ZUMWALT, JR.

My purpose today is to report to you on our naval strengths and weaknesses and the actions we are taking, or will propose, to achieve the highest feasible combat readiness. The report reflects our survey of the Navy to date and sets forth the change of direction which we think necessary. It is impossible to discuss these changes outside the context of potential budget reductions. We will indicate the effect of such reductions; they would curtail our capabilities critically, regardless of our actions. However, we hope to emphasize the theme of the changes that we feel must be undertaken, whether we can maintain our present expenditures or not.

The Navy's capabilities fall naturally into four categories:

NAVAL CAPABILITIES

- ASSURED SECOND STRIKE
 - CONTROL OF SEA LINES AND AREAS
 - PROJECTION OF POWER ASHORE
 - OVERSEAS PRESENCE IN PEACETIME
-

- Assured Second Strike Potential,
- Sea Control by our attack submarines, dual-mission carriers, escorts, and patrol aircraft,
- Projection of power ashore by our dual-mission carriers and the amphibious force, and
- Overseas presence in peacetime

We want to see where each of these capabilities fits into the possible conflict situations that we may face in the decade ahead. What, in short, does the country require of its sea forces?

SIGNIFICANT CHANGES IN SOVIET THREAT OF LATE '60s

- NUCLEAR PARITY
 - EMERGENCE OF STRONG, WORLDWIDE DEPLOYED SOVIET NAVY
-

We are looking at this matter at a time when two factors have developed, of the highest importance to the power relationship between the U.S. and the Soviet Union:

- Nuclear parity, and
- The emergence of a strong, worldwide-deployed Soviet Navy

ASSURED SECOND STRIKE POTENTIAL

The initial Navy capability is the contribution it can make to an assured Second Strike potential.

Strategic deterrence must come first. Soviet achievement of nuclear parity, deployment of SS-9's, and potential deployment of MIRVs have all raised the value of our sea-based strategic forces, and we are close upon the point when more of our deterrent forces will have to be based more securely. We are confident that the Navy can design and build a secure, effective ULMS. If the national decision is to rely more heavily on sea basing—that is, to have ULMS operating before 1980—we must soon decide to accelerate.

SEA CONTROL AND PROJECTION

The other major naval missions at sea involve our sea control and projection forces.

The recent changes in relative strategic power between the Soviets and ourselves also have important implications for these conventional forces.

SEA CONTROL AND PROJECTION

NUCLEAR-CONVENTIONAL RELATIONSHIPS

- SEA CONTROL GUARANTEES INVULNERABILITY OF SEA BASED MISSILES
 - NUCLEAR PARITY INCREASES LIKELIHOOD OF CONVENTIONAL CONFLICT
-

On the one hand, the credibility of our ability to control the sea is essential to the credibility of our strategic sea-based deterrent. On the other hand, now that we have lost our superiority and are reducing our conventional forces, the Soviets are more likely to use military force to achieve their political objectives. The importance of the portion of our conventional force that is capable of overseas presence has thus been increased.

SEA CONTROL AND PROJECTION

- NIXON DOCTRINE
 - NEW SOVIET NAVAL CAPABILITY
-

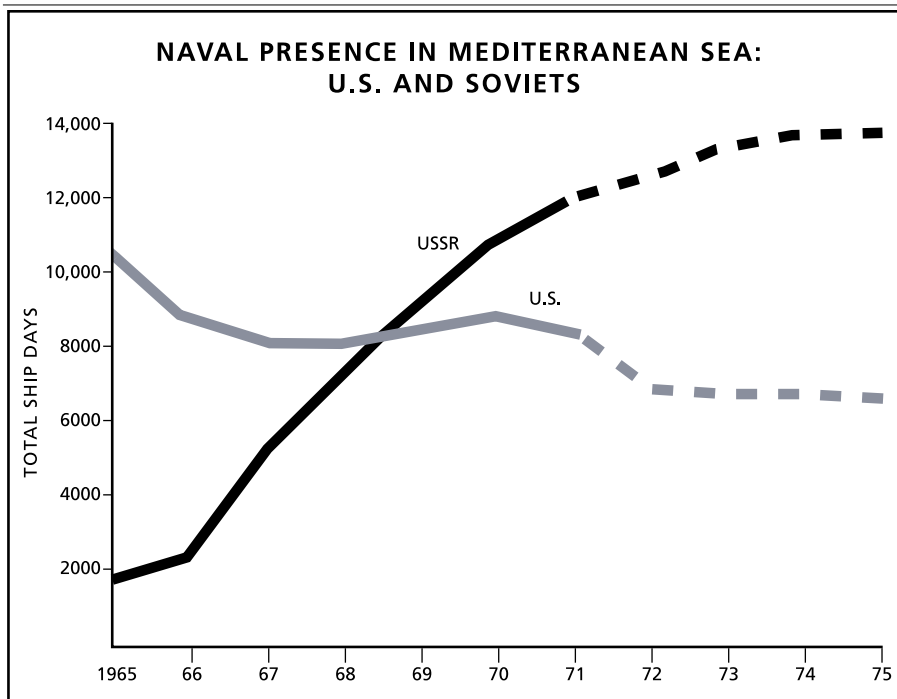
From the naval standpoint, these relationships are influenced further by the Nixon Doctrine and by the large, modern Soviet Navy that emerged in the 1960s.

The continuing withdrawal of the United States from foreign bases and—in Asia—the change in the forms of armed support we plan to make available to our allies, place additional responsibilities on our sea control and projection forces. Both will employ the dual mission carrier—the new CV concept. The Sea Control forces will see to it that sea lift supplies get through to our allies. Projection forces will maintain a ready deterrent to avoid any misunderstanding of our intent and provide support promptly if needed. The Nixon Doctrine has effectively raised the threshold at which we would commit land forces overseas. We have moved closer to a situation in which Soviet or CHICOM involvement is the primary circumstance that might force us to intervene. We therefore face conventional war that will not include the sanctuary of full use of our sea lines of communication. The Soviets have conceded us this luxury in the past, in part because of our nuclear superiority, in part because of their belief that we could defeat them at sea in conventional war.

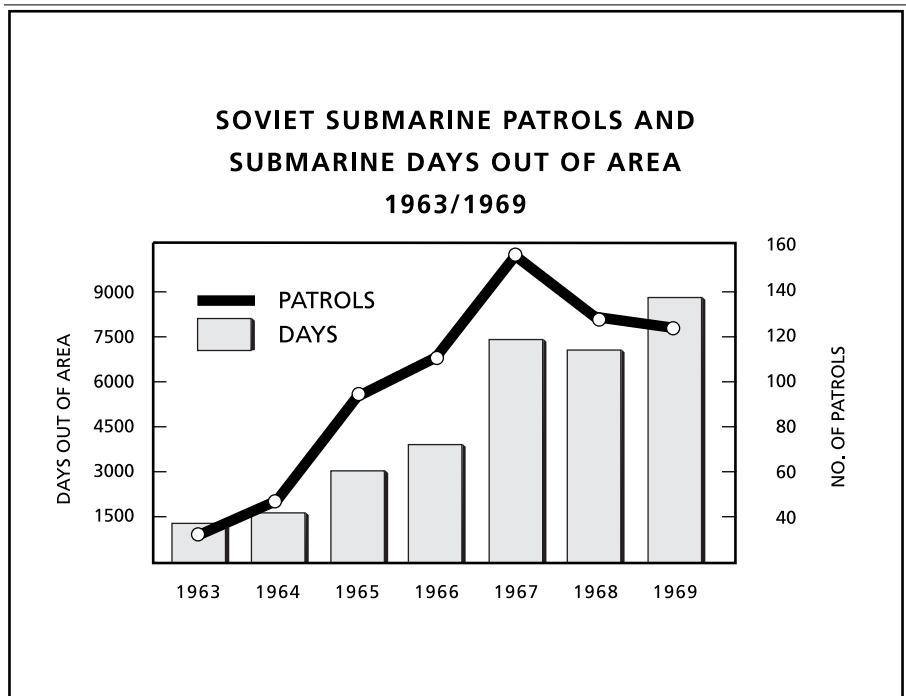
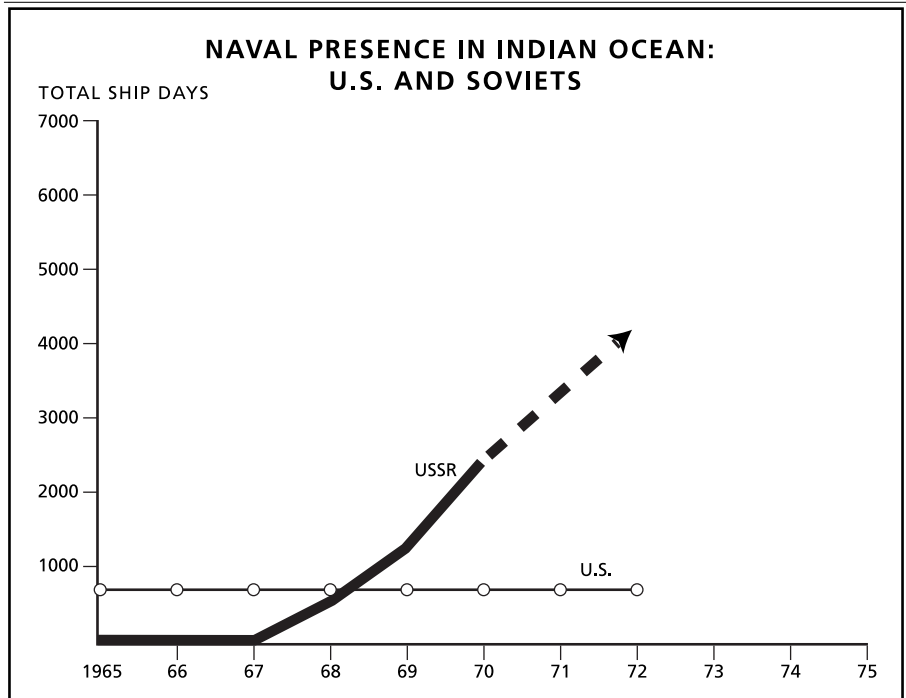
But now the Soviet Navy has evolved impressively in both size and spectrum of capabilities. Its technical and industrial base operates at high levels of design, development, and production. The Soviet Navy has been constructing and deploying submarines and surface ships at an ominously high rate. The quantity and technical quality of these ships has been rising sharply.

What does this new Soviet naval capability mean to us?

In strategic terms, the Soviet Navy is a worldwide force whose routine deployments reach into the Mediterranean Sea, the Indian Ocean, and Caribbean, as well as the Atlantic and Pacific Oceans. Today the Soviet naval presence in the Mediterranean is as great as ours; 10 years ago it was negligible. We devote fewer than 800 ship days a year to limited parts of the Indian Ocean; the Soviets' reach over that area has gone from zero ship days to 2400 in the past 3 years. Their submarine activity is four times as intense as ours and covers all the sea lanes of the world.



As you know, the Soviets have more attack submarines than we do. And they are building at a rate of 10–14 a year; we are building three. The Soviets are reducing the advantage we had in quality by building new, quieter classes of submarines. These new submarines have unique features that are so good we may copy them. In just two years, the Soviets have produced at least 6 new designs in submarines. Their new attack submarines are $3\frac{1}{2}$ to $5\frac{1}{2}$ knots faster than ours. Beyond this, they are giving priority to the Yankee-class ballistic missile submarines, building them at a rate of 6 to 8 a year.



SEA CONTROL AND PROJECTION

- SOVIET SUBMARINES
 - 10–14 NEW SSNs PER YEAR
 - QUIETER
 - NEW DESIGNS (FASTER)
 - PRIORITY TO YANKEE CLASS SSBN’s (6–8/YEAR)
-

These factors give the Soviets several advantages:

SOVIET ADVANTAGES

- INCREASED OUT OF AREA PATROLS
 - DECREASED U.S. ACOUSTIC ADVANTAGE
 - SPEED
-
- With greater numbers of submarines, routine out of area deployments can be increased without alerting our intelligence. Their readiness to fight is kept at a high level.
 - Quieter submarines decrease the acoustic advantage on which our submarine barriers and underseas surveillance systems depend to detect Soviet submarine transits.
 - Their speed advantage permits the Soviet submarines to use leap-frog tactics and brute speed in attack or evasion underseas.
-

YEARLY CONSTRUCTION OF NUCLEAR SUBMARINES

	<i>NOW BUILDING</i>	<i>CAPACITY</i>	<i>Avg. time to build 1 Sub.</i>
USSR	14–20	35	21 MOS.
U.S.	3	6*	27 MOS.

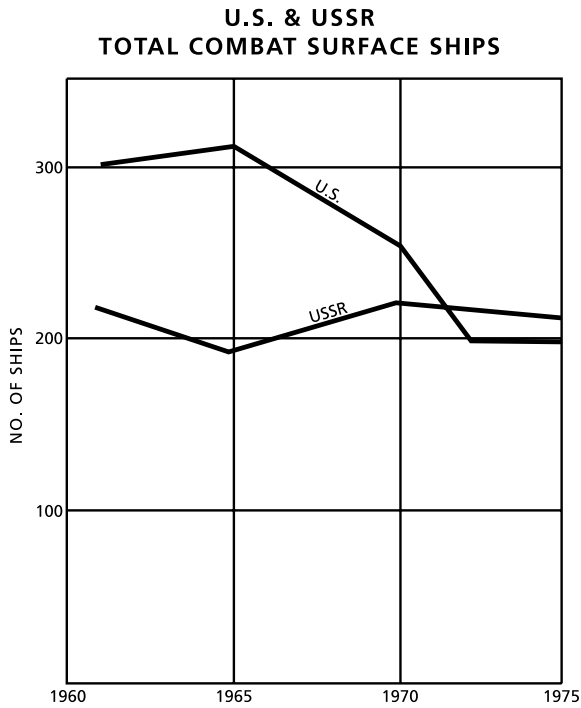
*WHEN POSEIDON IS COMPLETE, U.S. CAPACITY WILL BE 10–12 A YEAR.

And, highly important, the Soviets, with their large capacity and high building rate, can exploit technical improvements more rapidly than we can. They have a potential production level of 35 nuclear submarines a year without facility expansion.

GROWTH IN SOVIET MISSILE-LAUNCH PLATFORMS

	1960	1970
MAJOR MISSILE WARSHIPS	6	49
MISSILE PATROL BOATS	6	158
CRUISE MISSILE SUBMARINES	0	62
RECONNAISSANCE AND MISSILE AIRCRAFT	215	454
TOTAL	227	723

The Soviets have concentrated on weapons for use at sea. This chart shows the buildup in missile-launching vehicles in their naval inventory.



Their surface fleet continues to grow in size and quality relative to ours.

**US VS USSR GENERAL PURPOSE
NAVAL SHIP CONSTRUCTION 1966–1970**

	US	USSR	USSR/US IN %
MAJOR COMBATANTS	11	17	155
MINOR COMBATANTS	47	182	387
AMPHIBIOUS SHIPS	14	6	43
ATTACK SUBMARINES	26	43	165

They are building more ships than we are; amphibious ships are the only category in which we have been outbuilding them.

And the Soviets are enhancing the effectiveness of these forces with a high quality capability for electronics warfare and communications. This includes active and passive countermeasures directed at our systems, intercept equipment covering all of our emitters, and excellent facilities for communications jamming, deception, and intelligence. These assets are drawn together by a highly secure, worldwide communications system.

The Soviet Navy I have touched on here can be deployed in all the oceans. To maintain our own position, our Navy must be based on the two-ocean concept. We cannot concentrate forces in one ocean unless we are prepared to accept in war the loss of control of the other oceans—and thus the destruction of the Free World Alliance.

As an example of this limitation, in the first naval capability to be examined—that of support of war on land—we have looked at alternative ways to provide lift across the Atlantic. The lift mission cannot be performed by air alone. For a NATO war in the mid-1970’s, JCS plans call for moving seven million tons of military dry cargo and five million tons of military POL in the first six months. Of this total only 6% could be moved by air. This is consistent with our experience in Southeast Asia, where 96% has moved in ships.

SEALIFT IS ESSENTIAL

- IN A NATO WAR IN THE MID 1970’S, AIRLIFT WILL BE ABLE TO HANDLE ONLY 6% OF MILITARY CARGOES REQUIRED
 - IN SOUTHEAST ASIA, ONLY 4% HAS MOVED BY AIR
-

Heavy reliance on sea lift is an integral part of the U.S. role as a sea power. It emphasizes the absolute need to be able to control the seas if the nation is to exist. This slide shows why the sea control role must be a main concern of the U.S. Navy. Seaborne trade is several times more important to the U.S. than to the Soviets. Oceans lie between us and our allies; most of the Soviet alliances are with contiguous nations.

SEABORNE TRADE

(MILLIONS OF LONG TONS)

	1958	1965
U.S.	274	395
USSR	26	90

ALLIANCES

	WITH CONTIGUOUS NATIONS	WITH NON-CONTIGUOUS NATIONS
U.S.	2	43
USSR	7	4

POTENTIAL ENEMIES

U.S.:	NO CONTIGUOUS ENEMIES
USSR:	CHINA AND NATO

Support of war-on-land requires not only the ability to lift forces across the seas but also the ability to project power ashore.

At reduced force levels, we should be concerned about the threat to sea projection forces during the early days of a NATO war. The situation on each flank is different.

NATO WAR

MEDITERRANEAN THREAT FACTORS

- CONTINUOUS OPERATIONS OF SOVIET SHIPS
 - SOVIET ACCESS TO PORTS
 - SOVIET USE OF AIRFIELDS
-

A combination of factors has given rise to a serious threat in the relatively restricted sea area of the Mediterranean. There are three such factors:

1. Continuous operation of Soviet ships in the Mediterranean,
2. Soviet access to ports that were closed to them less than a decade ago, and
3. Soviet use of airfields in the UAR and Libya.

Because we lack adequate surveillance capabilities, we cannot keep full-time track of Soviet submarines in the Mediterranean. For their part, the Soviets' surface ships trail our carriers, ready for a first-strike attack in the event of conflict.

Yet, the Soviet naval presence in the Mediterranean demands militarily that we maintain our SIXTH Fleet at generally current force levels. Politically, the whole ambience of NATO requires us to assume that those forces—or augmented forces—will be in place and subject to early and very heavy attack at the outbreak of hostilities.

On the northern flank, however, political circumstances do not require our permanent or prior presence. Hence, before moving in to support forces on land, we would probably operate from mid-ocean to erode the Soviets' submarine force, sweep up their surface ships and, as Allied land-based air operations took effect, slow down the rate of sorties from enemy air bases.

These considerations also raise the question of the importance of the Naval air strike responsibility in NATO. NATO plans call for using all our carriers in this role. Because of air base shortages in Europe and competitive SAC requirements for tankers, I consider that mission of central value in holding the line on the NATO flanks until planned Air Force reinforcements can be deployed from CONUS. Though some feasible measures will reduce the Naval problem, the essential deficiency is in forces.

I should add that strategic warning does not lessen the Soviet naval threat, but it might give us time to move our forces from the Pacific. Strategic warning might also permit the Air Force to make deployments, though bases would be a limiting factor.

Support of the land battle in a NATO war would thus require naval carrier strike forces. Therefore, most of our sea control forces would be engaged in protecting these projection forces. There would be little left to provide more than random security to the sea

lines of communications. We would then be ceding to the Soviets this linch pin of rapid reinforcement upon which NATO depends to stabilize the conflict on land and reduce the likelihood of escalation.

Within likely budgets, this heavy commitment in one ocean would, in our judgment, require the movement of Naval forces from the Pacific, abandonment of the Pacific area west of Hawaii, and cession of control of those waters—including all of Japan, for instance—to the Soviet Far East Fleet. We can also lose sea control in the Atlantic as a result of events in the Pacific. The Soviets can give direct or proxy support to a North Korean attack on South Korea. The logical first response to that situation, as in South Vietnam, would be strikes by our carrier aircraft. Our analysis of the threat in the Sea of Japan at the time the EC-121 was shot down* indicates a requirement for at least four carriers, with large protecting forces. Again, within likely budgets, our forces will be inadequate for sea control in the Pacific in the face of Soviet involvement—or threat of involvement—at sea, unless we move the bulk of our Naval forces to the area. But that would cost us control of the Atlantic and the sea lines that support NATO.

These considerations present us with a number of hard alternatives in the face of budget reductions, if the Navy is to be in a position to make the necessary contribution to the nation's security.

ALTERNATIVES

- COMMIT ALL NAVAL FORCES TO SEA CONTROL
 - CONCENTRATE FORCES IN ONE OCEAN
 - INCREASE FORCES TO A LEVEL COMMENSURATE WITH TWO-OCEAN NEEDS
-
- One course would be to commit all or nearly all the forces available, including the carriers, to the sea control mission. If so, the NATO air strike responsibility would have to be significantly reduced or even eliminated. In Asia, the cutting edge provided by attack carriers in a situation such as Korea would be reduced drastically if the Soviets chose to become involved at sea. At our lower force levels, we simply could not risk the irretrievable loss of sea control by hazarding our few carriers in land battles close to Eurasia.
 - Another course would be augmentation of forces from one ocean to the other in time of crisis or conflict, as an integral part of our strategic planning. If so, we

* On 15 April 1969, North Korean MiG aircraft shot down a U.S. Navy EC-121 Warning Star from U.S. Navy Reconnaissance Squadron One (VQ-1). The aircraft crashed into the Sea of Japan ninety miles off the North Korean coast. All thirty-one on board were killed, including eight officers and twenty-three enlisted men, one of them a Marine Corps noncommissioned officer, all under the command of Lieutenant Commander James Overstreet, USN.

would have to accept the risk or actual fact of Soviet control of the other seas and the implications of that result for the Free World Alliance.

- The only real solution is maintenance of forces at the FY-1970 level or, for greater assurance, an increase of forces. This alternative will retain the naval option to provide the President with a mobile strategic contingency force whenever required and ensures greater confidence in our capability to support the deployment of Army and Air Force units.

Let me speak now of other naval capabilities that are required and that will fit into the force implications just discussed in the war-on-land case.

In addition to possibly contesting for control of sea lanes incident to a war on land, the Soviets' naval strength enables them to start a war restricted to the sea. Such a conflict could be directed at Free World merchant shipping, at our Naval forces, or at some combination of the two, the choice depending on the Soviets' objective. The Soviets might also wage such a war by proxy.

If we were not already engaged in conflict, we could commit maximum available forces immediately to the sea control mission. There would be no conflicting requirements for projection of power ashore, though our ability to provide a strategic contingency force for another crisis would be reduced. This slide shows the results of a recent study of such a war at sea, including a high intensity war and a guerrilla war at sea. The Study assumed present force levels projected ahead. In this Study, our losses are heavy. They would be heavier at the lower levels we are now planning on.

-
- HIGH-INTENSITY WAR D—D+60
 - LOSSES OF U.S. AND ALLIES

MERCHANT SHIPS HIT	1350–2550
--------------------	-----------

 NAVAL UNITS OUT OF ACTION:

CARRIERS	9–12
ESCORTS	120–180
SSN'S, SS'S	5–12
 - LOSSES OF SOVIETS AND THEIR ALLIES

SUBMARINES	150–200 (40–60% OF
AIRCRAFT	100–200 INVENTORY)
 - GUERRILLA WAR AT SEA
 - FIRST-YEAR LOSSES

U.S. SHIPS HIT	350
SOVIET SSN's SUNK	6–7
 - STEADY STATE

SOVIETS COMMIT AND LOSE 6 SSN's PER YEAR:	
U.S. SHIPS HIT PER YEAR	= 180
SOVIETS COMMIT AND LOSE 35 SSN's PER YEAR:	
U.S. SHIPS HIT PER YEAR	= 1050
-

How our allies—we—and the Soviets estimate the outcome of such a conflict could have a significant influence on responses to other situations. The Soviets surely gave this matter prominence in their decisions during the Cuban missile crisis. In our judgment, their naval course since that time originated then. Whether any President will ever again be willing to impose a blockade will depend on his assessment—and ours—of the risks if war at sea were to result. His decision will also depend on whether we proceed now to provide him with credible tools. To expect our allies to help us counter a Soviet initiative at sea will depend primarily on their view of our ability to pursue such a conflict successfully.

OVERSEAS PRESENCE

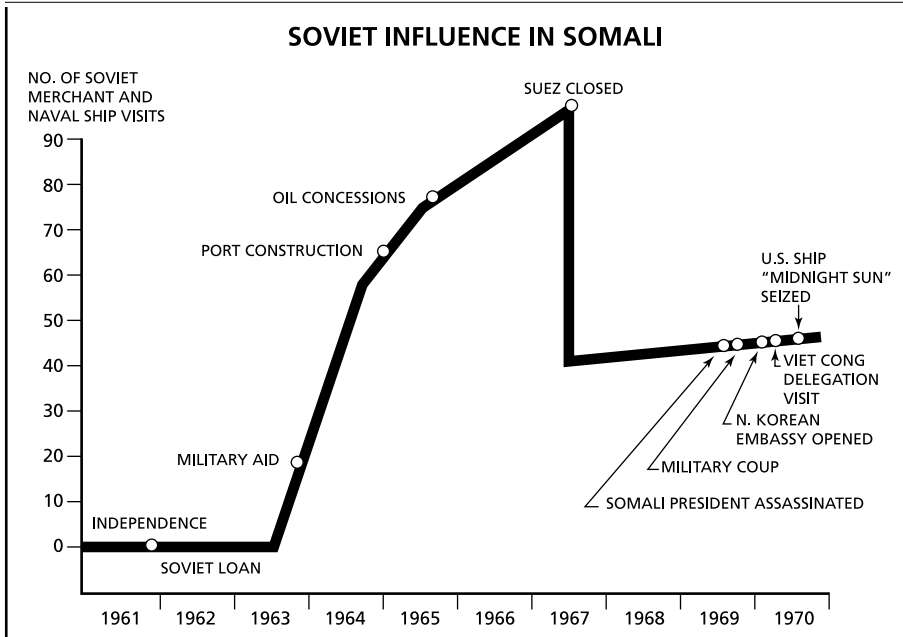
I spoke earlier of the importance we ascribe to the dual-mission carrier in supporting the Nixon Doctrine. It will give more flexibility. When we face opposition at sea, the carriers, now operating both strike and ASW aircraft, can be used to protect the sea lines of communications. When the seas are a sanctuary, as they have been off Vietnam, all the carriers can operate in an air attack role.

These forces can be employed as an advanced force that is capable of rapid commitment, possesses self-contained means of defense, and is easily withdrawn when a task is completed or other forces are deployed.

In this way, Naval projection forces are unique. They can operate as a mobile strategic contingency force—a ready, cutting edge. For instance, if it had been possible to turn over all the air strike effort in Vietnam to land-based air after the first 12 months, we could have pulled out the carriers. It would then have been feasible to reinforce the SIXTH Fleet, which, by showing greater capability from time to time over the past few years, might have proved helpful diplomatically. And we could have created a desirable presence in the Red Sea or Indian Ocean. In another war, at lower force levels, this ability of our projection forces to provide a retrievable strategic reserve after land-based forces are established might well be crucial.

All of a nation's maritime capabilities bear on its influence around the world and its ability to establish a peacetime presence at a point of choice. We need not look hard to see how the Soviets have translated their naval presence into diplomatic leverage. Their strength in the Arab world today is not entirely attributable to the buildup of their Mediterranean fleet, but it was surely an important factor. The Soviets have, in a sense, successfully turned NATO's southern flank.

Another area in which the Soviet Navy has supported political influence in peacetime is the Indian Ocean. Somali is a classic case. This chart, correlating Soviet ship visits with internal events, shows how the Soviets have carried on a coordinated economic and



diplomatic effort, supported by their merchant fleet and backed by their naval presence. It has been a subtle, piecemeal incursion.

First the Somalis were placed in debt to the Soviets. Next, that indebtedness was used to shackle Somali oil imports exclusively to the Soviet Union. Then, the Soviet-trained army executed a military coup. Finally, the campaign has developed into border harassment of our friends in Ethiopia.

ALTERNATIVE COMBINATIONS OF SEA CONTROL AND PROJECTION FORCES

These, then, are some of the complex considerations that have engaged our thoughts in the past two months as we face important program decisions that determine our course for the future. In our reevaluation of the direction to follow, force options are constrained by an imminent decline in the Defense budget and by predictions of a smaller percentage of the national budget for defense in the years ahead. We must find the best combination of the capabilities that we need most. In what has already been said, I have expressed our deep concern that our options are already constricted beyond the point at which we can cope with the threat.

This is an illustrative force, emphasizing projection forces that we could provide in FY-1972 with a budget \$1B lower in expenditures than the fiscal guidance. We are not advocating this budget level, and I shall remind you later of my confidence level in maintaining control of the sea with the best Navy we can design with this budget. Here we have categorized our forces by the broad missions they serve, though there is

FORCE STRUCTURE

\$1 BILLION BELOW FISCAL GUIDANCE

<i>FORCE LEVELS</i>	PRESENT FORCES	CASE A EMPHASIS: PROJECTION FORCES	CASE B EMPHASIS: SEA CONTROL FORCES	CASE C EMPHASIS: BALANCED FORCES
<u>STRATEGIC PROJECTION</u>	41	41	41	41
CVA (CV)	15	—	—	—
CVW	14	12	8	9
AMPHIBS (MEF)	1 1/3	1 1/3	1 1/3	1
DUAL MISSION CARRIER (CV)	—	13	12	12
<u>SEA CONTROL</u>				
CVS (CV)	4	—	—	—
CVSG	4	4	4	4
ESCORTS	226	110	196	180
CRUISERS	10	6	10	6
SS	59	0	31	12
SSN	44	54	54	54
VP RONS	24	10	24	24
<u>SUPPORT FORCES</u>				
URG	75	62	55	56

substantial overlap. One example is our dual-mission carrier, which fits, appropriately, in both the projection and sea control groups. Another consists of the cruiser and destroyer, which often project power ashore. The forces are designated here by the missions that will be affected most by marginal force changes.

This Case A force mix has been designed to provide: first, a moderate level of escort protection for our carrier forces and replenishment groups, and, second, minimal protection for amphibious forces. It assumes that we can operate freely at sea, that the Soviets allow us our sea lines of communication. I consider this an unacceptable risk.

Case B emphasizes sea control forces within the same FY 72 budget constraints. Here we do not have enough carriers for the strike mission requirements described previously for the NATO and Asia situations. There has also been a reduction in our ability to provide an attack and amphibious cutting edge as well as contingency force suitable to the Nixon Doctrine.

These examples show that our choice, within these budget constraints, must be one of relative emphasis between sea control and projection forces. In Case C, both are reduced, but with less effect on sea control forces. As with any compromise, neither type of force meets the need adequately. We are faced with the difficult alternatives set forth for you earlier. These alternatives, in our judgment, make it mandatory for the

national security that there be no reduction of Naval forces beyond the present levels. I want to remind you now of my view that, while we have a somewhat-better-than-even chance of defeating the Soviets with these FY 70 forces, the forces we can provide in a reduced budget—even at the POM level—lower my confidence of success to about 30 percent.

Prospective budget levels and the implications of the current and growing Soviet threat at sea require us to turn our force structure toward the sea control mission and to reduce accordingly the forces that support other missions. In partial compensation, we must take new actions to encourage the build-up of sea control forces by Japan and by NATO countries that have the requisite maritime skill and potential.

OTHER TYPES OF CHANGE

There are other types of change to which we are giving our attention.

In structuring our Navy for the 1970's, we shall seek a balance between maintaining present force levels and modernizing for the future. As an extreme example, if we wanted to maintain our present forces at the expense of modernization within a budget of POM minus \$1B in expenditures, we would have to eliminate every major procurement. This, of course, is out of the question for two reasons:

- The rapidly improving technical quality of the Soviet Navy, and
- The necessity for a balance—between our present capability against the present Soviet threat, and our future capability against a Soviet threat that not only is growing in quality but shows no sign of significant reduction in numbers.

To be able to concentrate our smaller forces rapidly in a single ocean against a sophisticated power and to meet strategic contingencies as well, the Navy—we are convinced—must have more nuclear-powered ships.

The Navy is committed to several complex and expensive systems, i.e., the SSN-688's, S-3A's, F-14's, DD-963's, DLGN's, CVAN's, and LHA's. These large programs account for a major part of the budget. Each, however, fits into the pattern of naval capabilities I have set forth. Though each program will be reviewed against the threat and budget environment, I believe that we can and should complete most of these major projects that are now underway. Abrupt changes in direction of procurement are costly and disruptive, and the threat is rising so sharply that we cannot risk a hiatus in the introduction of new, more capable systems.

Some have said that naval missions can be carried out by forces that are much less sophisticated. Some trade-offs, it is true, should be possible, but I am impressed with the need for sophistication in the sea control mission, to counter the high quality

submarines being produced by the Soviets. We need sophisticated carrier task forces for defense against Soviet anti-ship missiles launched from either submarines, aircraft, or surface ships. As for our employment of projection forces against third countries: we note that the Soviets have, so far, supplied our opponents with highly sophisticated defensive systems. We shall give this subject close attention and justify in detail all programs of high cost.

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- STUDY 6TH FLT DEFENSE
 - CV CONCEPT
 - MARINE AIR SQUADRONS IN CVWS
 - AIR CAPABLE SHIP-LAMPS
 - PG'S AND PGH TO MEDITERRANEAN
 - DECOYS AND DECEPTION DEVICES
 - CAPTOR
 - SSN'S AS TASK GROUP ESCORTS
 - INTERIM SSM
 - SSN WITH SUBSURFACE-TO-SURFACE MISSILE
 - HARPOON
 - NUCLEAR SAM AND SUBROC PROCUREMENT
 - SECURE COMMUNICATIONS
 - REVIEW OF ANTI-SHIP MISSILE DEFENSE
 - POINT DEFENSE
 - BETTER SURVEILLANCE
 - TRAINING SUBS
 - SPARE PARTS
 - CHANGES IN R&D
 - ALLIED SEA CONTROL FORCES
 - SYSTEMS MANAGEMENT
 - CNO EXECUTIVE PANEL
-

Let me report to you now on some actions we have taken—or are proposing—to increase current capability, speed modernization, and offset the actual and potential reduction in our forces.

As a matter of urgency in view of MidEast developments, we are examining ways to enhance the security of the SIXTH Fleet in the Mediterranean. We need a plan of action that will reduce the risk in the event of a confrontation with the Soviet Union.

A FORRESTAL-class CVA is being prepared for operation next spring as a dual-mission CV.

The Marine Corps will provide aircraft squadrons to operate in carrier attack air wings to make up, in peacetime, for the reduction we are taking in Naval aircraft.

We shall enhance surface ship capability for the sea control mission, in face of the Soviet anti-ship missile, by making surface ships air-capable. A Program Coordinator has been designated for the broad program. This is what we have begun:

- An LPD, with six helicopters, will test tactics and procedures for a new breed of sea control escort.
- An interim LAMPS program will place existing helicopters on DLG's and a DLGN.
- To prepare for the longer-range LAMPS program and test the feasibility of an interim capability, we shall test an existing helicopter in a DE-1052 class ship.
- We are speeding development of sensors for helicopters employed in the air-capable surface ship.
- The regular LAMPS program for our new DE's will be accelerated. We may need your help on this proposal. Congress is balking at even the present, modest program.

Before the end of the year, we shall deploy two patrol gunboats (PGs) to the Mediterranean to test their capability in trailing the Soviet missile ships that trail our carriers and other major combatants. This is another action of an interim nature, designed to take some of the initiative from the Soviets, to make them react—as we now must—and to make their operations difficult.

We shall deploy one hydrofoil gunboat (PGH) to the Mediterranean to test its suitability in the trailing role. The results of this evaluation will help in the development of a gunboat that is designed particularly for the mission.

We are increasing ASW R&D for decoys and deception devices and procuring additional torpedo countermeasures equipment to protect our ships.

The Captor mine development program is being accelerated, to give us additional capability against the Soviet submarine. Captor is a deep-moored sensing device that detects a submarine target and fires a MK-46 torpedo at it. It will be useful in our blockade and barrier tasks and may be effective in protecting CVA operating areas against submarine intrusions.

The employment of SSN's as surface task group escorts will be tested. A program to develop an improved submerged communications capability is being undertaken in support of this concept.

A proposal to develop an interim surface-to-surface missile by 1971, using off-the-shelf equipment—either a drone or a modular standard missile—is being readied. This weapons capability will give our ships a reach comparable to that of the Soviets and cut their advantage in that respect. With the carrier force level reduced, our ships cannot always count on air support, and this action will increase our flexibility in the employment of all our forces.

The Chief of Naval Material is conducting a conceptual design study of an advanced SSN with a subsurface-to-surface missile.

For the long term, a proposal will be made to accelerate delivery of the Harpoon missile system, which can be launched from either aircraft or ships against surface targets. This is the first formal program step toward achieving a requisite capability for both these purposes.

We are reviewing the desirability of removing nuclear surface-to-air missiles from our surface ships and terminating the procurement of SUBROC weapons. The prospective trade-off is an increase in our conventional capability.

The procurement of secure communications equipment is being accelerated, to give our ships and aircraft greater freedom of action. This measure, like others, will afford us the greater unit effectiveness that our smaller forces must have.

Defense against the entire spectrum of threats posed by the Soviet anti-ship missile to our task groups and convoys is under study. We are not convinced that our resources for defense are being used efficiently or effectively, and we are going to establish an office with authority and responsibility for centralized direction. We are looking at active and passive electronic warfare, command and control, communications, air and surface weapons, and new sensor areas, so as to match our response most effectively to the threat. As this matter is sorted out, we shall report to you with specific proposals.

We have begun to speed installation of the Basic Point Defense Weapons System and to develop the close-in Vulcan Phalanx gun system. We will thus increase our active defense against current Soviet missiles at low cost, while we seek solutions to the longer-range threat.

A smaller Navy must have better information and intelligence. We are establishing a group to look into the near- and long-term possibilities of better surveillance—both in satellites and underseas—including more effective use of the information already available from multiple sources. I expect a report within a month. In this area, our present view is that strong support from you and funding at relatively low levels could make a significant change in our favor in the power relation at sea.

If required by budget reductions, we are planning to decommission 35 conventional submarines, which now provide about 70 percent of our target services. We propose to retain 10 of these submarines at very austere manning levels and to reclassify them as ATSSs or target submarines. By taking similar action with an additional 7 conventional submarines of the active fleet, we are able to trade-off operating costs and have 17 target submarines with no additional requirement for funds. We thereby, of course, accept some loss of initial wartime combat capability.

To improve spare parts support, and thus material readiness, we are studying the desirability of reprogramming FY 71 funds to rebuild the spares inventory. Last year, an average of 6 percent of our ships were not ready for combat because of spares deficiencies.

We are modifying our investment in research and development. In FY-1972, the changes in emphasis will amount to about \$90M for ASW and about \$150M overall.

In pursuing the question of encouraging our allies to build-up their sea control forces, I have asked Admiral COLBERT* of the Naval War College to examine the need and possibilities. When his survey is complete—within two months—I shall recommend specific measures.

On the systems management side, we are emphasizing the Project Coordinator/Manager concept to deal with options that cut across all the complex disciplines of naval warfare. This concept—as exercised in the past—proved not effective enough; we are investigating ways of providing authority to go with the responsibility. We have already taken steps to ensure that successful project managers stay with their programs and receive promotion recognition.

You will note that these actions look to the present and to the future. They represent an initial program against the primary threat to our control of the seas. Though improved efficiencies in our use of forces may result, I refer you to my earlier remarks, pointing out that any of the potential reductions in our forces leaves the Soviets with the advantage at sea. The prospect that the momentum the Soviets have generated will lead to significant new developments is our primary concern. We must invest heavily in the future, even if we must pay for it by reducing current force levels.

* Vice Admiral Richard G. Colbert, USN, President, Naval War College, 30 August 1968–17 August 1971. As a captain and Naval War College graduate in 1956, Colbert became the first director of the school's new course for international officers, the Naval Command College. He subsequently earned the reputation of being "Mr. International Navy." See Hattendorf, "International Naval Co-operation and Admiral Richard G. Colbert: The Intertwining of a Career with an Idea," in *The RCN in Transition: Challenge and Response, 1910–1985*, ed. W. A. B. Douglas (Vancouver: Univ. of British Columbia Press, 1988), chap. 12; revised and reprinted in Hattendorf, *Naval History and Maritime Strategy: Collected Essays* (Malabar, Fla.: Robert Krieger, 2000), pp. 161–85.

To provide a better sense of direction for research and development, and promote force and strategic planning, I have created a special group, to be known as the CNO Executive Panel. The panel will work directly for me in developing a long-term concept for the Navy and in reviewing our current programs to make sure that they are consistent with that concept.

We are also reviewing the Navy's support structure and identifying special budget problems, so as to eliminate all expenditures that do not contribute to Naval readiness.

You are familiar with the problems we are encountering in scaling down our base and support facilities. Our current survey seeks to reduce overhead while providing a hedge against any future requirement for buildup. This analysis is nearing completion, and we shall come to you soon with a proposal for major savings in the consolidation and closure of facilities.

Similar work, now in progress, will lead to changes in the Navy's general support activities—base operations, training, logistics, command, medical, and individual support. These activities account for 35 percent of the FY 72 POM Annex Navy budget, a substantial increase from the 29 percent of FY 64. We are looking at the factors that have caused this increase. We are also establishing procedures to consider support and force implications simultaneously, providing a degree of effectiveness that has not been possible till now. In the meantime, our planning assumes that general support for each force category will be changed approximately in proportion to the changes in force level.

The Navy has a special problem in a serious expenditure hump in FY 71 that could induce even deeper cuts in force level. For example, a delay of several months in required decisions on inactivations of ships and reductions in civilian employment would cost the Navy on the order of \$75M. Our FY 71 budget is already tight, and trade-offs for the \$75M will be hard to find. Rumors are rife in the fleet; the uncertainty has created serious morale problems, with attendant effects on personnel retention. We need your help and shall continue to work closely with you on this.

We face a similar problem in out-year level funding. Inflation—at current or reduced rates—amounts to a cut in defense resources. For example, a 5% inflation effectively cuts \$1B from the Navy budget and reduces the size of the Navy that can be supported.

The change of direction that I have described will not improve our exercise of power at sea unless we are able to manage our personnel better. We must set a clear purpose within the Navy. We must make naval service more attractive. I think measures to achieve these goals offer the greatest single potential payoff in increased combat readiness. Nothing less than an all-volunteer force will be acceptable.

PERSONNEL RETENTION AND MOTIVATION

- FAMILY SEPARATION
 - COMPENSATION
 - HOUSING/FACILITIES
 - JOB SATISFACTION
-

There are several critical areas that must be dealt with directly before retention rates can be improved and shortages in experience corrected.

First, family separation must be reduced significantly. Second, pay must be raised to a level that reflects the unique problems associated with a Naval career. Third, Naval personnel support facilities must be improved. Last—and more generally—we must find new ways to restore the zest, challenge, and fun of a Naval career.

DAYS AT HOME FY 70

SHIP TYPE	DAYS IN HOME PORT (PER YEAR)	NIGHTS AT HOME	
		1 IN 3	1 IN 6
		(WATCHES)	
ATTACK CARRIERS	91	60	75
CRUISERS	146	97	122
DESTROYERS*	168	112	140
AMPHIBS	168	112	140
MINE COUNTERMEASURES	199	131	165
UNREP	128	85	107
SUBMARINES	168	112	140
CVS	193	129	161

*INCLUDES SOME NON-DEPLOYING DE's

Our surveys have shown consistently that family separation is a key factor in the career decisions of most Navymen. This slide shows the average number of days spent by our ships in their home ports last year. Some of our career men in deprived ratings are at sea for more than 7 years at a stretch on schedules such as these.

ACTION TAKEN TO MINIMIZE FAMILY SEPARATION

- A. CONUS IN-PORT POLICIES
 - 1. 30 DAYS LEAVE FOR ALL CHANGES OF DUTY STATION
 - 2. LEANER WATCH SECTIONS
 - 3. ADDITIONAL ADMINISTRATIVE AND WATCH STANDING SUPPORT BY SHORE COMMANDS FOR TENANT SHIPS
 - 4. LEAVE FOR 50% OF ALL CREWS DURING POST-DEPLOYMENT PERIOD
 - 5. IMPROVED PIER FACILITIES TO PROVIDE UTILITIES FOR ALL POST-DEPLOYMENT SHIPS
 - 6. IMPROVED IN-PORT STABILITY BY 40% REDUCTION OF SCHEDULE CHANGES
 - B. OVERSEAS POLICIES
 - 1. CONUS LEAVE FOR 5% OF DEPLOYED CREWS
 - 2. NAVAL-SPONSORED/COORDINATED FLIGHTS TO MED FOR DEPENDENTS
-

Here are some actions we have initiated—or intend to initiate—to increase the amount of time that Navymen can spend with their families. We are willing to accept the slight reduction in our CONUS training and readiness as the price of increases in time at home—“family” time.

DEPLOYMENTS		
FOR 1:3 ROTATION FOR CASE C FORCES		
SHIP/UNIT TYPE	COMMITMENT LEVEL	
	NOW	FORCE C
ATLANTIC		
CV	2	2
CRUISER	2	1
DESTROYERS	29	21–23
PACIFIC		
CV	3	2
VPRON	5	4
CRUISER	2	1
UNREP	17	11
SS/SSN	9	6

These actions are clearly inadequate, however, unless they are coupled with real reductions in Naval commitments commensurate with reductions in force levels. Consequently, if force levels are reduced further, we will ask the Joint Chiefs of Staff to support a selective reduction of our forward deployments, to ensure a one-in-three rotation policy for deployable units. The resultant reductions in our deployed forces for Case C, based on a budget \$1B lower in expenditures than the fiscal guidance, are shown here. The main effect, of course, would be to reduce further the number of attack carriers in the SEVENTH Fleet to only 2. There would be no significant decrease in our Mediterranean commitment. At a ratio of 1:3, or at the more desirable peacetime 1:4, we would retain the capability of a strategic contingency force for quick reaction.

RECOMMENDED PERSONNEL LEGISLATION	
	ADDITIONAL COSTS/YR.
• SEA PAY	\$71.7M
• OFFICER CONTINUATION PAY	12.1M (FIRST YEAR) (\$20–30M SAVINGS IN OUT YEARS)*
• SECOND TERM VARIABLE REENLISTMENT BONUS	35.3M
• VARIABLE HOUSING ALLOWANCE	20.6M
• QUARTERS ALLOWANCE FOR BACHELORS ON SEA DUTY	57.2M
TOTAL	\$196.9M/YR.

Raising pay requires your personal support more than any other single subject. In the absence of comprehensive salary reform legislation, I solicit your support toward the enactment of legislation in each of these areas.

Sea Pay constitutes the single most important “people legislation” sponsored by the Navy, because it identifies and provides compensation for the unique, hardship aspect of a Navy career. We had sea pay before 1949. It amounted to 10% and 20% of the base pay of officers and enlisted men respectively. In 1949, payment of sea pay to officers was discontinued, and the enlisted entitlement was changed to a flat rate; for a typical second class petty officer, it is now 4.3% of base pay. Our proposal, which is also for a flat rate, increases entitlement (to 12.6% of base pay for the second class petty officer), extends it to officers, and relates increases in sea pay to years spent at sea rather than seniority. This legislation has been returned from the Bureau of the Budget with the recommendation that it be studied further. We will discuss this matter with you separately and need your support in gaining approval of this vital proposal. The other recommended legislation is concerned with specific trouble spots in retention and puts the money where the problems are.

A compensation-related problem is the poor condition of many of our housing units and training facilities. We are exploring ways to engage the Seabees and other self-help forces more actively in such construction forces. To stretch our construction dollars, we are investigating innovative financial approaches. As an example, the Navy Relief Society has agreed to extend a \$2M low-interest loan to construct personnel facilities. The shortfalls in our current facilities are so acute that we are recommending changes in our MILCON, even at the price of smaller forces today.

SEA-SHORE ROTATION

ARTIFICER RATINGS

RATING	AVERAGE YEARS OF SEA DUTY IN 20 YEAR CAREER
BOILER TENDER	14–16
ELECTRICIAN MATE	14–16
MACHINIST MATE	14–16
ENGINEMAN	12–14
SHIPFITTER	12–14
INTERIOR COMMUNICATIONMAN	12–14
SHIPSSERVICEMAN	12–14
MACHINERY REPAIRMAN	12–14
DISBURSING CLERK	10–12

The family separation problem is especially acute in artisan enlisted ratings for which there is a paucity of shore assignments in the Navy. Many of these petty officers have skills that are usable in other areas of government—such programs as the Job Corps and

VISTA, for instance. As an interim objective, I request your support in helping to ease our severe rotation problems by the authorization of 4,000 additional billets ashore. We would try to make as many of them reimbursable as possible, that is, other government agencies would repay the Department of Defense. But even if the entire cost came from the Navy’s budget, I would regard the expenditure as well worth our while.

INITIATIVES TO INCREASE JOB SATISFACTION

- A. IMPROVED JOB ASSIGNMENT POLICIES
 - 1. INCREASE ATTENTION TO OFFICER JOB ASSIGNMENTS.
 - 2. PROVIDE INDIVIDUAL ATTENTION TO JOB ASSIGNMENTS FOR ENLISTED MEN.
 - 3. CREATE MORE CHALLENGING ASSIGNMENTS FOR THE 500 TO 600 ENLISTED MEN WITH ADVANCED DEGREES.
- B. EARLIER RECOGNITION AND GREATER RESPONSIBILITY FOR TOP PERFORMERS
 - 1. DISSOLVE CONVENTIONAL CAREER “PATTERNS” FOR TOP TEN PERCENT
 - 2. DOUBLE NUMBERS OF PEOPLE PROMOTED EARLY
 - 3. SUBSTANTIALLY INCREASE COMMAND OPPORTUNITY FOR LIEUTENANTS
 - 4. ESTABLISH TRIAL PROGRAM TO INCREASE RESPONSIBILITY IN GRADE IN ONE DESTROYER AND FOUR AVIATION SQUADRONS
 - 5. EXCHANGE DUTY ASSIGNMENTS BETWEEN AVIATORS AND SURFACE OFFICERS TO BREAK DOWN TRADITIONAL ASSIGNMENT CONSTRAINTS

To restore the zest of going to sea, we have initiated a number of programs; some are outlined here. I hope that the net effect of these and related initiatives will be to dissolve conventional—and now obsolete—career patterns, encourage greater latitude and more personal attention in both officer and enlisted assignments, provide increased responsibility earlier, encourage a bolder and more innovative philosophy of command, and open new avenues of communication.

The turbulence associated with rapid force reductions has a very real bearing on retention. To achieve lowered budget targets, we have had to take personnel release and redistribution actions that degrade fleet readiness and undercut our retention efforts. In my opinion, if we drop below 575,000 in FY 72, we will jeopardize seriously our ability to “put people first.” Yet, force mixes A, B and C all could be as low as 550,000 depending on actions taken in the shore establishment. Even a figure of 575,000 would require stringent personnel actions, starting this year. Further reductions would have severe and lasting effects on the Navy’s readiness and retention.

ALTERNATIVE ACTIONS TO REDUCE MILITARY MANPOWER

ACTIONS REQUIRED FY 71 & 72	END FY 72 MANPOWER	
	575,000	515,000
NO. OF PERSONEL RELEASED EARLY	180,000	243,000
NO. OF SENIOR ENLISTED PROMOTIONS	TOKEN NOS. ONLY	NONE—RESCIND 4500 ANNOUNCED
NO. OF JUNIOR OFFICER RIFs	3300	8200
OFFICER PROMOTION ACTIONS	NONE	DRASTIC REDUCTION IN PROMOTIONS TO LCDR, CDR, CAPT

SECDEF SUPPORT NEEDED IN FOLLOWING RETENTION-RELATED AREAS:

1. SELECTIVE REDUCTION OF FORWARD DEPLOYMENTS TO INSURE ONE-IN-THREE ROTATION POLICY THIS YEAR AND ONE-IN-FOUR POLICY BY F Y 72
 2. DISSOLUTION OF FIXED COMMITMENTS, TO PERMIT GREATER NAVAL FLEXIBILITY IN EXTENDING PEACETIME PRESENCE
 3. BILLETS IN GOVERNMENT AGENCIES FOR RATINGS WITH INADEQUATE SEA/SHORE ROTATION
 4. SPECIFIC PAY LEGISLATION
 5. FORCE STRENGTH NO LOWER THAN 575,000
-

These, in sum, are the areas related to retention in which we will need your personal support.

SUMMARY

This completes the detailed part of my presentation. I would like now to summarize my main points. It is from these that our proposals will originate in the immediate future; we will request your support.

THE SOVIET NAVY HAS ATTAINED SIGNIFICANT WORLDWIDE CAPABILITIES

- IT IS CONTESTING U.S. FOR CONTROL OF THE SEAS
 - ITS FORCES ARE GROWING IN QUALITY AND QUANTITY
 - WITH ITS PRESENT MOMENTUM, FUTURE IMPROVEMENTS ARE CERTAIN
-

1. The Soviet Navy has attained significant worldwide capability toward controlling the seas. The Soviet forces are increasing in quantity and quality and have a momentum of development that suggests further sharp improvements in the future.

- IF U.S. NAVAL FORCES ARE REDUCED BELOW THE END FY 70 LEVEL, SIMULTANEOUS TASKS AGAINST THE SOVIETS IN THE PACIFIC AND ATLANTIC MAY NO LONGER BE FEASIBLE
-

2. The Soviets have a two-ocean Navy. If our Naval forces are reduced below the level of end FY 70, we will no longer be able to oppose them simultaneously in the Atlantic and Pacific Oceans.

- SEA CONTROL MISSION SHOULD HAVE PRIORITY OVER PROJECTION OF POWER ASHORE
 - PROJECTION FORCES SHOULD BE STRUCTURED TO:
 - SUPPORT NIXON DOCTRINE IN ASIA
 - PROVIDE STRATEGIC CONTINGENCY FORCE
-

3. The Soviet Naval threat, our commitments abroad, and the credibility of our sea-based strategic deterrent demand that the sea control mission be assigned priority of resources at the expense of projection of power ashore. This action will reduce the capability of our projection force to support the Nixon Doctrine in Asia and to serve as a strategic contingency force.

-
- IF THE SOVIETS CHALLENGE THE U.S. AT SEA, OUR CHANCE OF DEFEATING THEM IS:
 - 55% WITH PRESENT FORCES
 - 30% WITH POM-72 FORCES
-

4. If the Soviets challenge us at sea, either as an adjunct to conflict on land or in a war restricted to the sea, we will have, in my judgment, a 55% chance of defeating them with our present forces. The forces at the POM-72 level, even after optimization, reduce my confidence of success to about 30%. The U.S. may thus be unable to support or hold together the Free World alliance in the face of a conflict with the Soviets at sea.

-
- WE ARE PROPOSING ACTIONS THAT CAN, WITHIN FISCAL CONSTRAINTS:
 - INCREASE OUR CAPABILITY FOR SEA CONTROL
 - RETAIN SOME PROJECTION FORCES TO SUPPORT NIXON DOCTRINE
 - INCREASE COMBAT EFFECTIVENESS
 - THESE ACTIONS CANNOT:
 - OFFSET FORCE REDUCTIONS
 - REVERSE THE CONSEQUENTLY ADVERSE POWER RELATIONSHIP WITH THE SOVIETS
-

5. We propose a number of actions designed to increase our capability for sea control while retaining some forces for projection of power ashore in support of the Nixon Doctrine—all within the fiscal restraints we face. These actions are intended to increase combat effectiveness within a given force structure and funding level, but do not offset the potential force reduction or reverse the critically adverse power relationship with the Soviets implicit in that reduction.

-
- GIVEN CURRENT AND POTENTIAL FY 72 FISCAL GUIDANCE, THE NAVY:
 - MUST CUT FORCES TO MAKE FUNDS AVAILABLE FOR:
 - DEVELOPMENT OF NEW WEAPONS SYSTEMS
 - MODERNIZATION OF FORCES
-

6. Under the current and potential FY 72 Fiscal Guidance, we see no alternative to accepting some further reduction in force levels, so that development of new weapons systems and modernization of forces can continue.

-
- NAVY WILL PAY ATTENTION TO ALL HIGH-COST PROGRAMS; SOPHISTICATION WILL BE ADDED ONLY WHERE IT IS NEEDED TO MATCH THE SOVIET THREAT.
-

7. We shall pay particular attention to all high-cost programs, adding sophistication only where the threat makes it necessary. The high quality of some of the Soviet systems, particularly in submarines, missiles and air defense, sets some limits to that objective.

-
- U.S. SHOULD ENCOURAGE APPROPRIATE ALLIES TO BUILD UP THEIR SEA CONTROL FORCES
 - U.S. MUST REALIZE THAT THE COMMITMENT OF EVEN OUR CLOSEST ALLIES WILL DEPEND ON THEIR COMPARATIVE ASSESSMENT OF U.S. AND SOVIET NAVAL POWER
-

8. We must engage the understanding and commitment of appropriate allies to build up their own sea control forces. This objective should be coordinated closely with our capabilities. In pursuing this course, we must realize that the commitment of even our closest friends will depend on their assessment of our naval power, compared with the Soviets.

-
- FUNDING ASSISTANCE IS REQUIRED FOR ULMS IOC IN LATE 1970's
-

9. We shall require assistance in funding an acceleration in ULMS, if directed to achieve an IOC in the late 1970's.

-
- DEVELOPING PLAN OF ACTION TO INCREASE 6th FLEET DEFENSIVE CAPABILITIES
-

10. We are examining the situation in the Mediterranean, to develop a plan of action that will increase the defensive capabilities of the SIXTH Fleet in the event of hostilities, to permit it to carry out its offensive mission.

-
- CENTRALIZED CONTROL OF EW & COMMAND & CONTROL AREAS
-

11. We are establishing an office with the necessary authority and responsibility to centralize direction of electronic warfare and command and control.

-
- SURVEILLANCE IMPROVEMENTS WILL PROVIDE LARGE RETURNS IN COMBAT CAPABILITY AT LOW COST
-

12. We anticipate large returns in combat capability at low cost by taking strong actions to improve our capabilities for satellite and underseas surveillance.

-
- THE PERSONNEL SITUATION REQUIRES IMMEDIATE ATTENTION:
 - TO REDUCE COSTS NOT RELATED TO COMBAT STRENGTH
 - TO INCREASE READINESS
 - TO REEMPHASIZE PURPOSE
 - NAVY
 - IS GIVING THIS AREA THE CLOSEST ATTENTION
 - WILL SACRIFICE FORCE LEVELS NOW IN EXCHANGE FOR LONG-TERM GAINS IN PERSONNEL READINESS
-

13. The most urgent action within the Navy, to reduce costs that are not related directly to combat strength, to increase readiness, and to reemphasize purpose lies in the personnel field. We are giving this area the closest attention. Some proposals have gone forward to you; others are in process. We are prepared to make some sacrifices in immediate force level in exchange for potential gains in personnel readiness. Your support in this key and vital matter is essential.

We are not presenting specific matters for your approval today. However, the actions we are taking or plan to take to set the new direction, will be introduced into the budget process. As these, and related, papers go forward we will request your support in each instance.

Missions of the U.S. Navy

While serving as President of the Naval War College, and as Admiral Zumwalt neared the end of his term of office as Chief of Naval Operations, Vice Admiral Stansfield Turner wrote an article for the Naval War College Review entitled “Missions of the U.S. Navy.” Turner’s article was designed to support the ideas in “Project SIXTY” and to provide a clear rationalization of the broad concepts it embodied. Working with Commander George Thibault as his sounding board and editor, Turner further developed some of the thoughts that he had had in 1970 during the early conceptualization of “Project SIXTY” and joined these to some of the broader thinking that he had developed in changing the basic curriculum at the Naval War College in 1972–74.†*

In planning a naval force for the future, Turner felt strongly about the need to change the thinking of officers within the U.S. Navy in a way that emphasized the Navy’s overarching missions, instead of promoting particular communities within the Navy or particular types of ships and vessels. To this end, he stressed the interdependence among the four principal naval missions and the point that sea control was the essential prerequisite to power projection and other naval missions.

At the outset, Turner was impatient with Mahan’s term “command of the sea.” “What does that mean?” he asked. “There was no way to translate that into guidance for what kind of Navy we needed in terms of how many submarines, destroyers, aircraft carriers. I wanted to put meat on the concept to let people make decisions.”‡ Turning Mahan’s phrase around, he coined the term “sea control” and to that added power projection, naval presence, and strategic deterrence. In the thirty years since its publication, Turner’s

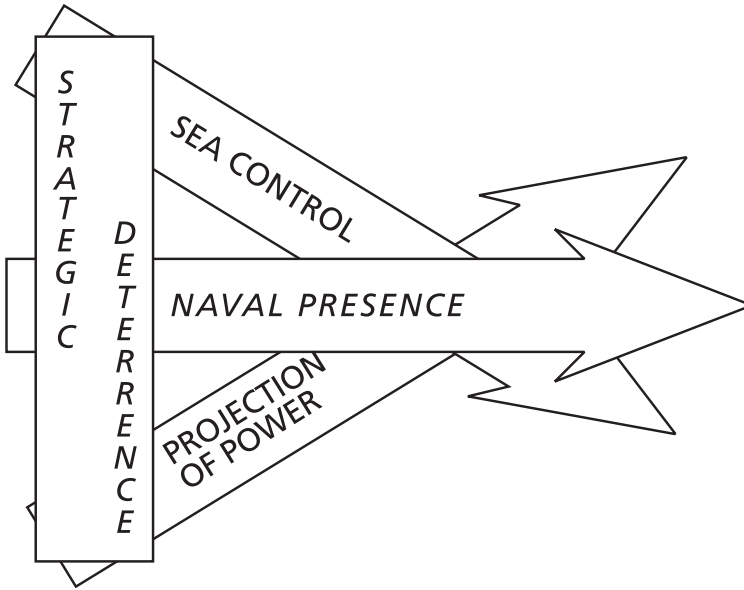
* Stansfield Turner, “Missions of the U.S. Navy,” *Naval War College Review* 26, no. 5 (March–April 1974), pp. 2–17, reprinted vol. 51, no. 1 (Winter 1998), pp. 87–103. A modified version of the original article appeared in the U.S. Naval Institute *Proceedings* (December 1974), pp. 18–24.

† See John B. Hattendorf, B. Mitchell Simpson III, and John R. Wadleigh, *Sailors and Scholars: The Centennial History of the Naval War College* (Newport, R.I.: Naval War College Press, 1984), chap. 11, pp. 273–95. Also Captain George Thibault, USN (Ret.), e-mail to Hattendorf, 23 July 2007.

‡ Telephone conversation with Admiral Stanfield Turner, USN (Ret.), 27 July 2007.

article has become highly influential within the U.S. Navy and has been widely cited by academics in the defense literature. ♦♦

Usefulness of Categorizing Navy Missions



INTERDEPENDENT NAVAL MISSIONS

Observers of military affairs will have noted a changed naval lexicon over the past several years. To those accustomed to phrases such as “sea power,” “command of the seas,” “commerce warfare,” and “amphibious warfare,” the new terms “strategic deterrence,” “sea control,” and “presence” may seem to be just a new jargon. Not so. Since 1970 there has been a redefinition of traditional U.S. naval roles and missions. The primary purpose of this redefinition is to force the Navy to think in terms of output rather than input.

Why must we emphasize output? First, a nation of concerned free citizens and skeptical taxpayers is naturally more interested in what is harvested than in what is sown. By measuring the value of output in terms of national objectives, the country can rationally decide what resources it should allocate to the Navy. Input categories such as manpower, ships, aircraft, and training are of little help in trying to determine why we need a Navy or, if we do need one, how big it should be and what it should be prepared to do.

Second, focusing on missions helps tactical commanders to keep objectives in mind. Antisubmarine warfare (ASW) tacticians often over-concentrate on killing submarines when their ultimate objective is to ensure safe maritime operations. An example of a good sense of objectives was the Israeli achievement of air superiority in the 1967 war. Even though air superiority is traditionally thought of as a function of dogfight tactics, the Israelis recognized that shooting the enemy from the air was not the objective. Destroying Egyptian aircraft was. They employed deep surprise attacks on enemy airfields to achieve this objective.

Third, an amorphous mass of men, ships, and weapons is difficult to manage because it is difficult for an individual to visualize. By subdividing these masses into their expected output, or missions, we are able to establish priorities for allocating resources—to know how much we are spending for different objectives and to judge their consonance with national strategy.

Mission categorization is useful in less abstract decisionmaking also. For instance, we shall propose that the sea control mission is executed by tactics of sortie control (barrier operations), chokepoint control, open-area operations, and local defense. Different platforms have different utility in each of these tactics. Generally speaking, maritime patrol aircraft are best for open-area operations, surface escorts best for local defense, and submarines best for chokepoint operations. Although each of these forces has secondary applications, resource distribution among them will be dictated by our evaluation of which tactics are going to be most important to us.

Categorization of mission tactics can also be used at even more detailed levels of resource allocation. A submarine designed for chokepoint operations should emphasize quietness at the expense of speed; a submarine for local or escort defense needs speed even at the expense of quietness. If we understand this, we will trade off speed versus quietness according to our evaluation of probable employment.

Fourth, an understanding of missions assists in selecting the best among several competing systems. A research program may develop five new air-launched munitions, but we may not be able to afford production of more than three. We shall divide tactical air projection tactics into deep interdiction, battlefield support, close air support, and counter air/antiair warfare. Each of these makes slightly different demands for weapons. While precision is mandatory for deep interdiction, it is critical in close air support. Surely in our mix of three new weapons we will want at least one that stresses accuracy. If this seems obvious, an examination of history will show that the military has sometimes become hypnotized by the weapons needed or used in one particular tactic or mission to the neglect of newly emerging requirements.

Finally, stressing missions helps to ensure that members of the organization focus on the whole rather than on one of its parts. This can help keep vested interests in proper perspective. Even the most professional, well-motivated individual can become so committed to a particular missile system, type of ship or aircraft, or special personnel program that he loses sight of what is best for the whole organization.

Evolution of Naval Capabilities and Missions

How did the Navy come to define the four mission areas as strategic deterrence, sea control, projection of power ashore, and naval presence? It was evolutionary. Navies have not always had each of these missions, nor is this likely to be the definitive list of naval missions.

The first and only mission of the earliest navies was sea control. A classic example of the importance of being able to move military forces by sea is the battle of Salamis in 480 B.C. The Persian armies had pushed the Greeks to the wall. The Athenian admiral Themistocles turned the tables by soundly defeating the Persian fleet at Salamis. Cut off from reinforcement and resupply, the Persians left Athens and Attica.

A few decades later, in the Peloponnesian Wars, Athenian sea control repeatedly permitted outflanking the land-based Spartan campaign. In the Punic Wars, Rome's exercise of sea control prevented the Carthaginians from being able to support Hannibal. And so it went. There were many technological milestones, new tactical concepts, and maritime initiatives, but the basic mission of navies was to ensure the safe movement of ground forces and their supplies across the sea.

In time, trade routes flourished, exploration became more far-ranging, the horizons of imperialism widened, commerce grew, and with it, piracy. Nations began to demand security for their endeavors. Broad command of the sea became the *sine qua non* of economic growth and well being. The nature of sea control evolved to include the protection of shipping for the nation's economy as well as its overseas military expeditions. By the same token, denial of an enemy's use of the seas for commerce as well as military purposes became an important element of warfare—blockade hurt economies and warmaking potential.

By the early 19th century, another important naval mission had evolved—the projection of ground forces from the sea onto the land. While there are many examples of landing operations throughout military history, amphibious warfare in the modern sense began during the wars of the French Revolution. Examples are the British amphibious assault operations at the Helder (1799) and Aboukir (1801). Ground troops, traditionally transported by sea to some staging area, began to use sea platforms as combat springboards. A new dimension in tactics was given to commanders

in the projection of power ashore through amphibious assault. This also extended the traditional sea control mission. In addition to protecting supply reinforcement and economic shipping, navies now had to protect the amphibious assault force.

Also during the 19th century, the term “gunboat diplomacy” came into the naval vocabulary. In the quest for colonies, nations paraded their naval forces to intimidate sheiks and pashas and to serve warning on one another. In time the range of this activity extended from warning and coercion to demonstrations of good will. It has come to be known as the naval presence mission. Sea control, projection of power ashore by amphibious means, and naval presence were the missions of navies through the end of World War II.

During that war, naval tactical air was used primarily in the sea control mission (e.g., Midway, Coral Sea, and the Battle of the Atlantic) and secondarily in direct support of the amphibious assault mission. When the war ended, however, there was no potential challenger to U.S. sea control. In essence, the U.S. Navy had too much of a monopoly to justify a continuing sea control mission. It was a navy in quest of new missions. Two arose.

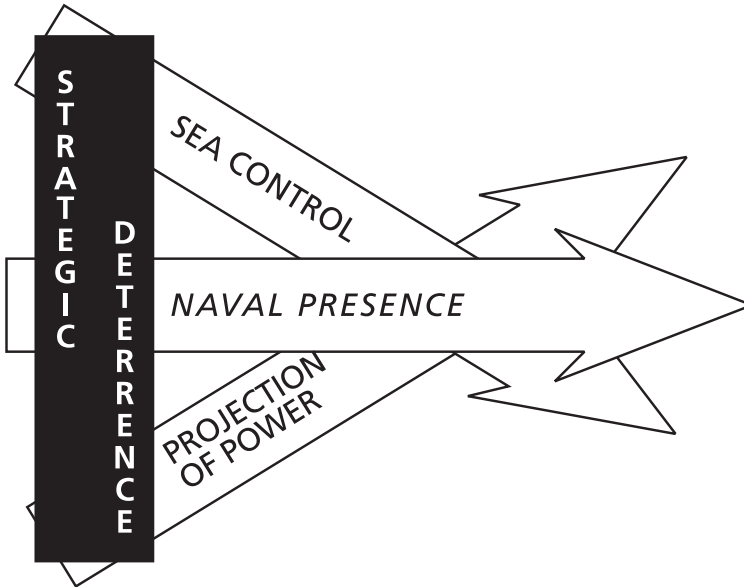
The innovation in missions came from the final stages of World War II, when naval tactical airpower played a role in the bombing of the Japanese home islands. Postwar improvements in aircraft and munitions made it logical to extend this use of naval airpower. In a sense, the tactical air projection mission was born. The Navy staked out its claim to the use of airpower in support of land campaigns: strategic air attack on enemy industry, transportation, and cities; air superiority over the battlefield; and close air support of ground forces. Its value was demonstrated early in the Korean campaign, where there were few alternative means of providing air support ashore.

The second innovation in naval missions came with the introduction of strategic deterrence as a national military requirement. The combination of improved aircraft performance and smaller packaging of nuclear weapons made the aircraft carrier capable of contributing to this new mission. With the Navy struggling to readjust its missions to peacetime needs, and the U.S. Air Force establishing its own place in the military family, it is understandable that there was a sense of competition for this new role. However, by the mid-1960s, the development of the Polaris ballistic missile submarine (SSBN) concept eliminated any question of appropriateness of this mission for the Navy.

At about the same time, the dramatic and determined growth of the Soviet naval challenge caused mission priorities to begin to shift and brought about a resurgence of traditional sea control requirements. Today, the balance of naval resources and attention devoted to each of these four missions—strategic deterrence, sea control, projection of power ashore, and naval presence—is especially difficult, because of their complex interdependence and because almost all naval forces have multimission capabilities.

The distinction between the four missions is primarily one of purpose. Despite these inevitable overlaps and interdependence, we can understand the Navy far better if we carefully examine each mission individually. We must know what each mission's objectives are so that we do not overlook some useful new tactic or weapon and so that we can strike the proper balance whenever these missions compete for resources.

Definition of Naval Missions and Discussion of Their Forces and Tactics



Strategic Deterrence Mission. Our strategic deterrence objectives are:

- To deter all-out attack on the United States or its allies;
- To face any potential aggressor contemplating less than all-out attack with unacceptable risks; and
- To maintain a stable political environment within which the threat of aggression or coercion against the United States or its allies is minimized.

In support of these national objectives, we have three principal military “tactics” or force-preparedness objectives. The first is to maintain an assured second-strike capability, in the hope of deterring an all-out strategic nuclear attack on the United States. Today that means dissuading the Soviets from starting a nuclear war. We hope to achieve this by maintaining a strategic attack force capable of inflicting unacceptable damage on any

enemy even after he has attacked us. The Navy's Polaris/Poseidon/Trident forces are fundamental to this deterrence because of their high nuclear survival probability.

A second tactic is to design our forces to ensure that the United States is not placed in an unacceptable position by a partial nuclear attack. If the Soviets attacked only a portion of our strategic forces, would it then make sense for the United States to retaliate by striking Soviet cities, knowing that the Soviets still possessed adequate forces to strike our own cities? In these circumstances do we need an alternative of controlled response? This means making our strategic strike forces quickly responsive to changes in targeting and capable of accurate delivery. SSBN forces can be well tailored to these requirements.

A third objective is to deter third powers from attacking the United States with nuclear weapons. Because of the great disparity between any third country's nuclear arsenal and ours, the same forces deterring the Soviet Union should deter others.

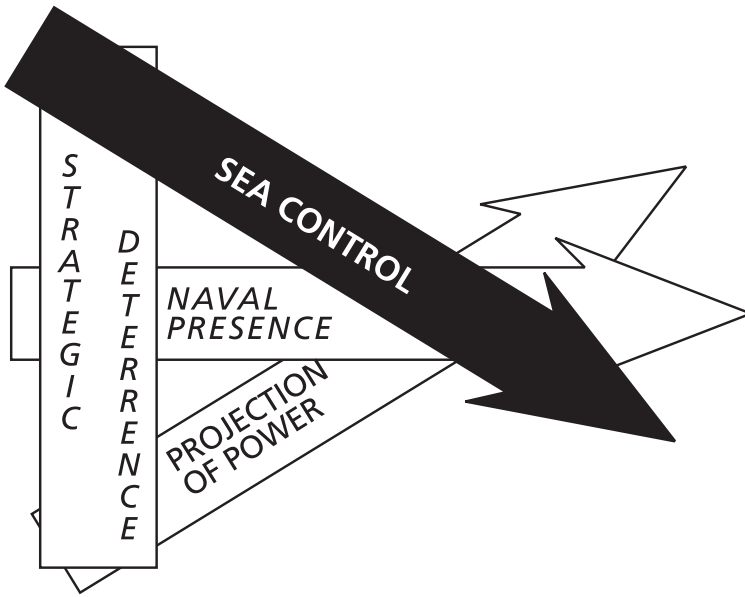
Finally, we maintain a quantity and quality of strategic forces which will not let us appear to be at a disadvantage [with respect] to the Soviet Union or any other power. If we were to allow the opinion to develop that the Soviet strategic position is markedly superior to ours, we would find that political decisions were being adversely influenced. Thus we must always keep in mind the balance-of-power image that our forces portray to the non-Soviet world. In part, this image affects what and how much we buy for strategic deterrence. In part, it affects how we talk about our comparative strength and how we criticize ourselves.

In summary, the strategic deterrence mission is subdivided into four tactics:

S T R A T E R G I C D E T E R E N C E

- Assured Second Strike
- Controlled Response
- Deter Third Powers
- Balance of Power Image

There is very little overlap between strategic deterrence and other Navy mission areas at present. However, significant improvements in enemy ASW technology could reduce the ability of SSBNs to survive without assistance from friendly sea control forces. With this exception and the fact that aircraft carriers still possess the potential for nuclear strikes, naval forces for strategic nuclear deterrence are almost exclusively devoted to that mission.



Sea Control Mission. The term “sea control” derives from the traditional phrase “control of the sea.” This change in terminology may seem minor, but it is a deliberate attempt to acknowledge the limitations on ocean control brought about by the development of the submarine and the airplane.

In the 18th and 19th centuries, we passed through a period of maritime history in which full regulation of the seas in wartime was the ambition of Great Britain. Initially, this could be accomplished through possession of a superior sailing fleet. The enemy’s harbors were closely watched by patrolling cutters and frigates. Ships of the line were called forth to defeat the enemy or at least to force him back into port whenever he dared to sortie. Later, when steam propulsion afforded ships greater mobility, the British found that they needed both coaling stations and control of vital chokepoints around the world. The intention was still to be able to move a superior fleet into position for a showdown engagement before an enemy had the opportunity to use the seas

for his advantage. The term “control of the sea,” as used by Mahan, meant both denying use of the seas to the enemy and asserting one’s own use.

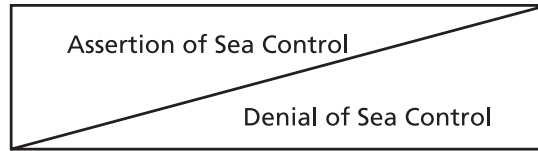
British and German naval strategies in World War I reflected this heritage. Both navies believed that a decisive encounter of their battle fleets would determine control of the seas. Hence caution dominated the tactics of Jutland. Germany challenged British reliance on a superior battle fleet first by employing surface-ship commerce raiders, then by unrestricted submarine warfare. The British reacted by attempting to blockade the German U-boats with mines laid across the exit to the North Sea. It failed. Few naval strategists understood how radically the concept of “control of the seas” was altered by the advent of the submarine. British, German, Japanese, and American preparations for World War II all concentrated on potential battle fleet actions. Only a few voices pointed out that an additional submarine might be more useful than another battleship or two.

Equally few strategists forecast the dominant role that control of the air over a surface fleet would have. However, in March 1941, off Cape Matapan in Greece, the first engagement of major surface forces since Jutland demonstrated that it was the presence of a British aircraft carrier that allowed an otherwise weaker force to prevail. By the end of World War II the idea of totally denying the seas to one’s enemy while asserting one’s own exclusive use had been overtaken by technology. On the one hand it was nearly impossible to deny an enemy submarine fleet access to the seas; on the other, there were likely to be areas of the sea where enemy airpower would make the assertion of one’s presence prohibitively costly. Yet, for the first several decades after the Second World War, the U.S. Navy had such a monopoly on seapower that the term “control of the sea” understandably continued to carry its long-established connotation.

The new term “sea control” is intended to connote more realistic control in limited areas and for limited periods of time. It is conceivable today to exert air, submarine, and surface control temporarily in an area while moving ships into position to project power ashore or to resupply overseas forces. It is no longer conceivable, except in the most limited sense, totally to control the seas for one’s own use or to deny them totally to an enemy.

This may change with evolving technology and tactics, but in the meantime we must approach the use of the term “sea control” from two directions: denying an enemy the right to use some seas at some times, and asserting our own right to use some seas at some times. Any seapower may assert its own right to use the seas and deny that right to the enemy at any given time. Its efforts will usually be divided between the two objectives. For instance, in figure 1, if the United States were attempting in wartime to use the North Atlantic to reinforce Europe, the greater percentage of its effort would be

United States



Opponent

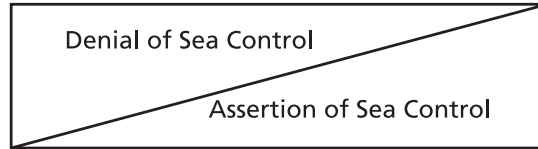


Figure 1

on asserting sea control. In a situation like the Vietnam War, we operated on the other extreme, since our use of the seas was not challenged, but we did make a substantial effort to deny the other side access to Haiphong. An opponent, of course, will usually respond with countering objectives and tactics.

Four U.S. national objectives which call for asserting our use of the sea and, by the same token, denial of them to an opponent are:

- To ensure industrial supplies
- To reinforce/resupply military forces engaged overseas
- To provide wartime economic/military supplies to allies
- To provide safety for naval forces in the projection of power ashore role.

There are four different tactical approaches for achieving these sea control objectives:

Sortie Control. Bottling up an opponent in his ports or in his bases can still be attempted. As opposed to the 18th and 19th-century tactic of forcing a major fleet engagement at sea, today's blockade seeks destruction of individual units as they sortie. If we assume an opponent will be in control of the air near his ports, sortie control tactics must primarily depend on submarines and mines.

If successful, sortie control is a most economical means of cutting off a nation's use of the seas or ability to interfere. Nevertheless, such established techniques have their disadvantages. No blockade is 100 percent successful. Some units may be beyond the blockade when hostilities commence and will remain to haunt opposition forces. Against the enemy's aircraft there is no static defense; planes must be bombed at their bases. Thus we must conclude that blockades are weapons of attrition, requiring time to be effective. But the lesson of history is perhaps the most instructive of all—ingenious man has usually found ways to circumvent blockades.

Chokepoint Control. Sometimes the best place to engage the enemy is in a geographical bottleneck through which he must pass. In so doing, platforms like ASW aircraft that probably could not survive in the area of the enemy's sortie point can be used. This also requires patience. For those enemy forces that have cleared sortie and chokepoint operations, there are two remaining tactics for dealing with them.

Open Area Operations. Once the enemy is loose at sea or in the air, surveillance and search systems can assist in locating and putting him at bay. Aircraft are perhaps the most appropriate platform, because of high search rates. Here again, though, time and patience are required.

Local Defense (Engagement). In contrast to searching out a large area, we can let the enemy come to us. If we are asserting our use of the seas, this means that his attacking craft, ships, or submarines must close our forces to within weapon-release range. This enables us to concentrate our defensive forces around the units to be protected. Defensive forces may consist of surface escorts, submarines, and whatever aircraft can be brought to the scene—maritime or ASW patrol, fighter or attack. These forces may attempt to destroy the enemy's launching platform prior to weapon release or may attempt to deflect or destroy the attacking weapons themselves. If we are denying use of the seas to someone else, local engagement amounts to positioning forces in a limited region and then preying upon the enemy.

The weapons employed in these four tactics are numerous, their selection depending on timing and the situation. The same weapon may be used to assert our control or to deny control to an opponent. This multimission character of many weapons systems often causes misunderstanding of the boundary between sea control and the other naval missions. Figure 2 shows the weapons systems applicable to specific Sea Control tactics.

WEAPONS SYSTEMS APPLICABLE TO SEA CONTROL TACTICS

Weapons Systems	Tactics	Sortie Control	Chokepoint Control	Open Area Operations	Local Defense
Submarines		X	X	X	X
ASW Aircraft			X	X	X
Fighter Aircraft			X		X
Surveillance Systems		X	X	X	X
Attack Aircraft		X	X		
Mines		X	X		
Escort Ships		X	X	X	X

Figure 2

In executing sea control tactics, two passive techniques deserve particular mention:

Deception. Assertive sea control objectives do not necessarily demand destruction of the enemy's force. If the enemy can be sufficiently deceived to frustrate his ability to press an attack, we will have achieved our sea control objective. Force routing, deceptive/imitative devices, and other antisearch techniques can be employed, often in combination with other tactics.

Intimidation. The perceptions of other nations of our sea control capability relative to that of other major powers can influence political and military decisions. What any nation says about its capabilities influences the challenges that are offered or accepted.

In summary, sea control tactics include:



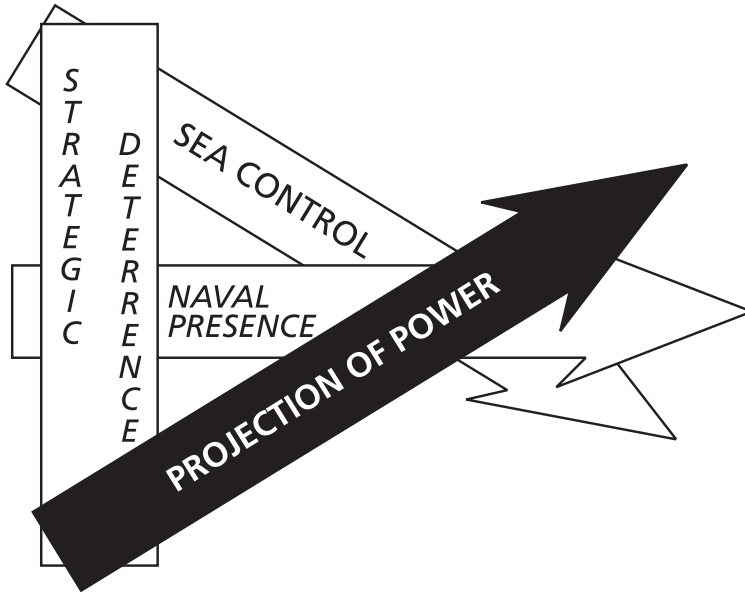
- Sortie Control
 - Chokepoint Control
 - Open Area Operations
 - Local Engagement
 - Deception
 - Intimidation
-

Projection of Power Ashore Missions. Sea control is concerned with what happens on, under, and over the ocean surface. Projection of power ashore is concerned with the impact of naval forces on land forces, and it can be divided into three categories: amphibious assault, naval bombardment, and tactical air.

Amphibious Assault Projection. Ships have long been used to transport military power to conflict areas. As noted earlier, assault from the sea in the face of opposition began to develop as a naval mission in the early 19th century. The calamitous assault at Gallipoli in 1915 and subsequent failure to distinguish poor execution from good strategy lowered enthusiasm for this mission. However, World War II and the Korean conflict testified to its continuing importance.

Amphibious assaults are opposed landings on hostile territory and have four objectives:

- To secure territory from which a land campaign can be launched and supported. We do this by assault from the sea in several circumstances. One is when there is no



other practical approach, that is, the enemy territory is a geographical or political island. Another is when we want to outflank and surprise the enemy. The Okinawa and the Normandy landings in World War II are examples. The purpose of the assault on Okinawa was to secure a base from which to launch the invasion of Japan. In Normandy the assault launched the attack into the heartland of Germany.

- To secure a land area from which an air operation can be launched and supported. One of the costliest amphibious assaults during World War II was launched against Iwo Jima to gain a site from which the Air Force could strike Japan.
- To secure selected territory or facilities to prevent enemy use of them. The first offensive action of World War II in the Pacific was the capture of Guadalcanal to deny the Japanese the airfield facilities from which they could interdict U.S. supply routes between Pearl Harbor and Australia.
- To destroy enemy facilities, interrupt his communications, divert his effort, et cetera, by means of amphibious raids with planned withdrawal.

Amphibious tactics are classified by the size of the operation, as indicated in figure 3.

These rough force compositions are by no means rigid. There are many specific ways in which amphibious assault forces can be tailored to the particular requirements at hand. Obviously the landing force must be adequate in size to handle the tasks assigned ashore. As the size of an assault increases, there are two factors that scale upward more than proportionally to the

COMPARISON OF AMPHIBIOUS TASK ORGANIZATIONS				
	MAF*	MAB*	MAU*	Raid
Troops	To 33,000	8000–12,000	1800–4000	50–250
Ships	43–52	15–17	4–6	1–2
Helos	250–300	75–120	30–36	10–14
Attack Aircraft	50–60	18–20	6–8**	2–4**
Boats	320–350	80–100	30–40	2–10
Gunfire Support	8–10 8"			
	22–30 5"/54	12–14 5"/54	2–4 5"/54	0–3 5"/54
*MAF — Marine Amphibious Force				
MAB — Marine Amphibious Brigade				
MAU — Marine Amphibious Unit				
**VTOL				

Figure 3

number of troops to be landed. One is the number of specialized units that are required, such as command, control, and communications ships or facilities; minesweeping capability; aircraft and gunfire support. The other factor is the time to assemble, sail, prepare the landing area and assault. The larger the operation the more complex it becomes, with attendant delays and the risk of enemy advance defensive preparations.

Finally, when little or no opposition is encountered, such as in Lebanon in 1958, amphibious forces can be landed “administratively.” They can then be employed as regular ground forces, if supported. Administrative landings are considered amphibious operations only when the unique over-the-beach capability of amphibious force is an essential element.

Naval Bombardment. Although most commonly associated with amphibious assault, bombardment can have three separate objectives:

- To provide direct support to troops operating near a coastline
- To interdict movements along a coastline
- To harass military or civil operations in coastal areas.

Bombardment is presently available from naval guns in destroyers and cruisers. There are two tactics: either direct or indirect fire control can be employed, depending on the distance of the ship and target from shore. Targets can be prearranged geographically, found by observers on the beach, or selected visually from a ship or aircraft. The accuracy of fire can be spotted from on board ship, from ashore, or from an aircraft. In time, even conventionally armed missiles may also be employed in this role.

Tactical Air Projection. Tactical airpower is used to achieve three objectives:

- Destroy portions of the enemy's warmaking potential
- Provide support to a ground campaign directly or by interdicting enemy support to the engaged areas
- Deny an enemy these same options against us.

There are four basic tactics by which these objectives are achieved: deep interdiction, battlefield interdiction, close air support, and counterair/antiair warfare.

Deep interdiction: attacks conducted to destroy, neutralize, or impair the enemy's military potential before it can be directed against friendly forces are deep interdiction. Targets assigned may be military or civilian, remote from the battle area, and perhaps more strategic than tactical. To prevent the enemy from moving forces and material under the protective cover of darkness or adverse weather, an all-weather attack capability is important.

Battlefield interdiction: sometimes referred to as direct air support (DAS), battlefield interdiction differs from deep interdiction in two ways: targets are usually military and of immediate tactical importance, and airspace control must be closely coordinated with frontline support operations. Sustained battlefield interdiction can restrict the enemy's capability to move supplies/reinforcements or maneuver his forces.

Close air support: providing direct support to frontline ground forces, close air support is generally exercised in a similar manner as call-fire support from field artillery. Therefore, very close coordination with gunfire support elements is necessary.

Counterair/antiair warfare: in order to conduct the three types of air strike operations, counterair forces are employed to neutralize the enemy's air capabilities to minimize expected attrition of our forces. The threat over enemy territory may be surface-to-air missiles (SAMs), antiaircraft guns (AAA) or fighter interceptor aircraft. Counters to these range from attack on enemy airbases or weapons sites to direct protection with our fighters or electronic countermeasures. When the situation is reversed and an opponent is projecting his airpower over our territory, antiair warfare operations come into play. Fighters, SAMs, and AAA are employed to exact attrition on enemy aircraft.

All of these tactical air projection tactics are carried out by attack aircraft supported as feasible and necessary by fighter-interceptor air-superiority forces. One of the values of categorizing air projection missions is to identify the aircraft and weapon characteristics and tactics best suited to each mission. Figure 4 does this with some of the principal aircraft and weapon characteristics. There will be specific scenarios where some of the judgmental evaluations in figure 4 will be incorrect. It would be desirable to be

infinitely flexible and have maximum characteristics in all aircraft and weapons; unfortunately, the laws of both physics and economics prevent that. Hence, some evaluation of probable use and likely need can be valuable.

Before leaving the projection mission, we would note that only a fine distinction separates some aspects of the sea control and projection of power ashore missions. Many weapons and platforms are used in both missions. Amphibious assaults on chokepoints or tactical airstrikes on enemy air bases can be employed as a part of the sea control mission. Sea-based tactical aircraft are used in sea control missions for anti-air warfare and against enemy surface combatants. The distinction in these cases is not in the type of forces nor the tactics which are employed, but in the purpose of the operation. Is the objective to secure or deny use of the seas, or is it to support the land campaign directly? For instance, much of the layman's confusion over aircraft carriers' use stems from the impression that they are employed exclusively in the projection of power ashore role. Actually, from the Battle of Cape Matapan through World War II, aircraft carriers were used almost exclusively to establish control of the ocean's surface. Today they clearly have a vital role to play in both the sea control and projection of power missions.

AIRCRAFT AND WEAPON CHARACTERISTICS FOR
TACTICAL AIR PROJECTION MISSIONS

(H—high; M—medium; L—low)

	Deep Interdiction	Battlefield Support	Close Air Support	Counterair
Aircraft				
Speed	H	M	L	H
Maneuverability	H	M	H	H
Range	H	M	L	M
Endurance	M	M	H	M
All Weather	H	M	L	M
Sophisticated Weapons				
Delivery System	H	M	M	—
ECM Capability	H	M	L	H
Weapons Payload	H	M	M	—
Weapons				
Long Range	H	M	L	M
Large Warhead	H	M	L	L
Antipersonnel	L	M	H	—
Antimaterial	H	H	H	—
Sophisticated (Smart)	H	M	L	—

Figure 4

In summary, projection of power ashore tactics are:



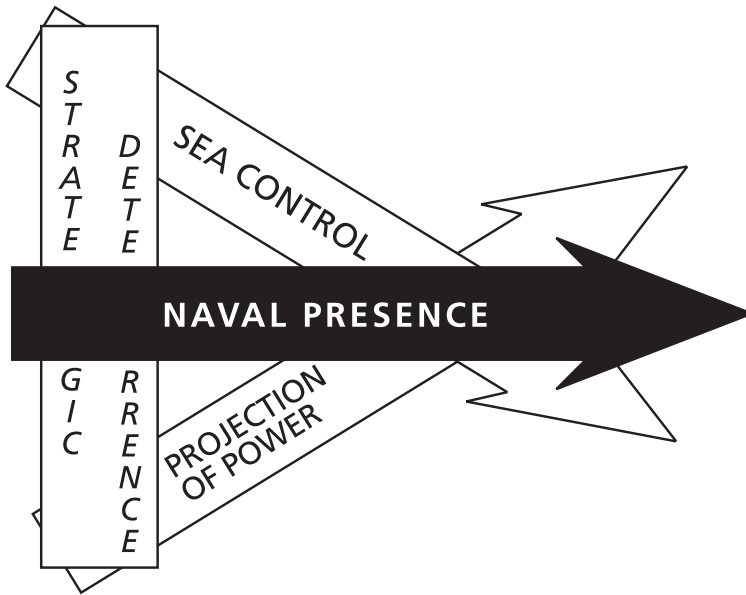
PROJECTION OF POWER ASHORE

- Amphibious Assault
 - Marine Amphibious Force
 - Marine Amphibious Brigade
 - Marine Amphibious Unit
 - Raid
 - Naval Bombardment
 - Direct
 - Indirect
 - Tactical Air
 - Deep Interdiction
 - Battlefield Interdiction
 - Close Air Support
 - Counterair/Anti-air
-

Naval Presence Mission. Simply stated, the naval presence mission is the use of naval forces, short of war, to achieve political objectives. The use of presence forces is for two broad objectives:

- To deter actions inimical to the interests of the United States or its allies
- To encourage actions that are in the interests of the United States or its allies.

We attempt to accomplish these objectives with two tactics: preventive deployments and reactive deployments. The key difference is whether we initiate a show of presence in peacetime (preventive) or whether we are responding to a crisis (reactive). In a preventive deployment our force capabilities should be relevant to the kind of problems which might arise; clearly they cannot be markedly inferior to some other naval force in the neighborhood, but they can rely to some extent on the prospect that reinforcements can be made available if necessary. On the other hand, in a reactive deployment any force deployed needs to possess an immediately credible threat and be prepared to have its bluff called. If another seapower, such as the Soviet Union, is in the area, a comparison of forces will be inevitable.



In deciding to insert a presence force, we must consider what size and composition of force is appropriate to the situation. There are basically five actions with which a naval presence force can threaten another nation:

- Amphibious assault
- Air attack
- Bombardment
- Blockade
- Exposure through reconnaissance.

In addition, almost any size and type of presence force can imply that the United States is concerned with the situation and may decide to bring other military forces to bear as well.

All too often, especially in reactive deployments, we tend to send the largest and most powerful force that can move to the scene rapidly. The image created may not be appropriate to the specific problem. For instance, the threat of major air attack on a small oil sheikdom would not be credible, but the threat of an amphibious assault on the capital might be; or, sailing a major fleet to show support for a small government threatened with insurrection might be more unsettling than stabilizing, perhaps prompting over-reaction.

When selecting a naval presence force, we must also take into account how the countries that we want to influence will perceive the situation. There are three distinctly different categories of national perceptions:

The Soviet Union. When contemplating a U.S. presence force, the Soviets must assess their comparative naval strength available over time and the expected degree of U.S. resolve. Their principal strength comparison would probably be on which country can exercise sea control in the area in question, since the United States is not likely to pose a threat of projecting power directly against the U.S.S.R., except in a worldwide crisis of the most serious proportions.

Nations Allied to the Soviets. Nations with close ties to the Soviets must assess relative United States–U.S.S.R. capabilities in the particular circumstances. These powers will be asking the questions, “Can the United States project its assembled power onto my shores?” and “Can the U.S.S.R. deny them that capability?” Thus third-nation appraisal of relative sea control strengths may be the most critical factor. We should note, however, that third-power assessments may not correspond to the assessments either we or the Soviets would make of identical military factors.

Unaligned Third Nations. There will be cases where a nation is not able to invoke major-power support in a dispute with the United States. The perceptions of such a country would likely focus on U.S. capability and will to project its power ashore to influence events in that country itself.

Thus, the naval presence mission is simultaneously as sophisticated and sensitive as any, but also probably the least understood of all Navy missions. A well orchestrated naval presence can be enormously useful in complementing diplomatic actions to achieve political objectives. Applied deftly but firmly, in precisely the proper force, naval presence can be a persuasive deterrent to war. If used ineptly, it can be disastrous. Thus, in determining presence objectives, scaling forces, and appraising perceptions, there will never be a weapons system as important as the human intellect.

In summary, the tactics of the naval presence mission are:



- Preventive Deployments
 - Reactive Deployments
-

Current and Future Issues Involving Naval Missions Areas

The United States, as we have seen, has performed the four basic naval missions for many years. Yet the dynamic nature of world conditions demands a continuing reassessment of the relation of one mission to another and the comparative emphasis on their individual tactics. National priorities change; the nature of the threat changes. Only by understanding the complex interdependence between naval missions and their elements can we expect to be able to allocate resources wisely and prepare for the future rather than the past.

Some of the key issues which must be addressed are:

Intra-mission Issues

Strategic Deterrence.

- Can we maintain our balance of power image and accent controlled response without appearing to be developing a first-strike capability?

Sea Control.

- Will probable scenarios allow time for attrition tactics?
- Can local engagement forces be made more effective?
- Should future SSNs be designed for employment in barriers (attrition), or as escorts (local engagement)?

Projection of Power Ashore.

Amphibious Assault—

- What size assault force is most likely to be needed?
- Should we design lift forces and tactics differently for different-size assaults?

Naval Bombardment—

- Should the vanishing 6-inch and 8-inch guns be replaced?
- Is there a place for bombardment by non-nuclear missiles?

Tactical Air—

- How much high-performance capability is needed—or can we afford—for deep interdiction?
- What tactical application could vertical-and-short-takeoff-and-landing aircraft best fulfill?
- In what ways are electronic warfare requirements influenced by the different tactics?

Naval Presence.

- Are there different operating policies that would yield a greater presence capability?

*Inter-mission Issues**Strategic Deterrence vs. General-Purpose Forces.*

- How much of the Navy's resources belongs in strategic deterrence?
- Should sea-based missiles be favored over the other elements of the SSBN/ICBM/bomber triad and assume a greater role in strategic deterrence?

Sea Control vs. Projection of Power.

- Does the increased size of the Soviet Navy signal the end of our freedom to project power from sea sanctuaries and justify shifting more resources into sea control?
- Did our Vietnam experience diminish the probability of future force-projection wars?
- Are "low-mix" sea control forces incompatible with the projection of power?

Presence vs. Combative Missions.

- Is the presence mission becoming sufficiently important to warrant building or designing forces for that purpose?

Obviously we cannot resolve these issues of inter-mission priority in a vacuum. We must consider both what our national political objectives are and what any potential opponent is doing. Our principal military concern, of course, is the growing Soviet Navy. The evolution of their post-World War II navy would indicate that they started with a sea denial orientation, as evidenced by their emphasis on submarines. There are those who argue that this was intended only to deny us access to waters from which we could project power into the Soviet Union. There are others who contend that their sea denial capability now includes being able to interdict our resupply operations over a wide span of oceans. It also seems clear that the Soviet Navy has chosen to exercise its naval presence capabilities aggressively. Whether it looks on this as a fallout of its other capabilities or has done so deliberately is difficult to assess. With the advent of Soviet aircraft carriers and the continuing expansion of their amphibious forces, there is a growing question of whether the Soviets have ambitions for projection of power ashore capability. If so, it would logically be accompanied by assertive sea control capabilities to defend their projection forces. Even smaller non-allied navies, such as the Chinese, must be taken into account. They, like the Soviets, are starting with a sea denial orientation. With relatively simple sea denial weapons, such as antiship missiles and mines, proliferating and extending in reach, the threat of sea denial in restricted waters from even the smallest navies may well increase in the future.

There will always be this constant flow and counterflow of mission emphasis and tactical adaptation. Perhaps it is even more accentuated today than in the past. On the one hand, the pace of technological innovation is forcing this. On the other, the changing nature of world political relationships demands a continual updating of naval capabilities to support national policy. Naval officers, as professionals, must understand the Navy's missions, continually question their rationale, and provide the intellectual basis for keeping them relevant and responsive to the nation's needs. Unless we do, we will be left behind, attempting to use yesterday's tools to achieve today's objectives.

Strategic Concepts for the U.S. Navy

Admiral James L. Holloway III, a naval aviator, succeeded Admiral Zumwalt as Chief of Naval Operations on 29 June 1974. He was to serve from the very end of Nixon's presidency through the entire administration of President Gerald Ford and on into the middle of President Carter's administration before leaving office on 1 July 1978. Holloway's term of office nearly exactly coincided with the tenure of General George S. Brown, U.S. Air Force, as chairman of the Joint Chiefs of Staff, but during this period Holloway also served under three successive secretaries of defense—James Schlesinger, Donald Rumsfeld, and Harold Brown—and two Secretaries of the Navy, William Middendorf II and W. Graham Clayton, Jr.

During this period of change, Admiral Holloway's strategic concepts for the Navy evolved through a number of actions, statements, and publications. Holloway's opening step was to deal with the problem of fleet organization by implementing the battlegroup concept; up to that point, the fleet had been organized around ship types rather than by broad roles or missions. His next major step was to record in a manual his guidance for future naval planners. The first version appeared in December 1975 as a classified publication entitled Strategic Concept for the U.S. Navy; portions of it later appeared in an article in the U.S. Naval Institute Proceedings in July 1976, two versions as Naval Warfare Publication 1 (NWP 1), and in his 1976 posture statement. Admiral Holloway reworked and updated his guidance for 1977 and 1978 posture statements, disseminating each as a stand-alone brochure, before capping off the whole process with the ultimate version in NWP 1 (Rev. A).† This was the largest and most complete statement of May 1978, and it is reprinted in full below.*

* James L. Holloway III, "The U.S. Navy: A Bicentennial Appraisal," *U.S. Naval Institute Proceedings* (July 1976), pp. 18–24; *Strategic Concepts of the U.S. Navy (Generation of Naval Force Requirements)*, Naval Warfare Publication (NWP) 1 (Washington, D.C.: May 1978); U.S. Congress, *Statement of Admiral James L. Holloway III, U.S. Navy Chief of Naval Operations before the Committee on Armed Services, United States Senate, Concerning the FY 1976 Military Posture, FY 1976 and Transition Budgets and FY 1977 Authorization Request of the United States Navy*, 11 February 1975, 94th Cong., 1st sess., 1975.

† U.S. Congress, *Statement of Admiral James L. Holloway III, U.S. Navy Chief of Naval Operations Concerning the FY 1977 Military Posture and FY 1977 Budget of the United States Navy*, 94th Cong., 2nd sess., 1976; CNO Report: A Report by Admiral James L. Holloway III, U.S. Navy Chief of Naval Operations Concerning the FY 1979 Military Posture and Budget of the United States Navy, March 1978 (Washington, D.C.: Office of the Chief of Naval Operations, 1978).

*Admiral Holloway was personally involved with this document. His executive assistant, Captain John Poindexter, served as Holloway's sounding board and shared his vision for the document as "the overarching guideline that would provide a point of departure for all of our strategic thinking and the common basis for the formulation of naval requirements."** Lieutenant Commander Joseph C. Strasser, of the Strategic Concepts Group (OP-60N), was assigned as the action officer. At that point, OP-60N was a very small shop of two or three officers with an office in nearby Rosslyn, Virginia, where it was hoped its officers would not be drawn into the day-to-day business of the Pentagon and could focus on studies and longer-term projects. Strasser met privately with Admiral Holloway to discuss the paper, later recalling that Holloway had provided him with a very rough draft with which Holloway was unsatisfied. After they first talked, Strasser went back to his office in Rosslyn to work on it; he met two or three additional times with Holloway to discuss drafts and get guidance.

In this document, Holloway suggests revisions to the terminology that Zumwalt and Turner had used and modifies the four missions for the Navy that they had employed. Holloway felt that the term "mission" had been misused; he believed that missions were warfare areas, such as antiair warfare, antisubmarine warfare, etc. He used instead the term "function" to describe the two primary roles of naval forces: sea control and power projection. In his view, presence was a result of those functions, not a specific function in itself.[†] ◆◆

Preface

NWP 1, STRATEGIC CONCEPTS OF THE U.S. NAVY, consists of two parts: PART I—(Generation of Naval Force Requirements); and PART II—(Planning, Employment and Readiness Doctrine for Naval Operating Forces). PART I is intended to provide a sound, common basis for the development and articulation of naval force requirements which fully support national interests and objectives as well as foreign and domestic policies, and which are consistent, coordinated and thoroughly justified. PART II is intended to establish a basic system for the employment planning of the operating forces of the U.S. Navy on both a long and short term basis; and to define the concepts and terms for execution of current operations, and for the derivation of operational planning factors which are required for the formulation of programs and the analysis of readiness.

Throughout this publication, references to other publications imply the effective edition. New or modified information will be indicated by a vertical line in the adjoining margin.

* Adm. James L. Holloway III, USN (Ret.), e-mail to Hattendorf, 1 August 2007. For a detailed account, see James L. Holloway III, *Aircraft Carriers at War: A Personal Retrospective of Korea, Vietnam, and the Soviet Confrontation* (Annapolis, Md.: Naval Institute Press, 2007), pp. 392–93.

[†] Rear Adm. Joseph C. Strasser, USN (Ret.), e-mail to Hattendorf, 27 July 2007.

Recommended Changes

Recommended changes to this publication may be submitted at any time using the accompanying sample format.

Atlantic and Pacific fleet units and stations, all other units, and CONUS shore activities submit recommendations to: Chief of Naval Operations, ATTN: OP-60N, Washington, D.C. 20350. In addition, forward two copies of all recommendations to: Officer in Charge, Navy Tactical Doctrine Activity, Washington D.C. 20374.

Part I: Generation of Naval Force Requirements

Chapter 1

Introduction

1.1 PURPOSE

A clear statement of the process involved in the generation of naval force requirements provides a sound basis for planning future force requirements and ensures understanding and support of naval requirements throughout the Navy and in the Department of Defense, the Congress, and the general public. The complexities involved in the consideration of force generating factors demand an orderly, logical, thorough, and disciplined planning process to ensure the continued capability of the Navy to fulfill its responsibilities in a dynamic world environment. Part I of NWP 1 is intended to provide a sound, common basis for the development and articulation of naval force requirements which fully support national interests and objectives as well as foreign and domestic policies, and which are consistent, coordinated and thoroughly justified.

1.2 SCOPE

Part I of this publication:

1. Examines briefly U.S. national strategy and national military strategy, and also the effect of our insular position on the formulation of these strategies.
2. Reviews the primary mission and functions of the Navy.
3. Defines Navy roles in support of the national military strategy.
4. Stipulates the required capabilities and characteristics of naval forces.
5. Considers threats to the Navy's ability to support the strategy and the impact of those threats on Navy force levels.
6. Discusses the element of risk associated with varying force levels.
7. Outlines the system for the generation of naval force requirements.

Figure 1-1 illustrates in diagram format all of the major considerations involved in the generation of naval force requirements. It is, in essence, a picture of the contents of Part I of this publication.

1.3 NAVAL CAPABILITY

1.3.1 Elements of Naval Capability. There are four distinct elements of naval capability which in their aggregate provide the total force capability of a Navy.

1. Force Structure—The numbers and types of organized units, active and reserve, of operating ships (or craft) and aircraft, and the facilities of the supporting base infrastructure.
2. State of Modernization—The level of weapon system technology reflected in the components of the force structure.
3. Readiness—The degree to which the operating units in the force structure are capable of performing the tasks for which they were designed and organized.
4. Sustainability—The ability of operating units to continue to conduct naval operations over extended periods.

1.3.2 Programming Naval Capability. Of the four elements which make up total naval capability, only readiness and sustainability are immediately responsive to corrective actions in the short term. Readiness and sustainability are elements which can rapidly change with the redeployment of forces, the redistribution of resources, and the increase of operating tempos to train ship and aircraft crews. Some aspects of readiness improvement do require somewhat longer to accomplish, such as increasing availability of replacement parts, or achieving higher levels of intermediate and depot-level maintenance. Similarly, there are aspects of sustainability, such as the procurement of weapon-systems and replacement parts, which take longer to influence than the simple redistribution of existing assets. But the improvements achieved in the short term must not be at the cost of future capability. Actions such as deficit spending, priority manning of selected fleet units, preferential supply support for deployed units, or permitting a surge in operating tempo to modify a level-funded flying hour or steaming day program, all mortgage the future. Instead, improvements must be carefully programmed and fully funded to achieve current benefits without a drawdown in capability at a later time. Improvements in the other two elements of naval capability, that is, force structure and state of modernization, occur over the longer term. Improvements in force structure can only occur through construction and procurement programs, which normally involve a 3 to 5 year span. Similarly, modernization requires research, development, procurement, and then construction or installation, a process which may take 10 years or more. Thus, from a programmatic point of view, a distinction must be

FIGURE 1-1
Generation of Naval Force Requirements

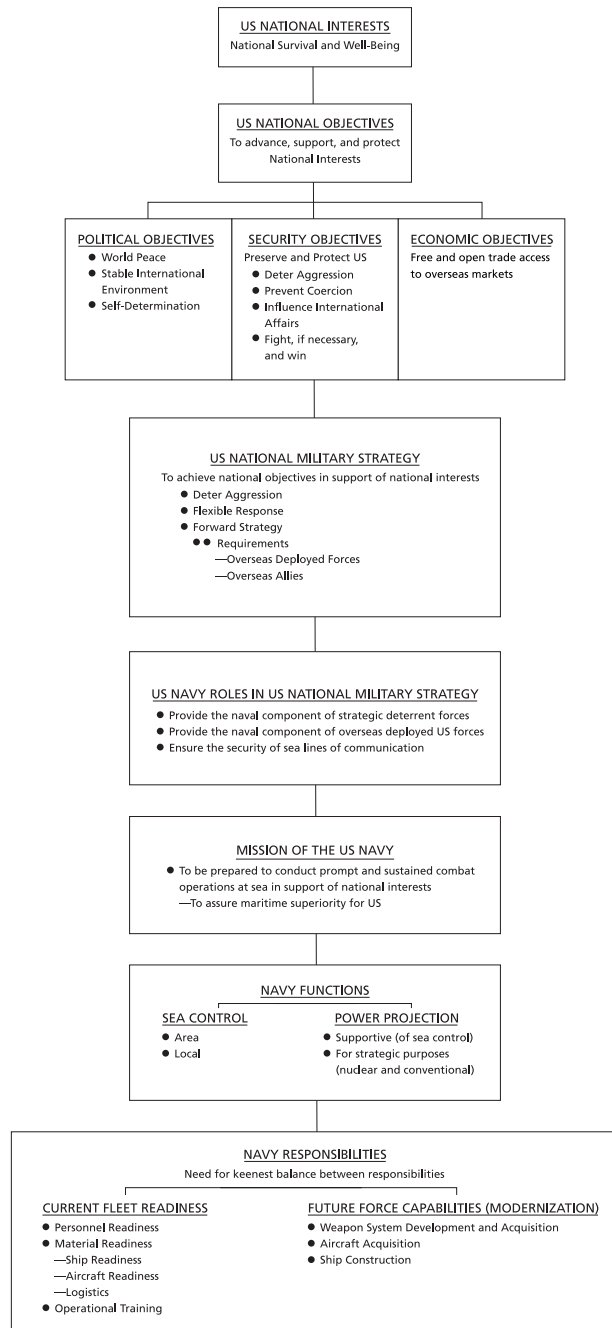
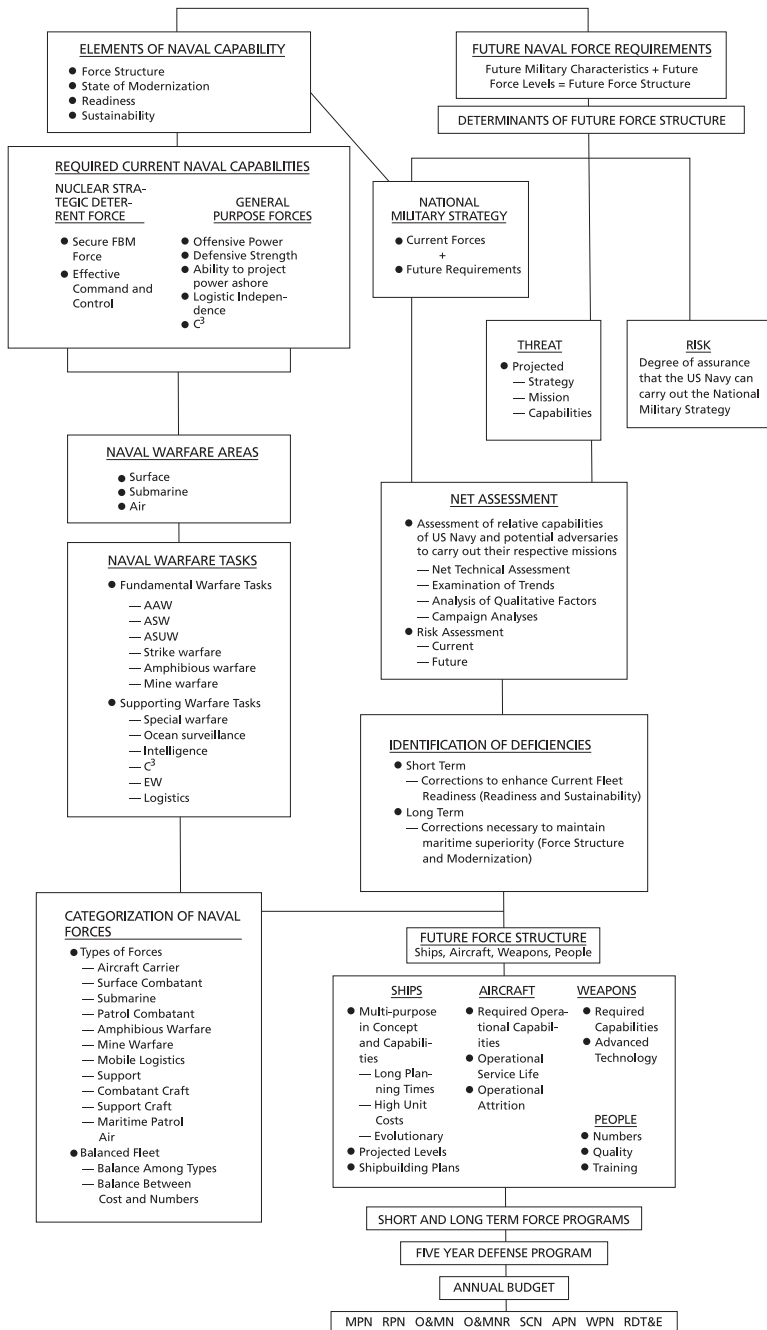


FIGURE 1-1
Generation of Naval Force Requirements (Cont.)



made between those elements of total naval capability that can be effected in the short term (readiness, sustainability) and those in the longer term (force structure, state of modernization).

1.4 RESPONSIBILITIES

In order to assure its continued capability to carry out the roles prescribed by the national military strategy, the Navy has two principal and distinct responsibilities: to maintain current fleet readiness, and to ensure future force capabilities. These two correspond to the short and long term programming actions just discussed.

1.4.1 Current Fleet Readiness. This refers to the capability of naval forces to carry out their roles in prompt response to the National Command Authorities. It is the product of personnel readiness, material readiness and operational training. Current fleet readiness depends upon:

1. Personnel—Maintaining the numbers, skills, and experience of personnel.
2. Material—An efficient and effective logistic support structure to provide higher material readiness and sustainability.
3. Training—A training program to achieve the most effective utilization of current sensor and weapon systems and platforms.

1.4.2 Future Force Capabilities. The future force capabilities of the U.S. Navy are mainly influenced by the projected force structure (numbers and types of units) and state of modernization (the level of weapon system technology incorporated in the force structure). Future force capabilities depend upon:

1. Weapons—Weapon system development and procurement to provide naval ships and aircraft with the most modern weapons technology available.
2. Aircraft—Aircraft acquisition to maintain or increase force structure, and to maintain a high level of force modernization.
3. Ships—Ship construction to maintain, increase, or adapt force structure to changing requirements or projected threats.

1.5 UNIQUE CONSIDERATIONS IN NAVAL FORCE PLANNING

In discussing the factors involved in the generation of naval force requirements, and the translation of those requirements into future force capability, it is important to consider planning factors that are unique to naval forces. Shipbuilding is an especially complex and demanding process which, because of the long life and high initial unit cost of a ship, is unique in defense programs. The most careful planning is therefore required to ensure that a ship will be a useful investment over its programmed lifetime.

For this reason, major ships must be multi-purpose in concept and capability in order to adapt to changes in strategies and areas of operation. Their design must be sufficiently flexible to permit weapon system modernization needed to counter emergent threats and weapon technologies. The factors which must be considered in shipbuilding are:

1.5.1 Long Planning Times. The construction period of a major warship will take 4 to 7 years from Congressional approval to operational deployment depending upon size, complexity, and design. The useful lifetime of a major combatant is 20 to 30 years. A ship's lifetime can be extended for another 10 to 15 years through extensive rework and weapon system modernization.

1.5.2 High Unit Cost. The high unit cost of a naval ship is due primarily to its complexity in comparison to a commercial ship. All installed weapon systems must be included in the total cost of a naval ship in the end cost system of budgeting. In addition, the full funding method used by the Department of Defense in naval ship procurement requires that costs be escalated over a ship's lengthy construction period to accommodate inflation.

1.5.3 Evolutionary Nature of Fleet Modernization. The long life of a ship and the high cost of replacement results in most major ships remaining in active service for the full span of their material lives. For this reason, the composition of the fleet is relatively slow to change. One can predict the force structure of the fleet for the next 10 years because of the 5-year shipbuilding plan and the 5-year average construction period. Twenty years from now 70 percent of the ships in the active force today will still be in the fleet. Forty years in the future, the major units in the fifth year of the five year construction period will just be reaching the end of their useful lifetimes. Because of the evolutionary nature of naval change, new ships must be designed to operate both in the future and in a compatible way with those ships already in the force.

1.6 DETERMINING FUTURE FORCE STRUCTURE

From the foregoing it is clear that the process of generating naval force requirements demands a disciplined and carefully developed approach. In essence, the process is based on three factors:

1. Strategy—The national military strategy which the naval force structure will be called upon to support,
2. Threat—The military force and weapons technology which the naval force structure will encounter in fulfilling its roles within the national military strategy, and
3. Risk—The degree of assurance that the Navy can successfully fulfill its roles in support of the national military strategy.

These factors are examined in further detail in subsequent chapters.

Chapter 2: National Strategy

2.1 STRATEGIC CONSIDERATIONS

National strategy is that broad course of action designed to achieve national objectives in support of national interests. U.S. defense forces are maintained to preserve the physical security and protect the political independence of the United States. The defense forces' ability to satisfy this objective depends on a capacity to deter aggression, to prevent coercion, and to exercise a degree of influence to shape world events in a manner conducive to U.S. interests.

2.1.1 National Interests. National interests are generalized conditions, frequently of a continuing nature, the pursuit or protection of which is perceived to be advantageous to the nation. They range from the ultimate interest, national survival, to very specific regional interests which collectively determine the importance of a particular region to the security of the United States.

2.1.2 National Objectives. National objectives are specific goals which a nation seeks in order to advance, support or protect identified national interests. National objectives can be broadly categorized as political, economic or security.

2.1.2.1 Political. The political objective of U.S. national strategy is to foster an international environment that is conducive to the maintenance of world peace and stability and in which the United States, its allies, and its friends can pursue their national objectives in security and freedom. The United States alone cannot maintain such an environment; however, the experience of World War II emphasized the unmistakable fact that the security and well-being of the United States, even its very survival as a free nation, are dependent upon the utilization and application of its power to influence the international environment in a manner compatible with U.S. and allied interests and security.

The United States is linked closely by strong historic, political, economic, and cultural ties to Western Europe, by close political and economic ties to Japan, and by one or more of these ties to other selected nations, but to a lesser degree. These associations, which reflect the fact that no nation has the capability to combat unilaterally the total potential threat to its security, have resulted in a series of mutual defense or collective security agreements between the United States and its allies which serve to provide for a common defense against aggression.

2.1.2.2 Economic. The economy of the United States depends heavily upon international trade for raw materials to support its industry, and for markets in which to sell

its agricultural and manufactured goods. In large measure, it is the effectiveness with which we engage in this trade that determines the standard of living enjoyed by U.S. citizens. Therefore, the basic objective in international economics is to promote a system of free and open trade which will enable the U.S. to benefit from those areas in which it has a relative productive advantage.

An important economic consideration is the portion of U.S. foreign trade that moves over the oceans of the world. In terms of volume, 9 percent of U.S. overseas export and imports are transported by sea. The seas will become increasingly important as highways of commerce and as a source of food and mineral supplies. In the next decade alone trade predictions indicate that both imports and exports will increase over 200 percent by volume. Additionally, over 50 percent of the U.S. requirements for 19 of 29 critical raw materials are met by imports, most of them delivered by sea. The search for additional sources of energy, minerals and food will inevitably result in international competition over future exploitation of sea-bed resources. Control of the level and intensity of this competition will depend in part on political and military strength.

2.1.2.3 Security. The basic national security objective is to preserve the United States as a free nation with its fundamental institutions and values intact. This involves assuring the physical security of the United States and maintaining an international environment in which U.S. interests are protected. Achieving this objective is contingent upon the ability of the United States to deter aggression, to prevent coercion, to influence international affairs from a position of recognized strength and credibility, to fight when necessary, and to terminate conflict on terms compatible with U.S. national security interests.

2.2 NATIONAL MILITARY STRATEGY

2.2.1 Defined. The national military strategy is that component of the national strategy prescribing the manner in which the elements of national military power will be developed and employed. To be effective it must be integral to the national strategy, able to achieve the national objectives in the face of the projected threat, and capable of accommodating to change. The U.S. national military strategy includes three principal elements.

2.3 ELEMENTS OF U.S. NATIONAL MILITARY STRATEGY

2.3.1 Deterrence. Deterrence of aggression requires a clear and evident capability and resolve to fight at any level of conflict, so that any potential opponent will assess his own risk to be unacceptable. Toward this end the United States maintains forces capable of exerting military power across the entire spectrum of requirements from show-the-flag deployments overseas to retaliation for strategic nuclear attack.

2.3.2 Flexible Response. Should deterrence fail, a full range of options for applying military power should be available to control the escalation, scope, intensity and duration of any conflict. Military forces available to provide for flexible response include strategic nuclear forces, theater nuclear forces and general purpose forces.

2.3.3 Forward Strategy. The national military strategy of the United States is a forward strategy, driven by geopolitical considerations. The U.S. is characterized by its insular position on the North American continent. It has only two international borders, neither of which is threatened by a hostile force, and communicates with the rest of the world to the east, west and south by way of two major oceans. One of the states and all of the territories for which the U.S. is responsible lie overseas. Additionally, the interdependent free-world economy increasingly depends upon the use of ocean shipping and access to the resources of the seas and sea bottoms. This forward strategy of the United States utilizes the oceans as barriers for the defense of the country, as military lines of communication with overseas allies, and as avenues of world trade.

2.3.3.1 Requirements of a Forward Strategy

2.3.3.1.1 Overseas Deployed U.S. Forces. U.S. forces are deployed overseas to be in position to engage promptly a hostile threat to the security of U.S. interests or allies. These forward deployed forces are a commitment which reassures our allies and deters the potential aggressor. Additionally, these forces provide a capability for flexible and timely response to other crises and contingencies. To carry out their mission within the national strategy, naval forces are deployed as naval components of theater forces. These forces provide the National Command Authorities (NCA) with a mechanism for exercising U.S. power and protecting U.S. interests in conditions short of general war. 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, all nations of the world have access to international waters. The free passage afforded all vessels on the high seas provides for greater mobility and flexibility in the employment of naval forces. 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 to violate the sovereign rights of any nation. As a prelude to hostilities, naval forces of any nation may assume a posture which will facilitate the destruction of enemy sea commerce at the initiation of conflict or enhance the projection of military force from the sea to targets ashore.

2.3.3.1.2 Overseas Allies. All but two of the nations with which the U.S. has formal security arrangements are overseas. The strength of the United States is complemented by that of other nations through participation in regional security arrangements. However, the U.S. must be able to deter or counter adventurism on the part of potential

adversaries even when, for reasons of their own national interest, allies choose not to support U.S. efforts with forces, material, or base rights.

Chapter 3: U.S. Navy Support of the National Military Strategy

3.1 THE U.S. NAVY MISSION

3.1.1 Defined. The mission of the U.S. Navy, as set forth in Title 10, U.S. Code, is to be prepared to conduct prompt and sustained combat operations at sea in support of U.S. national interests; in effect, to assure continued maritime superiority for the United States. This means that the U.S. Navy must be able to defeat, in the aggregate, potential threats to continued free use of the high seas by the United States. In its simplest terms, defeating the maritime threat means destruction of hostile aircraft, surface ships, and submarines which threaten the seaborne forces of the United States and its allies.

3.1.2 Implementation. The Navy carries out its mission within the framework of a national strategy, in joint coordination with the other Services and in combined planning with U.S. allies. U.S. naval force requirements cannot be regarded in isolation from U.S. foreign policy, domestic considerations, and the force requirements and capabilities of the other Services and selected allies.

3.2 U.S. NAVY FUNCTIONS

In order to achieve the basic military objectives of the United States, the respective Services are tasked with specific primary and collateral functions by Department of Defense Directive 5100.1. The Department of the Navy is tasked:

To organize, train, and equip Navy . . . forces for the conduct of prompt and sustained combat operations at sea, including operations of sea-based aircraft and land-based naval air components—specifically, forces to seek out and destroy enemy naval forces, and to suppress enemy sea commerce, to gain and maintain general naval supremacy, to control vital sea areas and to protect vital sea lines of communication, to establish and maintain local superiority (including air) in an area of naval operations, to seize and defend advanced naval bases, and to conduct such land and air operations as may be essential to the prosecution of a naval campaign.

Briefly, the Navy's two basic functions are sea control and power projection. The ability to perform these functions is a requirement if the U.S. is to utilize the seas to support its national policies and to defeat the forces of any state that would seek to deny such use. The functions of sea control and power projection are closely interrelated. Some degree of sea control is necessary in the sea area from which power is to be projected, depending on the type force to be employed. Conversely, the capability to project

power was developed in naval forces largely as one means of achieving or supporting sea control.

3.2.1 Sea Control. Sea control is the fundamental function of the U.S. Navy and connotes control of designated sea areas and the associated air space and underwater volume. It does not imply simultaneous control of all the earth's ocean area, but is a selective function exercised only when and where needed. Sea control is achieved by the engagement and destruction of hostile aircraft, ships, and submarines at sea, or by the deterrence of hostile action through the threat of destruction. Sea control is a requirement for most naval operations. It is required so that the U.S. Navy may have operating areas that are secure for the projection of power, such as carrier strike or amphibious assault, and sea lines of communications that assure buildup and resupply of allied forces in the theater of operations, and free flow of strategic resources. Effective sea control also enhances security for the nation's sea-based strategic deterrent.

3.2.1.1 Prerequisite. Sea control is a prerequisite to the conduct of sustained overseas operations by U.S. Army and U.S. Air Force general purpose forces. Modern land warfare generates logistic requirements of such proportions that the overwhelming amount of material needed must be supplied by sea.

3.2.1.2 Implementation. Sea control is achieved by the destruction or neutralization of hostile aircraft, surface ships and submarines which, by their presence, threaten U.S. or friendly forces operating in those maritime areas which the United States must use. Sea control can also be effected by deterring the intrusion of hostile forces into those areas. However, deterrence is less effective than destruction in that it permits the enemy to retain a threatening force in being.

3.2.1.3 Application. For analytical purposes sea control may be categorized as area or local. Area sea control includes extended operations to engage and destroy hostile forces, such as seizure or neutralization of enemy bases or denial to the enemy of access routes to the sea. Local sea control includes close defense of U.S. and allied naval and merchant units and of friendly forces engaged in other operations, such as amphibious assault and mine warfare. Sea control can be achieved or supported in several ways:

1. Sea control is primarily effected by operations designed to locate and destroy hostile naval combat units on the high seas.
2. Barrier operations are designed to deny enemy naval forces access to open oceans or specific areas, taking advantage, where possible, of geographic choke points.
3. Sea control is also accomplished through the use of moving screens to clear the sea area surrounding ships in transit such as military or commercial convoys and amphibious or support forces.

4. The utilization of mines in such areas as harbor entrances and choke points is an important means of sea control.

3.2.1.4 Power Projection as a Part of Sea Control. The use of carrier and Marine amphibious forces in the projection of military power can be an absolute necessity to ensure control and continued safe use of the high seas and contiguous land areas essential to control of the seas. This entails destruction of enemy naval forces at their home bases or en route to those ocean areas which the United States desires to protect, destroying their logistic support, or preventing the approach of enemy forces within range from which their weapons can be employed against U.S. forces.

3.2.2 Power Projection. As an independent function, power projection is a means of supporting land or air campaigns utilizing capabilities designed for naval tasks. Power projection covers a broad spectrum of offensive naval operations including strategic nuclear response by fleet ballistic missile forces, employment of carrier-based aircraft, amphibious assault forces and naval bombardment with guns and missiles of enemy targets ashore in support of air or land campaigns.

3.2.2.1 Sea Control as a Prerequisite for Power Projection. An essential element of power projection is the Navy amphibious ship with Marines embarked, the nation's only major means of inserting U.S. ground forces into the hostile environment of an opposed landing operation. Carrier aircraft, in the power projection function, are able to strike land targets with a variety of weapons, conventional or nuclear. The ultimate means of power projection is the Fleet Ballistic Missile (FBM) submarine force, one element of the U.S. strategic offensive force mix. Each element of power projection requires a measure of sea control for its effective execution, and that function can be exercised simultaneously with the projection function, if necessary.

3.3 U.S. NAVY ROLES IN THE NATIONAL MILITARY STRATEGY

In the functional exercise of its mission responsibilities within the national military strategy, the U.S. Navy has three main roles: strategic nuclear deterrence, to provide overseas-deployed forces, and security of the sea lines of communication (SLOCs).

3.3.1 Strategic Nuclear Deterrence. The effectiveness of the submarine launched ballistic missile combined with the virtual invulnerability of the SSBN provides the strongest deterrent in our strategic nuclear forces, and thus a stabilizing factor in the strategic nuclear balance.

3.3.2 Overseas Deployed Forces. The Navy provides operationally ready 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 engage hostile forces at the

outbreak of hostilities and rapidly support forward-positioned U.S. ground and air forces, as well as U.S. allies.

3.3.3 Security of the Sea Lines of Communication (SLOCs). The success of a forward military strategy depends upon the Navy's ability to maintain the integrity of the sea lines of communication between the United States and its forward deployed forces, its allies, and those areas of the world essential for the supply of imports. The most vulnerable segments of these SLOCs are the overseas portions lying closest to potential hostile bases and farthest from friendly territory where land-based air and patrol combatant craft can assist in the protection of shipping. The protection of these most vulnerable sea areas requires that U.S. Navy forces be present in sufficient strength to defeat hostile air, surface and submarine threats. The deployment of United States Navy sea control forces so far from United States bases and in such close proximity to hostile bases and operating areas places one of the most demanding requirements upon the capabilities of U.S. naval forces both in terms of individual ship characteristics and in total force levels of multi-purpose combatant ships.

3.4 POSTURE OF U.S. NAVAL FORCES

The heavy emphasis on overseas deployed forces demanded by a forward strategy and the vulnerability of the overseas segments of the sea lines of communication demands that a high percentage of U.S. naval forces be committed to overseas deployment.

3.4.1 Deployed Forces. Under normal peacetime conditions, about 30 percent of the active operating force is deployed overseas in a fully operationally ready status. An additional 40 percent of the active forces, also operationally ready, is assigned to operating fleets based in U.S. ports, ready for immediate deployment or reinforcement of overseas U.S. naval forces in the case of war, contingency or crisis. The remaining 30 percent of the fleet is in a reduced operational status, undergoing planned maintenance and conducting basic training. In times of tension or crisis the percentage of the fleet which can be deployed overseas can be increased to about 50 percent. However, this surge posture, if maintained indefinitely without mobilization, would have a progressively deleterious effect upon material readiness and personnel morale. Under conditions of general war with full mobilization, up to 85 percent of the fleet can be deployed, such as occurred during World War II.

3.4.2 Advantages of Deployed Naval Forces. In the implementation of the overseas deployment role, the special advantages and broad options inherent in the employment of naval forces make them uniquely valuable to the National Command Authorities. Naval forces have the organic ability to respond to contingencies or crisis situations worldwide with the discrete type and magnitude of forces necessary to achieve a given objective, from classic show of force, through landing of troops, to strategic nuclear

attack. Most overseas operations by other types of forces require the support of naval forces. These advantages generally stem from the free use of international waters, a principle long used by sea-faring nations, and one almost universally recognized and accepted. Because of the international character of the sea, several benefits accrue to naval forces that are not enjoyed by other military forces.

3.4.2.1 Political Flexibility. Naval forces may be positioned near potential trouble spots without the political entanglement associated with the employment of land-based forces. Naval forces, unlike land-based forces, do not have to rely on prior international agreements before taking a position in an area of potential crisis. By loitering in the proximity of a potential or real trouble spot, naval forces communicate a capability for action which ground or air forces can duplicate only by landing or entering the sovereign air space of another nation. The latter action presumes the crisis involves a nation with positive attitudes toward U.S. involvement and a willingness to host U.S. forces; this is not always the case. Thus, naval forces provide decision makers the option of influencing events without committing forces to combat, and allow a flexibility with regard to commitment and withdrawal not available when employing other forces.

3.4.2.2 Employment Flexibility. Although bases on foreign soil are desirable, they are not mandatory for naval forces as they are for other types of military forces. Ships are integral units which carry much of their own support, and through mobile logistics support, they can be maintained on forward stations for long periods of time. Naval forces, therefore, are relatively immune to the political difficulties which can be generated by bases on foreign soil, and they do not generate the same pressures toward involvement—the erosion of options—that occur when U.S. forces are ashore in an area of crisis. If U.S. forces in an area are sea-based, they can provide military or logistic support, or protect or evacuate U.S. citizens without becoming involved in a land war which may be contrary to both U.S. intentions and national interests. Additionally, sea-based forces cannot be subjected to host country employment limitations.

3.4.2.3 Mobility. Naval forces have unrestricted global mobility based on the traditional and time-honored concept of the free use of international seas. In many cases, naval forces can perform assigned missions while remaining beyond the range of the local enemy threat. As a minimum, the mobility of naval forces serves to seriously complicate the enemy's detection and targeting problems. It also gives the naval force the initiative as to when or if the land force should be engaged, thereby retaining the elements of surprise and concentration of force.

3.4.2.4 Ready on Arrival. Another major advantage of naval forces is their ability to commence combat operations immediately on reaching a crisis location. They are ready on arrival. Other types of forces, particularly when the contingency takes place in

a remote location, require the construction of staging areas prior to commencing combat operations, or the ready and uncontested availability of such facilities. As the U.S. military base structure overseas has diminished, the ability of naval forces to arrive in an area fully prepared to conduct sustained combat operations has taken on added importance.

3.4.3 Naval Presence. Naval forces are forward deployed primarily for the purpose of being in position to engage the enemy promptly at the initiation of hostilities; to provide protection and support to friendly, allied, and U.S. forces in time of war; and to stop the advance of the enemy as soon as possible. However, the deployment of these naval forces far forward in sensitive areas of the globe, positioned for war fighting, also provides a clear side benefit known as presence. The international character of the high seas and the sovereign rights associated with men-of-war provide such overseas deployed naval forces with a unique ability to make U.S. military presence overseas known in crises short of conflict. This presence can be modulated to exert the degree and kind of influence best suited to resolve the situation in a manner compatible with U.S. interests.

3.4.3.1 Modulated Visibility. The sight of a single U.S. warship in the harbor of a friend or ally can serve as visible evidence of U.S. close relations with or commitment to that country. In a crisis where force may be required to protect U.S. interests or evacuate U.S. nationals, but where visibility could provoke the outbreak of hostilities, the U.S. fleet can remain out of sight, over the horizon, ready to respond in a matter of minutes. To a friendly regime which is unable to control the situation, a clearly visible show of force by U.S. naval warships operating in international waters can serve to restore stability.

3.4.3.2 Modulated Capabilities. U.S. naval presence can be visible or invisible, large or small, provocative or peaceful, depending upon what best serves U.S. interests. Naval forces do not have to request overflight authorization or diplomatic clearance before taking a position in a crisis area. By remaining on station for indefinite periods of time, naval forces communicate a capability for action which ground or air forces can duplicate only by landing or entering the sovereign air space of another nation.

3.4.3.3 Relationship Between Presence and Capabilities. The effectiveness of naval presence cannot be considered separately from warfighting capability. In order to encourage friends, deter enemies, or influence neutrals, forces deployed to crisis areas must possess a warfighting capability. They must also reflect the degree of U.S. interests in the area relative to that of a potential enemy as demonstrated by his level of naval forces. To be effective in the presence role, naval forces must reflect a readily perceived combat capability for effectively carrying out the implied threats.

Chapter 4: Required Capabilities and Characteristics of Naval Forces

4.1 NAVAL FORCE REQUIREMENTS BASED ON NATIONAL STRATEGY

The roles of the U.S. Navy within the national military strategy and the unique advantages of naval ships operating in international waters influence the required capabilities of U.S. naval forces. Certain basic general capabilities are necessary if the Navy is to be successful in performing its primary functions.

4.1.1 Strategic Forces. Fleet ballistic missile submarines (SSBNs) must be capable of delivering ballistic missile attacks against assigned targets. A virtually invulnerable SSBN force with highly capable missiles and an effective and survivable command and control system is an assured retaliatory capability which is required to provide a credible strategic nuclear deterrent. SSBNs must be maintained in sufficient numbers to ensure that no asymmetry in overall strength is perceived by a potential foe, and they must be capable of a full range of responses to varying political circumstances.

4.1.2 General Purpose Forces. U.S. naval general purpose forces require the following capabilities:

4.1.2.1 Offensive Power. The offensive power to destroy or neutralize hostile forces routinely present in the theater of operations, or which represent a threat within that theater, is essential to maintain the credibility of stated commitments to allies and to deter or defeat potential adversaries. More importantly, if conflict should break out, the very survivability of U.S. naval forces and the accomplishment of their missions depend on it. This type of offensive power is provided by sea control forces, usually operating as an integrated unit. Such integrated forces may be geographically distant, but their movements, sensors, and weapons are coordinated to provide maximum mutual support and offensive capability.

4.1.2.2 Defensive Strength. The defensive strength to cope with large scale attacks by enemy forces which can concentrate in a given theater of operations on short notice is essential. The Navy must recognize the capability of a potential aggressor to capitalize on the mobility inherent in sea and air forces, and to mass them quickly in a position for launching a surprise attack. This is especially important since the advent of long range antiship cruise missiles (ASCMs) with large conventional or nuclear payloads, which have greatly multiplied the offensive power of small surface units, submarines and aircraft. Naval defensive capability should include long range detection systems such as airborne early warning (AEW), quick reacting command and control systems, and effective defensive weapon systems. Each of these categories should exploit the full technological potential of satellites and other space-based systems. When necessary, naval forces must

be able to operate in a silent electromagnetic and acoustic environment so as to minimize the probability of detection by the enemy.

4.1.2.3 Ability to Project Power Ashore. The ability to project power ashore by gunfire, missiles, carrier-based aircraft, and amphibious landing is required to achieve and maintain sea control and to support allied forces or U.S. land-based forces ashore. Use of sea-based projection in defense, denial, or seizure of advanced bases is an essential element in ensuring continued use of vital sea areas, in preventing enemy transit to open ocean areas, and in destroying enemy base areas from which assaults against friendly forces at sea may be launched. Perhaps more importantly, a capability to project power ashore lends substance to U.S. political initiatives when the implied threat of the application of military power is used in an effort to convince other nations to act in consonance with U.S. national interests.

4.1.2.4 Logistic Independence. A high degree of logistic independence from foreign bases, which may be temporarily denied through political decision, or which may be seized by an enemy, dictates that U.S. naval combatant ships be able to carry large quantities of combat consumables such as fuel and ammunition, have good sea-keeping qualities to ride out heavy weather for long periods of time, and be able to steam long distances without refueling stops. It also requires an underway replenishment force which can resupply combatant ships in the combat zone.

4.1.2.4.1. Overseas Bases. Overseas bases in foreign countries are not required for the operation of most naval forces in forward areas. However, they do allow both more efficient and higher intensity operations by providing routine organizational and emergency intermediate and depot level support for ships and aircraft. Overseas bases are becoming more expensive both economically and politically, and their availability in all contingencies cannot be guaranteed. The Navy must be prepared to augment and rely totally on the mobile logistics support force (MLSF), in lieu of overseas bases on foreign soil. The ability to so do will place increasing dependence on the Navy as the service most capable of conducting sustained operations overseas without base support.

4.1.2.4.2 Overseas Homeporting. The homeporting of fleet units in overseas forward areas allows higher deployed force levels with fewer total assets. Overseas homeported units also provide more on station time than CONUS based forces due to greatly decreased transit time. There are, however, inherent risks involved in homeporting units in a foreign country. Simply stated, political instability or conflicting national interests in many countries cause the United States to lose a certain degree of control over units homeported in foreign countries. In addition, overseas homeporting is becoming more expensive, both in terms of payment demanded by host countries, and

in terms of international and domestic political considerations. These considerations must be carefully weighed in any overseas homeporting decisions.

4.1.2.5 Command, Control and Communications (C3). A command, control and communications system which will permit the reconnaissance and surveillance of hostile forces and the direction of U.S. forces in the conduct of naval warfare on a global basis is required. Naval command, control and communications systems must provide for coordinated operations of U.S. and allied forces at sea, and for coordination between forces at sea and land-, air-, and space-based naval/national/other services command centers and surveillance systems. Operational security demands that at-sea forces minimize electromagnetic emissions in effecting this coordination. The command, control and communications system must possess the flexibility and redundancy to permit reconfiguration following a conventional or nuclear attack in order that surviving forces can be reconstituted into an effective system.

4.2 NAVAL WARFARE

4.2.1 Naval Warfare Areas. Naval warfare is conflict in which at least one of the opponents is operating from the sea with surface ships, submarines, or sea-based aircraft. The three naval warfare areas are surface, submarine, and air. Each of these areas has its operating characteristics derived from the nature of the operating medium, and each has its own particular strengths and limitations. The art of naval warfare is to employ surface, submarine, and air forces in such a manner as to exploit the strengths and minimize the weaknesses of each. This objective has led to the integrated employment of surface, submarine, and air forces operating together, with the common objective of gaining advantage over the enemy by enhancement of offensive capabilities and decreasing individual vulnerabilities through mutual support. Naval forces now and in the future must be structured to integrate all three warfare areas in the prosecution of their tasks in order to meet a similarly multi-dimensional threat.

4.2.2 Naval Warfare Tasks. The Navy's functions include both sea control and power projection. Therefore, naval warfare tasks must address the accomplishment of the Navy's functions through the three areas of surface, submarine and air warfare, against the opposition of similarly delineated forces. The resulting warfare tasks are classified as fundamental tasks and supporting tasks.

4.2.2.1 Fundamental Warfare Tasks

1. **Antiair Warfare (AAW)**—The destruction of enemy air platforms and airborne weapons, whether launched from air, surface, subsurface, or land platforms. It comprises all the measures that are employed in achieving air superiority.

2. Antisubmarine Warfare (ASW)—The destruction or neutralization of enemy submarines. The aim of antisubmarine warfare is to deny the enemy the effective use of his submarines.

3. Anti-Surface Ship Warfare (ASUW)—The destruction or neutralization of enemy surface combatants and merchant ships. Its aim is to deny the enemy the effective use of his surface warships and cargo carrying capacity.

4. Strike Warfare—The destruction or neutralization of enemy targets ashore through the use of conventional or nuclear weapons. This includes, but is not limited to, targets assigned to strategic nuclear forces, building yards, and operating bases from which an enemy is capable of conducting or supporting air, surface, or subsurface operations against U.S. or allied forces.

5. Amphibious Warfare—Attacks, launched from the sea by naval forces and by landing forces embarked in ships or craft, designed to achieve a landing on a hostile shore. It includes fire support of troops in contact with enemy forces through the use of close air support or shore bombardment.

6. Mine Warfare—The use of mines and mine countermeasures. It consists of the control or denial of sea or harbor areas through the laying of minefields and countering enemy mine warfare through the destruction or neutralization of hostile minefields.

4.2.2.2 Supporting Warfare Tasks

1. Special Warfare—Naval operations generally accepted as being non-conventional in nature, in many cases clandestine in character. Special warfare, which often accomplishes fundamental warfare tasks, includes special mobile operations, unconventional warfare, coastal and river interdiction, beach and coastal reconnaissance, and certain tactical intelligence operations.

2. Ocean Surveillance—Ocean surveillance is the systematic observation of ocean areas to detect, locate, and classify selected high interest aerospace, surface, and subsurface targets and provide this information to users in a timely manner. A target may be any hostile, neutral, or friendly platform of interest. Ocean surveillance provides the current operational setting in which Navy commanders deploy forces to do battle. Ocean surveillance is supportive of and dependent on C3 and intelligence, and therefore must be integrated with both.

3. Intelligence—Intelligence is the assessment and management of information obtained via surveillance, reconnaissance and other means to produce timely indications and warning, location, identification, intentions, technical capabilities, and tactics of potential enemies and other countries of interest. Current and complete intelligence, correctly interpreted according to the task at hand, permits military decisions to be based on accurate knowledge of the enemy's forces and capabilities.

4. Command and Control and Communications (C3)—The overall operational management of the Navy in peace and war. The Navy Command and Control System (NCCS) provides the means to effectively exercise the authority and direction of naval forces in the accomplishment of their mission. The objectives of NCCS are to ensure that the National Command Authorities, unified commanders, naval component commanders, and subordinate naval commanders are able to discharge their individual responsibilities by receiving sufficient, accurate and timely information on which to base their decisions and by having available the means to communicate these decisions to the forces involved. Effective control over its forces allows the Navy to operate on a coordinated basis in fulfilling its worldwide operational responsibilities.

5. Electronic Warfare—The electronic support for all warfare tasks. Its primary objective is to ensure the effective use of the electromagnetic spectrum by friendly forces while determining, exploiting, reducing or denying its use by an enemy. Electronic warfare assists in the detection and targeting of hostile forces while making it more difficult for the enemy to detect and target friendly forces.

6. Logistics—The resupply of combat consumables to combatant forces in the theater of operations. It may often be a major factor in determining the success or failure of an operation. A principal aim of naval logistics is to make the operating forces as independent as possible of overseas bases. Most movement of supporting supplies to engage U.S. naval forces, and to all other U.S. combatant and allied forces is by sealift.

The U.S. maritime mobility forces are composed primarily of ships of the Military Sealift Command, various ships held in reserve for defense employment, and ships provided from the U.S. Merchant Marine.

4.3 CATEGORIZATION OF NAVAL FORCES

In recent years comparisons and net assessments of different navies have been plagued by lack of a clear and universally accepted framework within which naval forces can be categorized. Results of numerical analyses often have been misleading because they do not accurately represent comparisons of force elements of equivalent warfare capability. Furthermore, loose definitions of ship categories permit erroneous perception of the net force balance between U.S. and potential adversary naval forces. In order to establish a comprehensive and widely accepted framework for analysis and force level description, the categorization set forth below has been adopted. The basic approach divides navies into four fundamental categories: combatant ships, auxiliary ships, combatant craft, and support craft. These categories are further subdivided into “classifications” and “types” which can be modified additionally by hull descriptors to provide the detail necessary to identify all fleet units. Figure I-4-1 is a block diagram of all ship/craft categories. As an example, all combatants which form U.S. Navy battle groups are

drawn from the “combatant ship category,” “warship classification.” The characteristics of the principal types of ships are described in the following:

4.3.1 Strategic Nuclear Force. Fleet ballistic missile (FBM) submarines, the Navy’s strategic nuclear force, are equipped with sea-launched ballistic missiles for attack and with torpedoes for defense. As the most survivable component of the U.S. strategic nuclear forces, FBM submarines must be capable of executing a broad range of options on receipt of direction from the NCA. They are highly survivable and reliable no matter how or when hostilities may be initiated. Such qualities provide the basis for the FBM force’s significant contribution to the overall strategic balance.

4.3.2 General Purpose Forces

4.3.2.1 Aircraft Carriers. These are ships designed primarily for the purpose of conducting combat operations by aircraft which engage in attacks against airborne, surface, subsurface and shore targets. Aircraft carriers are able to accommodate a broad range of conventional take-off and landing (CTOL) aircraft types which perform tasks encompassing AAW, strike, reconnaissance, air, surface and subsurface surveillance, ASW, electronic warfare and logistics. Aircraft carriers can also accommodate helicopters and vertical-short-take-off and landing (VSTOL) aircraft. The carrier’s complement of aircraft can be adapted on short notice or on a long term basis to accomplish the prescribed tasking.

4.3.2.2 Surface Combatants. These are large, heavily armed surface ships which are designed primarily to engage enemy forces on the high seas. Surface combatants include cruisers, destroyers, and frigates. Equipped with guns, missiles, torpedoes, and advanced complex weapon systems such as light airborne multipurpose system (LAMPS) helicopters, they conduct combat operations against submarines, aircraft, and surface ships at sea and against targets ashore.

4.3.2.3 Attack Submarines. These include all self-propelled submersible types designed to locate and destroy other submarines, surface combatants, and merchant ships. Their principal armament consists of torpedoes and torpedo tube-launched missiles for employment against enemy ships and submarines and shore targets.

4.3.2.4 Patrol Combatants. These combatants’ missions may extend beyond coastal duties. Their characteristics include adequate endurance and sea keeping to provide a capability for operations exceeding 48 hours on the high seas without support. They are employed for ASUW, surveillance, and shadowing in control of narrow seas and choke points.

4.3.2.5 Amphibious Warfare Ships. All ships having an organic capability for amphibious assault and which have characteristics enabling long duration operations on the

high seas are included in this category. Amphibious ships transport troops and their essential equipment to an objective area, and land forces on and over the beach.

4.3.2.6 Mine Warfare Ships. These are ships with the primary function of mine warfare on the high seas. They are used to clear choke points, militarily important sea areas, and amphibious objective areas.

4.3.2.7 Auxiliary Ships. As opposed to the foregoing description of ship types, this paragraph describes a ship category. These are Navy-subordinated ships designed to operate in the open ocean in a variety of sea states to provide underway replenishment, direct material support, maintenance, repair and general support to deployed units, combatant forces or shore-based establishments. They include oilers, ammunition ships, combat stores ships, repair vessels, towing, salvage, rescue, special project, and other such specialized non-combatant ships. In forward areas, mobile logistic forces supply the materials of war to all other forces afloat, as well as to the bases which they build and maintain. They are equipped to replenish combatant units underway with fuel, ammunition, food, and spare parts. They also provide maintenance and repairs to afloat units at forward operating bases and anchorages.

4.3.2.8 Maritime Patrol Aircraft (MPA). These are long range, high endurance, land-based patrol aircraft. Navy MPA conduct all-weather operations in antisubmarine warfare, reconnaissance, ocean surveillance, aerial mining, and, when equipped with missiles, antishipping. As MPA are not a ship type, they do not appear in Figure I-4-1, but are described here for completeness.

4.4 NAVAL FORCE STRUCTURE

The capabilities and characteristics required by the U.S. Navy to conduct its mission, functions, roles, and tasks in support of the U.S. national military strategy are translated through a process of analysis and judgment (treated in Chapter 5) into the platforms discussed in the preceding paragraphs and in Figure I-4-1. The prosecution of the Navy's warfare tasks must be carried out against opposition that ranges from limited to severe, but that always presents a multi-dimensional threat. Therefore, the force structure of the U.S. Navy must be comprised of that proper balance of ship types which will most effectively accomplish the required warfare tasks. Figure I-4-2 displays individual platform capabilities to accomplish warfare tasks. It is the matching of capabilities to tasks that generates the first level of naval requirements.

4.5 NAVAL TACTICAL FORCE ORGANIZATION

Naval force structure is concerned with both the proper balance of the total Navy and the proper balance of individual forces assigned to specific roles and tasks in specific geographic areas. The total fleet inventory is made up of the various categories, classes,

and types of ships and craft, and units are aggregated by type in the administrative organization of the Navy to facilitate material management. However, the grouping of units to achieve the proper balance for specific tactical employment is the purpose of that element of the naval force structure called tactical force organization. In the operational sense, units are tactically deployed in task organizations tailored to the intended employment of the force. Because the sine qua non of all Navy missions is sea control, the principal task organization[s] must be those established to meet hostile forces in battle at sea.

4.5.1 Battle Forces. Therefore, battle forces are made up of those units designed for combat at sea; that is, the warships, carriers, surface combatants, and submarines. Further, each included battle group must be able to perform effectively the full spectrum of at-sea offensive warfare tasks. Thus, as a minimum the battle group would include within its task organization a carrier, surface warships, and submarines in direct support.

4.5.2 Other Task Forces. Although the battle forces are formed for the specific purpose of challenging the enemy's main combatant force at sea, other (and particularly subsequent) naval tasks may require other types of ships with other capabilities. Therefore, the underlying concept of naval tactical force organization is to aggregate units of specific warfare capabilities (as shown in Figure I-4-2) so as to form a structure whose total capability most effectively meets the requirements of the assigned tasks. In naval warfare, as in all combat, economy of force can be as important as sufficiency of capability.

4.6 NAVAL WARFARE TECHNOLOGY

4.6.1 Tactical Nuclear Weapons. In order to gain and maintain control of sea areas and sea lines of communication vital to the nation's forward strategy, the U.S. Navy requires sufficient offensive power and defensive strength to maintain maritime superiority with conventional weapons. However, since a potential enemy of the United States is capable of employing tactical nuclear weapons at sea, the impact of their employment must be assessed.

1. If both the U.S. and its adversaries are restricted to conventional weapons in the war at sea, the U.S. Navy can prevail.
2. If both sides employ tactical nuclear weapons in the war at sea, the U.S. Navy will probably prevail, but with a thinner margin of confidence of success, and with substantially greater losses at conflict termination.
3. If adversary maritime forces employ nuclear weapons and U.S. naval forces have only a conventional weapon capability, the U.S. Navy will lose. Therefore, it is essential that

FIGURE I-4-1
Categorization of Naval Ships and Craft

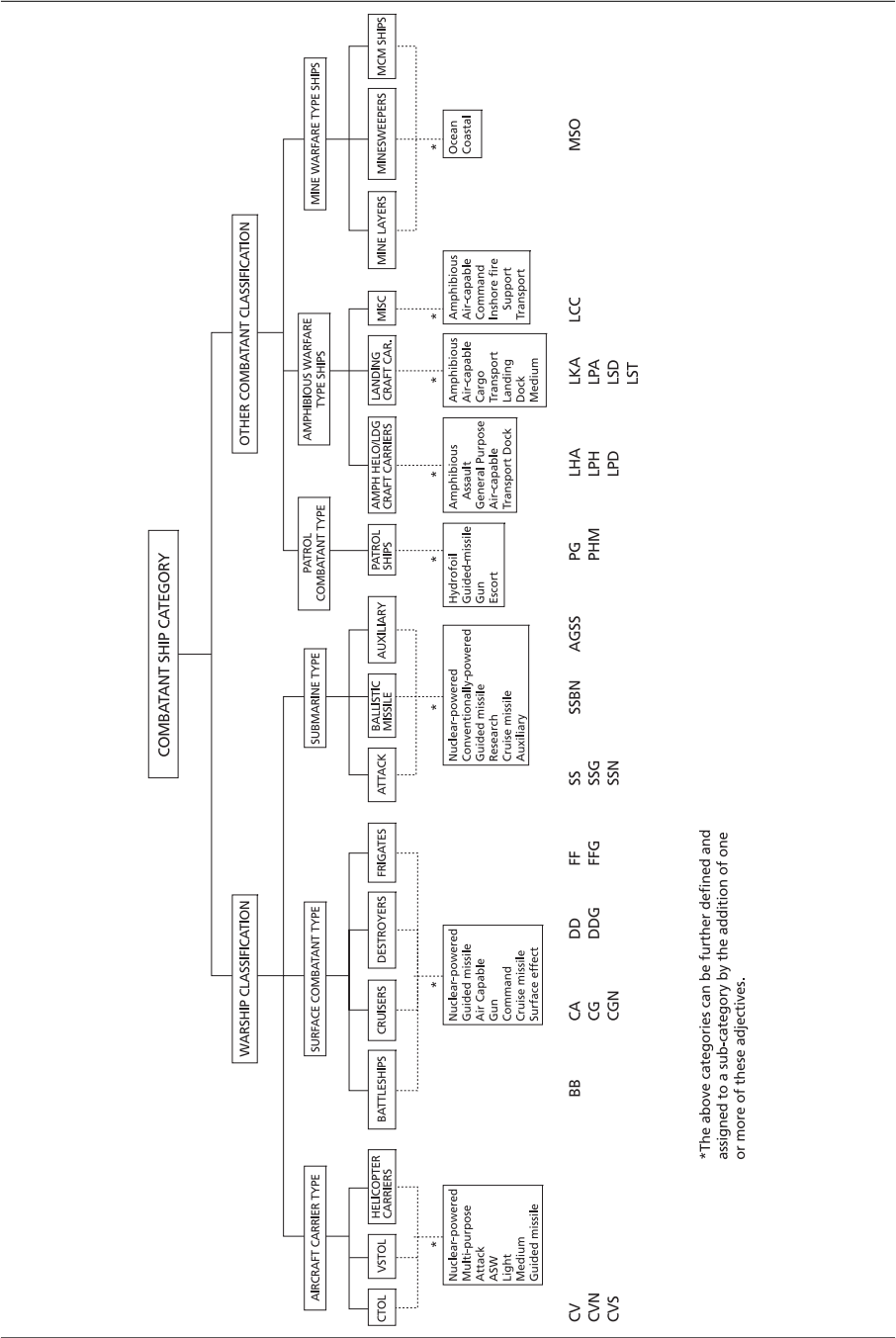


FIGURE I-4-2
Platform Type Capabilities for Warfare Tasks

Warfare Tasks	Carrier	Surface	Submarine		Amphibious	Maritime Patrol	Support
		Combatant	SSN	SSBN		Aircraft (MPA)	
Fundamental Tasks							
ANTI-AIR WARFARE							
Air Superiority	0						
Air Defense	0	0					
ANTISUBMARINE WARFARE							
Distant Operations	0		0			0	
Close Operations	0	0	0			0	
ANTISURFACE WARFARE							
Distant Operations	0	(1)	0			(2)	
Close Operations	0	0	0			(2)	
STRIKE WARFARE							
Nuclear	0	(3)	(3)	0			
Conventional	0	(4)	(4)				
AMPHIBIOUS WARFARE							
Vertical Assault					0		
Over the Beach					0		
Close Support	0	0			0		
MINE WARFARE							
Offensive	0		0			0	
Countermeasures		0			0		
Supporting Tasks							
SPECIAL WARFARE							
OCEAN SURVEILLANCE	0	0	0		0		0
INTELLIGENCE							
Imagery	0						
Reconnaissance	0		0			0	
COMMAND, CONTROL AND COMMUNICATIONS (C ³)							
ELECTRONIC WARFARE	0	0	0	0	0	0	0
LOGISTICS							
Long Haul Resupply	0						0
Local Resupply	0						0
Repair	0						0

Legend: Major Capability
Planned Capability

0
()

NOTES: (1) Sea-launched cruise missile (SLCM) with extended range, over-the-horizon targeting.
(2) HARPOON capability enables maritime patrol aircraft to attack ships.
(3) SLCM with terrain contour matching (TERCOM) will provide nuclear strike capability.
(4) SLCM (second generation) with guidance accuracies to permit conventional warheads.

Total Active Commissioned

Assigned by Fleet
Total COR: C-1, C-2, or C-3
Total CNOR: C-4
Total CNOR for scheduled maintenance or scheduled training
CNOR ships listed by name, command and location, showing primary reason code for CNOR status and providing an estimated COR date.

the U.S. Navy maintain a capability to use nuclear weapons if the U.S. is to be able to fight and win at sea.

4.6.2 Nuclear Propulsion. The advantages of nuclear propulsion in providing naval ships with the capability to steam virtually unlimited distances at high speed are clearly useful and important to the United States Navy with its global responsibilities, forward deployed posture, and limited availability of forward bases. In addition, it reduces the Navy's dependence on oil as an energy source. On an individual ship basis, the addition of nuclear propulsion results in a ship significantly superior to one with similar military characteristics, but having conventional propulsion. However, nuclear propulsion does add to both the acquisition and life cycle costs of a ship, so the numbers of nuclear-powered ships in a finite budget must be constrained. Therefore, the advantages of a limited application of nuclear propulsion technology can best be realized under the following approach:

4.6.2.1 Submarines. All submarines should be nuclear-powered, because with nuclear power the submarine attains the ultimate capabilities of the true submersible.

4.6.2.2 Surface Ships. Carriers and cruisers are the only warships of the U.S. Navy large enough to accommodate nuclear propulsion. Because the Navy today consists of both conventionally and nuclear-powered ships, new construction of nuclear-powered ships should be pursued with the objective of forming all-nuclear-powered battle groups, since that is the principal way in which the advantages of nuclear propulsion in surface ships can be realized, and the offensive capabilities of surface combatants fully utilized. Each nuclear-powered battle group consists of one carrier, two to three cruisers, and one to three submarines. There should be enough of these nuclear-powered battle groups to constitute a strategically significant segment of the fleet. These nuclear-powered battle groups have the ability to steam unlimited distances at high speeds without refueling and to arrive at a crisis point fully ready to conduct combat operations until the crisis is resolved or conventional forces with logistics support can arrive. Three of these battle groups in both the Atlantic and the Pacific, for example, would permit one to be deployed overseas at all times, one to be combat-ready operating out of continental U.S. ports, and the third to be in maintenance status. The Navy's build-up toward this nuclear-powered battle group capability should continue in an orderly and balanced nuclear ship construction program.

4.6.3 Organic Air Power. Because U.S. naval forces routinely deploy to areas well beyond the range of U.S. land-based air cover where they may be exposed to attack by potential adversary land-based air, and because the manned aircraft presently provides the most capable and sophisticated weapon system available to counter enemy manned aircraft and establish and maintain local air superiority in areas of U.S. naval operations,

it is essential that U.S. naval battle forces and groups include organic tactical air power at certain times and places. This capability is currently exemplified by the large-deck multi-purpose aircraft carrier. Further, the United States Navy is investigating the future potential advanced VSTOL technology both to permit wider latitude in the design and size of aircraft carriers and to expand the operation of high performance tactical aircraft to more air capable ships, with the end objectives of achieving improved warfighting ability, and operational responsiveness and flexibility for sea-based forces.

4.6.4 Cruise Missiles. Cruise missile technology has important applications in naval warfare. They will permit long-range stand-off attacks against geographically fixed land targets and against surface ships at sea. Cruise missiles may be categorized by launch platform (aircraft, surface, ship or submarine), by function (land attack or antiship), by warhead (nuclear or conventional). Cruise missile employment policies will be largely governed by their basic characteristics: high accuracies and kill probabilities against surface ship targets, lesser accuracy against land targets (with potential for improvement under some circumstances) and relatively high cost per unit. Current state of cruise missile technology optimizes conventionally armed cruise missiles against land targets. Improvements in guidance systems should expand the tactical employment of long-range cruise missiles from sea-based forces against high value identifiable geographically fixed targets on land.

4.6.4.1 Cruise Missile Targeting. As cruise missile ranges increase, more targets will be within range of a single launch platform and more launch platforms will be capable of attacking the same target. Therefore, antiship cruise missile engagements must be managed at a command level which permits the designation of priorities and the assignment of missiles in such a manner as to avoid omission or overkill of targets. To accomplish this, the Navy is approaching the over-the-horizon targeting (OTH-T) concept by establishing a sensor-coordination center/launch platform system which will operate according to the following procedures:

1. Target detected by one or more sensors;
2. Additional sensors cued to acquire the target using information from original contact;
3. Target data transmitted to coordination centers (ship and shore) for identification, localization, and threat analysis;
4. Using the facilities of his coordination center, the operational commander evaluates the threat, his capabilities to counter it, and then designates the target to the appropriate launch platform under his command;

5. Assigned launch platform attacks designated target with a weapon suitable to the desired level of target damage.

Chapter 5: Navy Program Development

5.1 TRANSLATION OF REQUIREMENTS TO PROGRAMS

Three primary factors determine naval force requirements: strategy, threat and risk. U.S. national military strategy is characterized by forward defense, and requires naval forces able to meet a broad spectrum of contingencies from peacetime deployment and crisis management to the most demanding case of a major war. The threat reflects probable force levels and capabilities of potential foes. Risk is the degree of assurance that U.S. naval forces could satisfactorily carry out the strategy when opposed by the potential threat.

5.1.1 Force Structure Assessment. To assess the risk and ensure that programmed forces will have the numbers, balance and platform capabilities required to execute the Navy's mission at an acceptable level of risk, an annual force structure assessment of naval capabilities is conducted. The methodology of this process is shown in Figure 5-1. The assessment starts with the current force structure; i.e., the ships, aircraft and weapon systems presently in the fleet. Current forces are then projected ten years into the future, adding units under construction or programmed to enter service during this period and deleting those forces which will reach the end of their expected service lives. The resulting future force structure is then used as a basis for assessing the capabilities of naval forces to support national strategy requirements when opposed by the expected threat. The actual assessment is a complex series of analyses which considers various strategies by the U.S. and its potential enemies in several planning scenarios. The result is a net qualitative assessment of the maritime balance in each fundamental warfare task (AAW, ASW, etc.), identifying deficiencies in future forces and indicating the level of risk inherent in current programs. This annual net assessment serves as the basis for formulating changes to the programmed forces. This appraisal process leads to the decisions which will eventually reallocate funds among Navy programs within fiscal guidelines, correcting deficiencies and making incremental changes to ship, aircraft and weapon procurement programs. The revised programs are then used as the basis for future naval force structure.

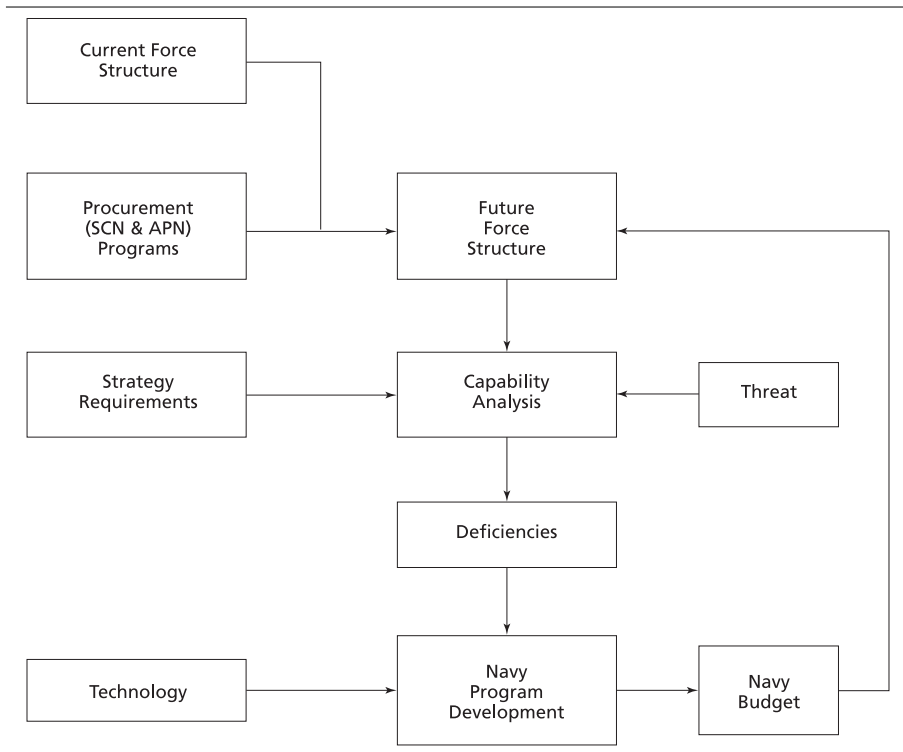
5.1.2 Future Force Capabilities. The composition of naval forces can be projected ten years into the future using current force levels as a base. Added to this are those units expected to enter service in the next ten years. This includes ships already under construction as well as those units authorized by the Congress or included in the Department of Defense Five Year Defense Program (FYDP). The impact of force aging is

accounted for by dropping units as they reach the end of their expected service lives. In the same manner, new weapon and sensor developments may be projected using programmed operational dates and procurement figures. The possible contributions of allies are factored into this process.

5.2 THREAT ASSESSMENT

In assessing the threat, all capabilities which might operate to prevent the U.S. Navy from fully supporting the national military strategy must be considered. Ideally, U.S. forces would be planned to combat successfully the capabilities of all potential enemies; however, constraints on national resources which can be applied to defense require that there be an evaluation of intentions to allow priority assignment of available resources. This is a delicate task. Intentions as to the employment of a capability may change very quickly. Narrow threat assessments which limit flexibility of response must be avoided. The threat assessment must include the primary considerations of a potential enemy's military strategy, available weapon systems and technology, current and projected military strength, and specific employment capabilities.

FIGURE 5-1
Force Structure Assessment of Naval Capabilities



5.2.1 Potential Enemy Military Strategy. Assessment of a potential enemy's strategy requires continued updating as world events evolve. There are many approaches to the examination of a potential enemy's military strategy, but each approach should include an examination of the historical context which has fostered strategic perceptions, political ideologies, diplomatic initiatives, internal politico-economic factors, technological development, and military force structure trends. This approach, when combined with an examination of current projected force strength and capabilities, enables deduction of possible roles of naval forces in support of military strategy. Through this process, possible directions of potential enemy military strategy may be projected. The paramount consideration throughout the process of force derivation, however, must be given to enemy capabilities.

5.2.2 Weapon Systems and Technology. Assessment of a potential enemy's weapon systems and technology involves an examination of the technological trends in such major weapon systems as submarines, aircraft and surface ships, and in significant capabilities such as cruise missiles and surveillance systems. It also entails investigation of enemy research and development efforts so as to estimate accurately the potential for major technological breakthroughs which might quickly and drastically alter the military balance.

5.2.3 Current and Projected Order of Battle. Assessment of a potential enemy's military force strength includes the current and projected number and type of nuclear and conventional forces in all major warfare areas. Total force strength is not indicated by numbers alone, but requires detailed knowledge of individual unit capabilities, and training and readiness levels. The numbers of units by type, their total firepower and technological sophistication, and knowledge about platform combat maneuverability and endurance all combine to produce a total force capability assessment. Current and projected naval construction, modernization efforts, and construction capacity must be considered in projecting the future naval force strength of potential adversaries. It is on this projected threat that the planning process must focus.

5.2.4 Contribution of Allies of Potential Adversaries. Just as the U.S. must consider the possible contributions of its allies, a comprehensive threat assessment should also include the contribution of the allies of potential adversaries and the potential for transfer of modern weapon systems to client states of such adversaries. High performance weapon systems in the hands of such nations could present a significant threat to U.S. Navy forces in crisis or limited war situations.

5.2.5 Maritime Threat Characteristics. Hostile naval forces can be expected to be encountered in all three of the warfare areas: surface, submarine and air. They will possess the general characteristics, advantages, and vulnerabilities of similar U.S. weapon

systems. Consideration of the unique capabilities and limitations inherent in each naval warfare area of a potential enemy is important in determining requirements for U.S. naval forces both in types and numbers of ships and aircraft.

5.2.5.1 Cruise Missiles. The addition of cruise missiles, whether launched from air, surface or subsurface platforms, to the capabilities of potential adversaries further intensifies the threat by making it necessary to destroy not only enemy platforms but enemy missiles as well.

5.2.5.2 Surveillance Systems. Until recent years the ability of naval forces to remain undetected prior to engagement was a significant tactical advantage. However, modern technology is giving some potential adversaries increasing ability to locate and track naval units in many weather conditions and across broad areas of the world's oceans. Using undersea and overhead surveillance systems, an enemy may achieve advance warning of naval force dispositions. This capability is a significant factor in planning for appropriate employment of U.S. naval forces.

5.3 ANALYSES

5.3.1 Net Assessment. The Navy believes that it is the balance of capabilities achieved and the innate flexibility of naval forces that weigh most heavily in any assessment. Therefore, in its net assessments it examines the missions of the United States and potential adversary navies and estimates the capability of each Navy to carry out its mission in the face of determined opposition by the other. Numerous analyses are used to conduct the net assessment of U.S. naval power relative to that of potential adversaries. Some of these examine the performance of individual ships, aircraft, and weapon systems. Others measure trends in force structure and the ability of the forces of each side to carry out their respective missions. Still others, such as campaign analyses, are used to estimate the probable outcome of interactions between forces. Any analysis is highly dependent upon its foundation or assumptions, most of which are uncertain. Nevertheless, by employing good judgment on a broad range of analyses drawn from the lessons of experience, grave miscalculations can be avoided.

5.3.2 Risks. Risk can be measured in several ways. First among these is the degree of confidence that U.S. Navy forces can fulfill their mission; i.e., that they can win in a given scenario. This type of assessment is used to generate the minimum risk and prudent risk forces, to weigh the level of risk inherent in programmed force objectives, or to calculate the degree of attrition which is expected or accepted for convoys or naval forces in various scenarios. A second form of risk assessment examines rapidity of success and indicates the time required to achieve sea control or accomplish a specific mission. A third measurement of risk focuses on simultaneity of execution, which is governed by geographic priorities. This method of risk assessment shows strategic

flexibility and implies that, within fixed forces levels, increasing capabilities in one area must come at the price of reduced capabilities in other regions.

5.3.3 Deficiencies. In addition to the identification of various levels and types of risk, the annual assessments of the naval balance expose specific deficiencies in programmed forces. These relate to various fundamental warfare tasks and address force level deficiencies for individual ship types or aircraft, imbalances in force structure, or vulnerability to certain threats. Identification of specific quantitative or qualitative deficiencies serves as a point of departure for optimizing future naval forces.

5.4 ALTERNATIVE FORCE LEVELS ASSOCIATED WITH LEVELS OF RISK

Several identifiable force levels are generally understood to be associated with levels of risk and provide convenient terms of reference. These force levels are: Force Planning Estimate, Objective Force, Immediate Force Goal, and Programmed Force. These are discussed below in descending order of size.

5.4.1 Force Planning Estimate. The force planning estimate is the level of military force that is required to counter the threat, worldwide, in simultaneous operations irrespective of the strategy which a potential enemy has the capability to pursue. It provides the highest assurance of worldwide naval superiority at a minimum level of risk. Force planning estimates are developed for each of the force planning cases unconstrained by fiscal, manpower, logistic or other limitations.

5.4.2 Objective Force. The objective force is the naval force level required within a definite time frame and resource level to accomplish approved military objectives, missions or tasks. It is a Navy which is capable of providing reasonable assurance of success in the primary areas of national interest in both Atlantic and Pacific Oceans at a prudent level of risk. Recommended objective force levels are derived from the force planning estimates through acceptance of prudent risk and in consideration of reasonable attainability. The force is not fiscally constrained but its derivation is fiscally responsible.

5.4.3 Immediate Force Goal. The immediate force goal is a balanced, flexible force, fiscally constrained but with most qualitative deficiencies in the programmed force corrected, capable of fulfilling the national strategy against the projected threat. It is a Navy which can maintain fully capable forces forward deployed. An acceptable risk force, with mobilization warning and redeployment it can prevail in the primary theater, and simultaneously provide selective thrusts in a secondary theater.

5.4.4 Programmed Force. The programmed force is that contained in the currently approved Five Year Defense Plan as well as the Extended Planning Annex (ten year projections). This force is fiscally constrained and provides variable capability in fulfilling

critical elements of the national strategy depending upon the extent of this fiscal constraint. The programmed force should be a balanced Navy able to maintain representative forces forward deployed. At its lowest level, it is a marginally acceptable risk force which could prevail with heavy losses in a major conflict with mobilization warning and extensive redeployment. Simultaneously with a major overseas conflict it would be able to protect vital maritime interests in the Western Hemisphere. With lessening of fiscal constraints the programmed force could progress to one of acceptable risk or even prudent risk allowing for the time involved from budget authorizations to forces in being.

5.5 RISK ASSESSMENT IN PROGRAM DECISIONS

Naval force structure is derived from consideration of strategy, threat, and risk. The importance of risk assessments is that they determine the level of risk, and thereby indicate the degree to which the projected force structure is adequate to carry out the strategy in the face of the threat. By pointing out strengths and weaknesses in the force structure, risk assessments highlight areas requiring attention in Navy programming actions.

The process by which future naval force requirements are determined is both simple in concept and complex in execution. Starting with national military strategy, forces which have been approved and will reach the fleet within the time period under consideration are added, and those units which will reach the end of their useful service lines are deleted in order to estimate future force structure. The capabilities of these forces are evaluated against the expected threat, and the ability of the U.S. Navy to carry out its functions of sea control and power projection is assessed in various scenarios. Significant uncertainties and judgmental factors are an integral part of this continuing process. The final and most difficult step is to determine the number, type, and mix of ships and aircraft needed to correct deficiencies in our forces and minimize risks, keeping in mind the requirement to maintain balanced force levels and fiscal realism. If the proper strategy is projected, the threat correctly assessed, and risks accurately identified, uncertainty can be minimized and naval requirements can be established.

Part II: Planning, Employment and Readiness Doctrine for Naval Operating Forces

Chapter 1: Planning Concepts

1.1 PURPOSE

The purpose of this doctrine is to establish, at the Chief of Naval Operations' level, a basic system for the employment planning of the operating forces of the U.S. Navy on both a short and long-term basis. The doctrine defines standard concepts and terms for

execution of current operations, and for the derivation of operational planning factors which are required for the formulation of programs and the analysis of readiness.

1.2 TOTAL FORCE

For the purpose of assessing the full range of U.S. naval capabilities, the total force must be considered. The total force of the U.S. Navy includes:

1.2.1 Operating Forces. The operating forces of the U.S. Navy consist of ships, aircraft squadrons, units, and staffs, assigned to the Fleet Commanders in Chief (FLTCINCs). These forces include both active and reserve commissioned units and ships of the Naval Fleet Auxiliary Force.

1.2.2 Shore Establishment. The shore establishment consists of all activities ashore assigned to support the operating forces in terms of personnel, material, supply, and fiscal procurement; training; maintenance; and planning and operational guidance.

1.2.3 Reserve Forces

1.2.3.1 U.S. Naval Reserve. The Naval Reserve is the reserve component of the Navy, and includes those personnel who may augment the regular force, either individually or in units, to support and expand the Navy under full or partial mobilization. Included within the Naval Reserve is the Naval Reserve Force (NRF), the equipment component of the Naval Reserve—organized into operational commands of ships, aircraft squadrons, construction battalions and coastal riverine squadrons.

1.2.3.2 Inactive Reserve Fleet. The Inactive Reserve Fleet consists of ships and aircraft retired from operational status but retained under preservation for activation, including industrial refurbishment and modernization, in contingency situations.

1.2.4 Naval Fleet Auxiliary Force. Military Sealift Command (MSC) provides ships to the Naval Fleet Auxiliary Force. In general, these are mobile logistics type and support type ships (e.g., TAO, TATF, TAP) which operate under operational control (OPCON) of the FLTCINCs and are manned with civilian crews.

1.3 FLEET CONTROL OF FORCES

All of the fleet operating forces of the U.S. Navy, consisting of staffs and commissioned ships and aircraft squadrons, are administratively assigned by the Chief of Naval Operations to the Atlantic and Pacific Fleet Commanders in Chief (FLTCINCs).

1.3.1 Administrative Control (ADCON). Administrative control (ADCON) of individual commands is normally further delegated from the Atlantic and Pacific FLTCINCs to the Type Commanders (TYCOMs). A Type Command is an administrative subdivision of a fleet into ships or units of the same type, as differentiated from a tactical subdivision.

1.3.2 Operational Control (OPCON). Operational control of the naval operating forces is exercised by the Commanders of the Unified Commands (CINCs: CINCLANT, CINCPAC, and CINCEUR), under the Unified Command Plan (UCP). The responsibility for OPCON is normally delegated through the Naval Component Commanders (CINCLANTFLT, CINCPACFLT, and CINCUSNAVEUR) to the Type Commander or to an Operational Fleet Commander (OPFLT).

1.4 OPERATIONAL STATUS

All units in the operating forces are categorized as being Command Operationally Ready (COR) or Command Not Operationally Ready (CNOR). The FLTCINC monitors the status of the ships, including the assigned aviation detachments of air capable ships, and land-based aircraft squadrons through review and quality assurance of all pertinent data including the following reports: Navy Forces Status (NAVFORSTAT), Casualty (CASREP), Movement (MOVREP) and Employment Schedule (EMPSKD). The relationship between C-ratings as reported in NAVFORSTAT and COR/CNOR status is that the overall C-ratings of C-1, C-2, and C-3 correspond to COR, and C-4 corresponds to CNOR. C-ratings are described in detail in Section 2.4.1.1 and 2.4.1.2. In the context of command operational readiness, Marine units embarked in amphibious ships should not be reported as part of the ship's readiness.

1.4.1 Command Operationally Ready (COR). When COR, the unit is capable of conducting underway operations in support of general war plans. The determination of operational status must be flexible enough to accommodate differences in design capabilities within types, and to recognize that ships with material casualties or personnel shortages, which reduce but do not eliminate required mission capabilities (C-2 and C-3), can still carry out operational tasks which contribute to the effective accomplishment of the FLTCINC's responsibilities.

1.4.1.1 Assignment and Readiness. COR units must be reporting an overall C-rating of C-1, C-2, or C-3 and, based on FLTCINC judgment, able to support their mission as required by the general war plans. Maintenance on units reporting C-1, C-2, or C-3 which requires more than 96 hours to complete may be scheduled and the units remain C-1, C-2, or C-3 provided that the personnel can be recalled in time to have the unit RFS in 96 hours.

1.4.2 Command Not Operationally Ready (CNOR). A unit is CNOR when it does not meet the requirements to be COR.

1.4.2.1 Assignment and Readiness. Commands CNOR are normally assigned to the OPCON of the Type Commander who is responsible for conducting the training and maintenance required for the unit to attain COR status.

1.4.3 Training. Basic training is that required to attain the level of basic mission capability necessary to achieve COR status. It includes fast cruises, sea trials, shake-down, work up, and type training as required. Type training is included in basic training but is also conducted by operationally ready ships as required to maintain basic proficiencies.

Chapter 2: Readiness

2.1 UNIT READINESS

Operational readiness in specific terms of naval usage derived from JCS Pub 1 is the capability of a unit or ship to perform the missions or functions for which it was organized or designed. The term may be used in a general sense or to express a level or degree of readiness.

2.2 FLEET READINESS

In its broadest sense, fleet readiness is the degree to which the force is ready to carry out its mission to wage prompt and sustained combat at sea. Supporting military strategy involves not only having units properly manned, trained, equipped and supported, but also deployed to positions from which they may be able to best support U.S. interests and rapidly engage potential enemies, if required. The U.S. Navy's ability to respond to national tasking is reflected in the percentages of the fleet that are deployed, immediately available for deployment, and subsequently available for deployment upon the completion of scheduled maintenance and training. The gradations of the factors affecting readiness (discussed below) are the essential determinants for measuring individual unit, and in turn, composite fleet preparedness for combat, regardless of deployed status.

2.3 READINESS FACTORS

Fleet readiness is comprised of personnel readiness, material readiness and training readiness.

2.3.1 Personnel Readiness. This factor refers to having the quantity of people to man the ships, squadrons, and support activities to full allowance; the quality in terms of skills required to operate and maintain the ships, aircraft, facilities and installed equipment, and the experience to provide organizational leadership and morale. Crew morale is considered an important part of personnel readiness as it impacts on the individual and group quality of effort, and the sustainability of that effort.

2.3.2 Material Readiness. This factor refers to maintenance, both scheduled and unscheduled, and logistic support.

2.3.2.1 Maintenance. Maintenance is accomplished at three levels: organizational, intermediate, and depot.

1. **Organizational Maintenance**—Accomplished by the crews of units when operational or, in the case of major propulsion machinery which must be non-operating for maintenance, during periods of upkeep when units are not operational. Necessary spare parts are maintained aboard ships and air stations for this purpose.

2. **Intermediate Level Maintenance**—Usually accomplished when the ship is not underway. It is conducted by intermediate maintenance activities, such as tenders or Shore Intermediate Maintenance Activities (SIMAs).

3. **Depot Maintenance**—Accomplished by shipyards. The ship may be in the shipyard, or not in the shipyard but with the shipyard workers and equipment onboard.

2.3.2.2 Logistic Support. This part of material readiness refers to furnishing spare parts for ships and aircraft to be installed at any of the three maintenance levels. Also, logistic support in the context of material readiness includes the availability of combat consumables, fuel, and ammunition carried in the ship's hull.

2.3.3 Training Readiness. Training readiness is the combining of personnel and equipment in the operation of the ship and its embarked weapons system. It is mainly achieved through operations at sea or flying hours for aircraft crews either from the ships themselves or from temporary land basing at naval air stations. The ultimate in training readiness is achieved by realistic exercises which approximate as closely as possible combat situations. Advanced exercises usually require special facilities such as ranges for impact measurement, live firing, air combat maneuvering, and services of electronics countermeasures, targets, drones, and submarines, ships and aircraft for tracking.

2.4 READINESS MEASUREMENT

The two levels of readiness measurement are unit readiness and composite readiness.

2.4.1 Unit Readiness. Unit readiness is the degree to which an individual ship or aircraft squadron is able to accomplish its primary mission. Unit readiness measurement has two functions. First, it is the basic building block upon which further levels of composite readiness are developed. Second, through identification of deficiencies, unit readiness becomes a measure used for resource management by indicating the qualitative and quantitative requirements for the correction of those deficiencies in order to achieve readiness improvement. This function of resource management is primarily for internal naval purposes.

2.4.1.1 Navy Forces Status Report (NAVFORSTAT). The NAVFORSTAT is a component of the JCS Readiness Reporting System, and a basic means for analyzing unit readiness. In addition, the NAVFORSTAT provides information of particular interest to Navy commanders and managers. The NAVFORSTAT has three main parts: the mission area or M-rating which measures the capability of the unit to perform in each of its primary mission areas; the resource area or C-rating measuring the resource areas of personnel equipment, equipment and supplies on hand, and training; and an evaluation of the overall readiness of the ship which is made from a synthesis of the M and C-rating analyses into an overall C-rating, which is used to determine COR/CNOR status.

2.4.1.2 Overall Readiness Ratings. Overall readiness C-ratings are C-1, Fully Ready; C-2, Substantially Ready; C-3, Marginally Ready; and C-4, Not Ready. These C-ratings and the descriptive terms are standard for all Services through the JCS Readiness Reporting System. The amplifying terms, such as for the descriptor "Substantially Ready," described as minor deficiencies which are insufficient to cause the loss of any primary mission areas, were written by the Navy explicitly for naval forces. The degrees of readiness, C-1 through C-4, identify those units which are ready through those which are not ready and, therefore, which need the application of additional effort and/or resources, or to complete scheduled maintenance or training.

2.4.2 Composite Readiness. Composite readiness describes the ability of an organized force to carry out its missions and tasks. Composite readiness may be described in terms of a geographic area: naval readiness in the Indian Ocean. It may be described in terms of a force readiness: readiness of the fleet ballistic missile submarine force. In the aggregate, the composite readiness of all units in the force will give an accurate picture of the active force readiness of the U.S. Navy, which is essential for strategic and operational decision making at the theater, JCS, or National Command Authorities (NCA) level. The means for displaying composite readiness is the Fleet Readiness Status Report.

2.4.2.1 Reporting System. NAVFORSTAT information, along with MOVREP, EMPSKD and CASREP data serve as the basis for the analysis of unit and composite readiness. Data from these reports comprise the Naval Status of Forces (NSOF) data base which is used in the Fleet Readiness Status Report. NSOF data are computerized and available automatically in several different formats. This system is called the Readiness Information Service. In determining composite readiness, senior operating commanders are mainly interested in the numbers, types and locations of ships which are ready or not ready. COR and CNOR are the two primary readiness status indicators established for this purpose and are presented by type, command and location in the Fleet Readiness Status Report.

2.4.2.2 Fleet Readiness Status Report. Based on data received from the FLTCINCs and subordinate commands, the Fleet Readiness Status Report is compiled in OPNAV (OP-64)

and distributed daily. The purpose of the Fleet Readiness Status Report is to present a broad overview of fleet readiness.

2.4.2.2.1 Breakdown of Ready Units. The National Command Authorities and senior level operational commanders are interested in the number of ships which are operationally ready. Further, if a crisis is developing, the National Command Authorities are particularly concerned with which operationally ready units are in the geographic area of the crisis. Therefore, the first half of this report is designed to show a breakdown of ready units, by type, in geographic areas.

a. Command Operationally Ready (COR) Ships. COR ships are normally assigned to the OPCON of an operational commander. COR submarines are assigned OPCON to their TYCOM.

b. Deployed Ships. Included in the COR category are deployed ships which are normally assigned to the OPCON of COMSIXTHFLT, COMSEVENTHFLT, or COMIDEASTFOR. The length and frequency of deployment for an individual ship are limited by requirements for training, intermediate and depot level maintenance, and more practically, by crew morale considerations driven by the percentage of time out of homeport.

2.4.2.2.2 Time-Phased Deployment Availability. The second item of interest on the part of the Secretary of Defense or the Joint Chiefs of Staff would be how soon additional forces could be made ready in the case of a growing crisis. Therefore, the time-phased deployment availability is presented in the second half of this report.

a. Ships Available for Time-Phased Deployments

1. Active Forces. All active ships in the operating forces are available for phased deployment. Active ships not operationally ready can be deployed when COR status is attained.

2. Naval Reserve Forces. When mobilized and COR, Naval Reserve Force (NRF) ships can be deployed within 96 hours. NRF ships may also be temporarily assigned to an OPFLT commander during training (with reservists aboard) or with reduced manning (active duty complement) for assignments not requiring full command operational readiness.

b. Time-Phased Deployments. Time-phased deployments are further categorized into ships which can be operationally ready in: 96 hours; one month; six months; one year.

2.5 READINESS REQUIREMENTS

The attainment of a high state of readiness requires both funding and a balanced fleet employment program.

2.5.1 Funding. The funding associated with readiness is found principally in the O&M accounts where fuel, repairs, overhauls, aircraft rework, spares, fleet training, steaming

days and flying hours are financed; and the MPN account which provides for manpower levels, TAD funding for schools, and rank and rate structure.

2.5.2 Balanced Employment. A properly balanced employment schedule is essential to attain high states of readiness, because the individual requirements for maintenance, training, and morale are frequently in competition with each other.

2.5.2.1 Maintenance Requirements. While some preventive maintenance can be done at sea, intermediate and depot maintenance are normally done in port.

2.5.2.2 Training Requirements. Realistic training requires a ship to be operating at sea. Some training is available ashore using simulators; however, ships must be operating in order to take advantage of the specialized ranges for live firing, electronic warfare, and other available target services, and to participate in multi-ship training exercises.

2.5.2.3 Personnel Requirements. Morale is an extremely important aspect of readiness; morale has a significant impact on personnel readiness through the quality of individual and group effort, and retention levels. In a steady state, peacetime operating condition, it is necessary that a ship spend at least 40 to 50 percent of its total time in its homeport. With a ship in homeport 40 percent of the time, a sailor standing one watch in four will be able to go home to his family in the evening after work only 30 percent of his total days during a 4-year sea tour.

2.5.2.4 Requirement for Overseas Deployment. Despite the need for time in U.S. ports for basic training, some types of maintenance, and morale enhancement, a unit must not only be operationally ready, but also must be deployed to reach its highest state of readiness to react in a particular area. A primary advantage of deployments is that units are in better positions to respond rapidly to NCA tasking in time of need.

Chapter 3: Employment Cycle

3.1 EMPLOYMENT CYCLE DEFINED

The planning baseline for operating forces is the employment cycle. For ships, this cycle extends from the completion of one regular overhaul, or upon commissioning in the case of new ships, through the completion of the subsequent regular overhaul. This employment cycle is measured in months and is repetitive over the life of the ship.

3.2 SHIPS' EMPLOYMENT CYCLE

The employment cycle for ships encompasses four distinct phases: The new construction phase, the operational phase, the refit phase, and the regular overhaul phase. Phases are further subdivided into periods.

3.2.1 New Construction/Conversion Phase. This is the initial phase of a ship's employment, and includes the precommissioning, shakedown, and post shakedown availability periods.

3.2.1.1 Precommissioning Period. During this period, the ship is under construction and has not yet been commissioned. Personnel may be assigned, and the ship is administratively assigned to a Type Commander (TYCOM). The ship has not yet commenced an employment cycle.

3.2.1.2 Shakedown Period. During the shakedown period, the ship is in commission after new construction or conversion but not yet operationally ready, due principally to training deficiencies. The command is undergoing basic training under the OPCON of the TYCOM.

3.2.1.3 Post Shakedown Availability Period. In this period, the newly commissioned ship is normally undergoing depot level maintenance and is not able to carry out its mission due to the nature of the repair work. The command remains under the OPCON of the TYCOM and is CNOR.

3.2.2 Operational Phase. The operational phase initially follows the new construction phase and subsequently recurs between regular overhaul or refit phases. It includes the ready, preparation for overseas movement (POM), deployed, and post deployment leave periods.

3.2.2.1 Ready Period. In the ready period, the ship is normally COR, and assigned to the OPCON of the SECOND or THIRD Fleet Commander. Submarines and other selected units (AD, AR, ARS, ATF, NRE, etc.) are assigned to their TYCOM for OPCON. The ship is conducting intertype fleet operations and type training, primarily operating out of U.S. bases in local operating areas.

3.2.2.2 Preparation for Overseas Movement (POM) Period. During the POM period, the ship is COR and assigned to the OPCON of the SECOND or THIRD Fleet Commander. (Submarines remain assigned to their TYCOM.) The ship is in homeport, pierside, loading out and preparing for deployment. Although the ship maintains 96-hour ready-for-sea status, the ship is scheduled primarily in port to fulfill POM requirements.

3.2.2.3 Deployed Period. A ship is considered deployed when it is homeported overseas, when it is operating out of homeport for more than eight weeks, when specified as deployed by the FLTCINC or CINCUSNAVEUR, or when assigned to the operational control of COMSIXTHFLT, COMSEVENTHFLT, or COMIDEASTFOR. (Note: Although a unit must be COR to deploy, casualties or planned maintenance (in the case of overseas homeported ships) which prevent a deployed ship from getting underway in 96 hours will result in a status of deployed/CNOR.)

3.2.2.4 Post Deployment Leave Period. Post deployment leave may be granted upon return to homeport. The ship is in homeport with minimum scheduled activity and up to 50 percent of the crew may be on leave. The ship may remain COR under OPFLT OPCON if members of the crew on leave are available for recall to meet the 96 hour RFS requirement. Crew members not on leave during this period perform their normal duties.

3.2.3 Refit Phase. The refit phase of the employment cycle follows the operational phase, normally after the deployed period. It includes the post deployment availability period, refresher training period and may include the post deployment leave period.

3.2.3.1 Leave Period. When a post deployment leave period is not scheduled in the operational phase, or is less than four weeks in duration, the initial part of the refit phase may be a scheduled leave period of two to four weeks duration. Up to 50 percent of the crew may be on leave.

3.2.3.2 Post Deployment Availability Period. In this period, the ship is normally in homeport for a maintenance availability. During the availability, the ship would probably be CNOR and under the OPCON of the TYCOM.

3.2.3.3 Refresher Training (RFT) Period. When a ship completes a post deployment availability and refresher training, it commences a new operational phase. The refresher training period consists of basic training and upkeep. In this period, the TYCOM's goal is early attainment of COR status in order that the ship may be assigned to OPFLT OPCON (except in the case of submarines) for intertype training and deployment.

3.2.4 Regular Overhaul (ROH) Phase. The ROH phase follows an operational phase, and consists of a regular overhaul period and a refresher training period. The ship is CNOR under the OPCON of the TYCOM.

3.2.4.1 Regular Overhaul (ROH) Period. In the ROH period, the ship is in a shipyard, naval or civilian, undergoing depot level maintenance. Whenever possible, the location of the ROH is scheduled in a shipyard in the vicinity of the ship's regular homeport. When ROHs are scheduled in shipyards other than regular homeports and the duration of the ROH is six months or more, the homeport may be changed to the location of the ROH shipyard. The crew is employed in ship material improvement, maintenance and training, with some training being accomplished at schools ashore.

3.2.4.2 Refresher Training (RFT) Period. When a ship completes ROH, it commences refresher training. The refresher training period consists of basic training and upkeep. In this period, the TYCOM's goal is early attainment of COR status in order that the ship may be assigned to OPFLT OPCON (except in the case of submarines) for intertype training and deployment.

3.2.5 Deployment Cycle. The deployment cycle is that period of time from the commencement of one deployment to the commencement of the next deployment. This cycle incorporates both the operational and refit phases, and is an important planning factor in the preparation of operational schedules.

3.2.5.1 Turn Around Time. Turn around time is that period beginning upon the conclusion of one deployment and ending upon commencement of the next deployment. Under normal circumstances, this period will include the entire refit phase, and the ready and POM periods of the operational phase. It is an important consideration in analyzing the feasibility of operational schedules.

3.2.6 Employment Cycle Pattern. The employment cycle would typically commence with the new construction phase, followed by the operational phase, then the refit phase. Operational and refit phases would alternate until the ship enters the regular overhaul phase to complete the first employment cycle. Subsequent cycles would run from overhaul to overhaul, alternating operational and refit phases. The length of the employment cycle is established for each class of ship, based upon the depot maintenance requirements for that class of ship. The FLTCINCs have, for each class ship, a peacetime employment cycle (model) which puts into optimum balance the requirements for maintenance, morale and training in order to maximize the fleet's potential for wartime operations. Normally, peacetime operations/deployments should not be scheduled which degrade the fleet's readiness to conduct sustained combat operations at sea. The optimized peacetime employment schedule which has as its objective maximizing combat readiness should always be the goal and guide.

3.3 AIRCRAFT EMPLOYMENT CYCLES

Aircraft employment cycles are similar to, and often parallel, the employment cycles used by ships.

3.3.1 Ship-Based Aircraft

3.3.1.1 Carrier Air Squadrons. In general, the employment cycles of carrier air wings and their integral squadrons parallel the cycle of the aircraft carrier to which they are assigned. Upon completion of the refit phase leave period, emphasis is placed on individual squadron training, including the assimilation of recently reported aircrews and aviation maintenance personnel. After approximately three months of shore-based operations as individual squadrons, coordinated carrier air wing operations are conducted during a period of concentrated weapons flights at an advanced training base. The carrier air wing is then ready to rejoin its ship at sea for the refresher training period, followed by the operational phase. During extended periods ashore, such as when an air wing's assigned aircraft carrier is in overhaul, the longer cycle is normally

phased coincident to squadron transition to new aircraft, in order to complete the extensive training required in the new model aircraft.

3.3.1.2 Detachments. Other aviation units deploying aboard ship are helicopter detachments: LAMPS (Light Airborne Multipurpose System) units for antisubmarine warfare/electronic surveillance from surface combatants, and utility detachments aboard mobile logistic and support type ships for underway vertical replenishment. Their employment cycles parallel those of the ships on which they deploy; their training cycle is similar to that of other sea-going aircraft described in the preceding paragraph.

3.3.2 Land-Based Squadrons. The employment cycle for maritime patrol squadrons normally consists of a 12-month ready phase followed by a six-month deployment phase. While both operational and training evolutions are flown throughout the entire 18-month cycle, the emphasis is on training during the ready phase.

Chapter 4: Reports

4.1 COMPOSITE READINESS REPORTING

The proper implementation of this employment doctrine and the evaluation of fleet readiness resulting from that implementation require a system for the measurement and reporting of basic parameters. The data are required for operational planning, operations analysis, formulating readiness goals, and the measurement of progress toward readiness objectives. The particular data requirements listed below have been selected as some of those necessary to provide the Chief of Naval Operations with current information needed to realistically express to the JCS, OSD, and other high level civilian authorities the readiness level of the fleet. At this time, the data refer primarily to active commissioned ships.

4.1.1 Fleet Readiness Status Report. The information in Figure II-4-1 for the unit categories of Figure II-4-2 will be compiled daily from data received from the fleet through the Navy Worldwide Command and Control System and computer-generated as the Fleet Readiness Status Report. The automated report will be sent via secure facsimile to the FLTCINCs for review, verification and correction, if necessary, to ensure that each unit's reported readiness is accurate and compatible with the FLTCINC plans to use that unit in support of the general war plans. Verification, error corrections, and problems which would impact on execution of the general war plans should be reported to the Navy Department Duty Captain within 12 hours after receipt of the report.

4.1.2 Fleet Employment Planning Operational Data Report (FER). The information in Figure II-4-3 for PACFLT and LANTFLT by unit categories in Figure II-4-2 will be extracted from the WWMCCS data base (Source: Employment Schedule data received from the FLTCINCs) and promulgated monthly for use in planning and analysis. Similar data for individual ships are available on request.

4.1.2.1 Employment Schedule Model. FLTCINCs keep a current employment schedule model for each type ship. The employment schedule model covers normal peacetime operations and puts into optimum balance the requirements of maintenance, morale and training in order to maximize the readiness of the fleet to conduct combat operations at sea. Commitments for deployed forces are not considered in the development of the model.

FIGURE II-4-1
Information Compiled Daily from Fleet Readiness Status Report

Operationally Ready (COR):	East Coast, U.S. (including Caribbean waters)
	North Atlantic (Europe)
	South American and African waters
	Mediterranean
	Eastern Pacific—PACOM waters east of 140 degrees west
	Mid Pacific—between 140 degrees west and the THIRDFLT/ SEVENTHFLT chop line
	Western Pacific—west of chop line
	Indian Ocean
Total COR/CNOR Deployed	
Deployment Availability	Deployable in 96 hours
	Deployable in one month
	Deployable in six months
	Deployable in one year

FIGURE II-4-2
Unit Categories (data shown in Figure II-4-1 is maintained by unit categories shown in this figure)

- Total Active Ships Assigned
- Aircraft carriers (CV, CVN)
 - Cruisers (CG, CGN)
 - Destroyers (DD, DDG)
 - Frigates (FF, FFG)
 - Attack Submarines (SS, SSN)
 - *Ballistic Missile Submarines (SSBN)
 - Patrol Combatants (PG, PHM)
 - Amphibious Warfare (LCC, LHA, LKA, LPA, LPD, LSD, LST)
 - Mine Warfare (MSO)
 - Mobile Logistics (AD, AE, AF, AFS, AO, AOE, AOR, AR, AS)
 - Support (AG, AGDS, AGEH, AFG, AGFF, AGSS, ARS, ASR, ATA, ATF, ATS, AVM)
 - Land-Based Air Squadrons (VP)

*Some data on Ballistic Missile Submarines (SSBN) will not be included in this report.

FIGURE II-4-3
Information for Planning and Analysis

- UNDERWAY - Percentage of days underway at sea.
 - TNGANCH - Percentage of days spent on miscellaneous training at anchorage/anchor.
 - INPORT - Percentage of days inport.
 - INHOMEPORT - Percentage of days in assigned homeport.
 - UPKEEP - Percentage of days in upkeep.
 - DEPLOYED - Number of months (to nearest tenth) deployed.
- TOTAL SHIPS
- Average Months Deployed Per Ship

SEA PLAN 2000

*In January 1977 President Jimmy Carter took office, with Harold Brown as secretary of defense along with W. Graham Claytor, Jr., as Secretary of the Navy and R. James Woolsey as Under Secretary of the Navy. As the new administration's defense policy took shape, Claytor and Woolsey soon found it difficult to accept the naval portions of the defense policy that had been promulgated in Presidential Review Memorandum 10 (PRM-10). This policy of building up U.S. Army and Air Force strength in Western Europe, in the face of the Soviet Union's apparent supremacy in land forces on the inner German border, clearly envisioned a continental war and gave relatively little thought for the employment for naval forces. Claytor and Woolsey wanted a new study that could demonstrate the strategies and missions that naval forces could contribute in a range of situations, including peacetime presence, crisis management, and major warfare involving NATO forces. In mid-July 1977, Secretaries Claytor and Wolsey jointly requested that the Defense Department give the Navy responsibility for such a study. The Under Secretary of Defense approved that request on 1 August 1977 and directed the Navy to undertake a force-planning study on the most probable range of tasks for the Navy and Marine Corps during the remainder of the twentieth century.**

In the autumn of 1977, Under Secretary of the Navy Woolsey visited the Naval War College, along with a Navy Department consultant, John F. Lehman, Jr. Over a meal at the Black Pearl Restaurant in Newport, Woolsey and Francis J. "Bing" West, Jr., sketched out an alternative strategy. On Woolsey's return to Washington, Claytor appointed West to head the study group. The study group under West included eleven naval officers and two Marines, with technical support by Presearch Incorporated.† As the study group's

* See Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986*, Newport Paper 19 (Newport, R.I.: Naval War College Press, 2004), pp. 13–17.

† The study team comprised F. J. West, Jr., as director, and members Captain P. K. Fitzwilliam, USN; Captain R. A. Gallotta, USN; Colonel J. J. Grace, USMC; Colonel C. A. Jorgenson, USMC; Captain P. Skarlatos, USN; Commander J. J. Dittrick, USN; Commander W. G. Lange, USN; Commander J. H. Rixse III, USN; Commander R. D. Tucker, USN; Lieutenant Commander D. D. Geismar, USN; Lieutenant Commander G. P. Lauzon, USN; Lieutenant Commander James D. Stark, USN; and Lieutenant Commander Kenneth McGruther, USN, who was succeeded by Lieutenant Commander Jay Rixse as West's deputy. Technical advisers were L. P. Gollobin (president of Presearch Incorporated), J. R. Penny, G. C. Grapas, and J. D. Conley.

work progressed, Admiral Robert Long, the Vice Chief of Naval Operations, became the key point of contact within the Navy for the study and became closely engaged with the development of its arguments. The study took as its starting point the work that was being done by Admiral Thomas Hayward, then Commander, Pacific Fleet, in his Project SEA STRIKE, and then added other frames of reference to broaden the criteria for sizing the Navy's force structure.* As West recalls, "The essence of Plan 2000 was the assertion that any assault across the inner German border would result in a global, not continental war. Naval forces provided strike capabilities that could be marshaled anywhere, while protecting the sea lanes. The redoubtable Soviet CNO, Admiral Gorshkov, had enunciated a strategy of protecting his ballistic missile submarines in northern bastions. SEA PLAN 2000 advocated naval-based offensive strikes against the Kola Peninsula and against Soviet attack and missile submarines worldwide."[†]

In the process of the study, Lieutenant Commander James Stark made a singular contribution by calculating the force-level requirements of all the key groups involved—Marine Corps, amphibious forces, submarines, aviation, surface, logistics—and built a spreadsheet that related the numbers of ships and ship types to missions and funding levels projected over the coming decades. He came up with a total target number slightly less than six hundred ships, including fifteen carriers;[‡] this confirmed the general figures that the Ford administration had put forward in its 1976 National Security Study Memorandum 246.[§] West brought this calculation to Secretary of the Navy Claytor and Admiral Long and also provided the information to Admiral Hayward, by then scheduled to be the next Chief of Naval Operations. Long, Claytor, and Woolsey rounded the number up to six hundred ships. When Secretary of Defense Harold Brown reviewed that number, he did not dispute it but warned that in his view it was not financially possible.** Others carried the six-hundred-ship figure into the next decade. The final study was completed during the winter of 1977–78. Secretary Claytor forwarded the completed two-volume work to Secretary Brown on 20 March 1978; the Secretary of the Navy's office distributed volume 1 to key offices within the Navy on 4 April 1978 and volume 2 on 31 May 1978.

* Kenneth McGruther, e-mail to Hattendorf, 5 August 2007; Rear Adm. James D. Stark, USN (Ret.), telephone conversation with Hattendorf, 17 August 2007. For Project SEA STRIKE, see Hattendorf, *Evolution of the U.S. Navy's Maritime Strategy*, pp. 17–20.

[†] F. J. West, Jr., e-mail to Peter Swartz, 1 August 2007.

[‡] West, e-mail to Hattendorf, 10 August 2007; Stark, telephone conversation with Hattendorf, 17 August 2007.

[§] *National Defense Posture and Military Security*, NSSM-246 (Washington, D.C.: 2 September 1976). "There is general agreement that the size of the U.S. Navy should be closer to 600 than the present 485 ships by the mid-1990s": Donald H. Rumsfeld, "Which Five-Year Building Program?" U.S. Naval Institute *Proceedings* 103, no. 2 (February 1977), p. 25.

** West, e-mail to Hattendorf, 10 August 2007.

The following document is the unclassified executive summary prepared by the study group for wide circulation and released on 28 March 1978. It differs from the classified executive summary and the analysis in the study itself in that it stresses views that Under Secretary Woolsey, West, and the Department of the Navy wished to convey about the breadth of suitable Navy roles in support of a NATO war in Europe and in many other circumstances worldwide. ➡*

INTRODUCTION

SEA PLAN 2000 explores the rationale for general purpose naval forces. It addresses two sets of questions. First, what can a policymaker expect of naval forces? How do they contribute to U.S. interests? What is the connection between naval missions and U.S. national security objectives? Second, how capable are our naval forces of carrying out their missions? In assessing naval capabilities, three time frames were used: 1978, the late 1980s, and the 1990s.

The Difficulty of Naval Planning

It can take up to ten years for a new ship to go through the planning process, be authorized by Congress and built before it is introduced into the fleet. Further, ships remain in the fleet for 20 to 30 years unless they undergo service life extension programs in lieu of new procurement, in which case another ten years can be added to their useful service life. The naval forces serving this Administration exist today in the fleet or are already under construction. The ships that are procured—or not procured—will affect the latitude available to policymakers and thus American security interests decades hence. Force elements with shorter lead times or shorter lifetimes can be planned to accommodate a specific scenario or an immediately pressing problem. But a near-term planning horizon is inappropriate for naval forces.

For a variety of reasons it is necessary now to develop long range naval plans: this Administration is interested in and has a sense of responsibility with regard to the future; even in the near term, U.S. longer range policy planning has an important politico-military impact on allies, on potential aggressors and on the U.S. public; and finally, there is, in a real sense, a continuity between the present and the future. Recognizing these realities this Administration has directed that a study be undertaken of U.S. naval posture for the year 2000 and beyond. It is to that directive that this study responds. It does so by relating naval forces to national security objectives on the one hand and to military capabilities on the other.

* Captain Wayne P. Hughes, Jr., USN (Ret.), e-mail to Hattendorf, 10 August 2007. Hughes served as executive assistant to Under Secretary Woolsey.

SEA PLAN 2000, through a series of policy and feasibility analyses, seeks to provide the policymaker with a framework for understanding the utility of naval forces. With this framework in hand, program decisions regarding the size and structure of the Navy can be made with more confidence and surety.

Past Uses of Naval Forces

The traditional naval functions of control of the seas and projection of power ashore have in the past included a broad range of actual missions. Judging from historical use, a primary mission, or “business,” of naval force is the projection of American influence in situations where military means are appropriate. A second “business” is emerging, where the past is not prologue: that of countering Soviet influence which seriously threatens U.S. interests. A third “business” of naval forces is in support of land forces in a major war. Table A illustrates some past uses of naval forces in those businesses.

TABLE A
How U.S. Naval Forces Have Been Used

Projecting Influence

- Reassuring friends and allies (6th/7th Fleets)
- Lebanon (1958)
- Vietnam (Linebacker, etc.)
- Jordanian crisis (1970)
- Indo-Pakistani war (1971)
- Resupply of Israel (1973)
- Mayaguez (1975)

Countering Soviet Projection

- Cuban missile crisis (1962)
- Cienfuegos (1970)
- Mideast war (1973)

Supporting Land-Based Ground Power

- World War II: Battle of the North Atlantic/Pacific
- Korea (1950–53): Inchon
- Vietnam (supply lines, etc.)

The point is that, given past uses of naval forces and the uncertainty of the future environment, naval planning should focus upon capabilities, not scenarios, and upon a range of measures, not a dominant force sizing criterion.

There is no reason to believe that in the future the basic American security objectives will be substantially modified. A primary goal is the deterrence of nuclear threats or war against the U.S. and its allies. This study addresses the relationship between general purpose naval forces and three primary national security objectives:

- *The maintenance of stability.* Routine forward deployments are intended to reassure allies and strategic friends. Further, this use of naval forces serves to deter crises and constrain potential Soviet adventurism.
- *The containment of crises.* Critical to this is the ability to deal not only with low order crises, but also with those where the Soviets may choose to challenge U.S. capability and resolve.
- *The deterrence of major war.* The main elements of naval contribution to this deterrence include: a survivable SSBN force; protection for any SLOC in support of land campaigns; supporting allies, even if in proximity to the USSR; the capability to operate in forward areas and increase the risks for Soviet naval forces and capabilities; the capability to open a second front, especially in the Pacific; and possessing sufficient combat potential to hedge against the uncertainty of where and how a war of this magnitude would occur.

During the course of this study, a series of measures of naval capabilities were identified. They should enable the policymaker to judge the worth of naval forces as measured against those three basic U.S. security objectives. The measures take into account the past uses, or “businesses” of naval forces. They are shown in Table B.

TABLE B
Policy-Related Measures of Naval Capabilities

Maintain Stability

- Forward deployments
- Perceptions of naval power

Contain Crises

- Capability to affect outcome ashore
- Superiority at sea versus Soviets

Deter Global War

- Protection of sea lanes
- Reinforce allies
- Pressure upon the Soviets
- Hedges against uncertainties

THE INTERNATIONAL ENVIRONMENT

In evaluating the worth of naval forces in meeting national security objectives, it was necessary to determine the environment in which they would operate.

Overall, the trends do not indicate that the world will be more receptive toward American interests. The awesome American economic and military power which undergirded the stability of the democratic West in the first two decades after World War II has waned. The dollar is frequently under pressure on world money markets. The tragedy

of Southeast Asia raised questions about the extent of U.S. military power, wisdom and foreign policy consensus.

The Soviet Union has emerged as the world's second superpower whose international influence is basically derived from its steady and determined increase in nuclear and conventional military power, to which it continues to devote an unprecedented level of resources despite the inadequacies of its economic structure.

The most certain aspect of the environment will be its uncertainty and volatility. There is no reason to believe that ethnic or national rivalries or irredentist claims, many of which predate this country's existence, will be amicably resolved in the next 20–30 years. The acquisition by Third World nations of sophisticated military capability (including nuclear technology) is not encouraging. Nor is the expanding world population and increasing demand on scarce resources needed for survival and national development.

As the world has become more interdependent, the distinction between U.S. "vital" interests and "peripheral" interests has blurred. The period when the U.S. was self-sufficient in natural resources and protected by a 3,000 mile wide moat has long since passed. Its economic, political and military interests are, for better or for worse, intimately related to what happens elsewhere in the world. What happens in one region affects another. The West may choose to ignore Soviet or other disruptive actions on other continents; but the consequences of those actions cannot be avoided.

The military capabilities of nations in areas where the West has both vital and peripheral interests are growing. As regards naval forces alone, antiship precision-guided munitions (PGMs) are in the hands of 30 nations, excluding NATO and the Warsaw Pact. The main threat, the USSR, continues its steady naval growth in terms of blue water (at-sea sustainability) capabilities, ocean surveillance, and antiship missile improvements. The projections are that, over the next two decades, the Soviets will largely increase their nuclear attack submarine fleet, greatly improve their naval air strike force and deploy more aircraft carriers.

In doctrinal terms, the Soviets have been a sea-denial force whose maritime strategy centered around checking the nuclear-delivery potential of the carrier and the SSBN. Increasing Soviet involvement in crises worldwide, however, indicates that their doctrine accommodates to ambitions and capabilities. Today Soviet maritime strategy includes the concept of force projection, although not in mirror-image fashion to U.S. projection capabilities.

While the Soviets are manifesting a more ambitious worldwide involvement, the U.S. is no longer able to offset Soviet adventurism by reliance on nuclear superiority.

The central national security problem for the future will be effectively to control Soviet expansion of influence, hopefully without engaging in hostilities. To accomplish this will require a mix of political, economic and military means, one important portion of which will be our naval capabilities.

The future will not be more secure for U.S. interests than the past.

BASIC STUDY FINDINGS AND TRENDS

What does the future promise in terms of U.S. naval capabilities? Basically, in terms of technology U.S. naval capabilities should improve relative to the projected threat. Naval science is dependent upon areas of expertise—microelectronics, computers, nuclear physics, etc.—where the United States holds considerable relative advantages over potential adversaries. Several points deserve mention.

World Environment and Military Capabilities

Given an unstable world environment extending well into the future, the U.S. will require a variety of military capabilities. Trends indicate the world environment will not be more stable or more secure for U.S. interests in the future than in the past. The U.S. will face adversaries overseas, great and small; the U.S. must keep secure links to overseas allies (NATO, Japan, and others) and secure access to resources (e.g., Persian Gulf oil). The U.S. will require substantial military capabilities to maintain stability, contain crises and deter worldwide war. Because uncertainty increases as we look further into the future, military capabilities must be balanced and flexible to deal with a range of possible world environments. Primary among these capabilities will be versatile naval forces, the centerpiece of which will continue to be carriers because they contribute heavily both to control of the seas in high threat areas and to the outcome of battles ashore.

Aside from force projection, other naval missions of high priority will involve the projection of U.S. influence to reassure friends and allies and counter Soviet influence projection, the latter likely to be a growing threat.

Soviet Missile Threat

Soviet missiles, launched from either bombers, submarines or surface combatants, are a principal threat to U.S. surface forces operating either during a serious crisis such as the 1973 Mideast War or during a major war. The Soviets currently have about 100 submarines and surface ships equipped with antiship missiles. These forces and antiship missile equipped Backfire bombers are projected to increase substantially in this period.

U.S. naval forces must be able to cope successfully with that threat. National security is based on a forward strategy which links the U.S. with allies on both flanks of the Soviet Union. Contrary to popular opinion, properly employed carrier task forces are not highly vulnerable. They can, of course, be damaged. But they are not easy to put out of action and are even more difficult to sink.

Technology has not made U.S. surface forces the horse cavalry of the 1980s. This trend is due to a combination of fighter aircraft protection, area and point antimissile defenses (especially the new AEGIS air defense system), electronic warfare plus cover and deception tactics.

Major Warfighting Capabilities

While a worldwide war is extremely unlikely, the massive Soviet buildup of strategic, theater nuclear and general purpose forces will require a high level of U.S. preparedness.

Antisubmarine Warfare/SLOC Defense. In antisubmarine warfare (ASW), systems of proven capability are entering the fleet today. The analysis in this study indicates the defense of SLOCs (sea lanes of communication), especially in the North Atlantic, appears to be improving markedly. This is in part due to the new ASW systems.

Further, SLOC protection is aided by allied naval capabilities to operate offensively in a major war, thereby forcing the Soviets to allocate to defense a substantial portion of their forces.

Exerting Pressure on the Soviets. Naval forces may have unique capabilities for assisting the flanks of NATO.

Forward strike operations may prove highly valuable in tying down large Soviet forces which might otherwise be employed.

The threat of opening a second front would help relieve pressure against the SLOC, complicate Soviet planning and give the Soviets pause before the initiation of hostilities. The policy worthy of such operations probably resides more in their effects upon Soviet behavior in crises and upon the equilibrium of the worldwide power balance than in their employment in the remote possibility of a global war.

In any major war, the destruction of the Soviet fleet and denial to the Soviets of access to any ocean is a basic objective. This requires the close coordination of surface, submarine and sea-based air assets in an aggressive naval campaign. The ability to achieve this objective has a significant impact on the attainment of other important objectives, e.g., maintenance of important SLOCs and support for allies.

Thus, naval capabilities, in conjunction with allies and land-based air, provide for the maintenance of maritime superiority in relation to the most powerful potential adversary, the Soviet Union—a fleet which can prevail over Soviet naval forces in the key strategic areas of the world. Forward naval operations can have a decisive effect on the outcome of a land war in Europe by ensuring firmness of NATO flank states; relieving pressure on the SLOCs; ensuring reinforcement and stiffening the will to resist of various NATO states; facing the Soviets with the real possibility of truly unacceptable losses.

Dealing with Crises

Most likely, however, serious military challenges to U.S. interests will come not in the industrialized heartland of the West but in other geographic areas where, despite U.S. preference, military force and violence are frequently the primary means of resolving policy disputes.

Should the U.S. draw down its forward deployments, this could leave the USSR as the dominant naval power in the vacated region. As the Soviets perfect their V/STOL carriers, their ability to influence events ashore, psychologically as well as physically, will increase. It can be expected they will use this influence and gradually shed their image of a reactive navy and an autarkic, continental power.

Criticality of Fleet Size

Even with favorable technological trends, the overall fleet size is threatening to decline below the threshold of critical mass necessary for the containment of serious crises and the retention of flexible options for the deterrence of major war. Numbers are important. U.S. naval forward deployments are stretched taut. Further reduction in U.S. capital ships, when contrasted with the growing numbers of Soviet antiship missile combatants, is a matter for concern.

As part of the deterrent to a major war, the credibility of naval force options to reinforce allies on the Soviet flanks or to hem in Soviet naval forces again depends upon massing sufficient numbers.

Major reductions in carrier levels, the heart of U.S. naval capabilities, will reduce the ability of a President to respond rapidly to crises. Further, reduction of forward deployment posture is liable to have high political costs.

Choices for the Future

The costs, on the other hand, to maintain a *balanced naval* capability, one which can project U.S. influence, counter Soviet influence and, if required, fight and prevail in worldwide war, can be met within a 3% real budgetary growth. New technologies will affect the naval capabilities on both sides but there is no basis to conclude that in

balance they adversely affect U.S. interests. To the contrary, the potential of the cruise missile, V/STOL, AEGIS, etc., if vigorously pursued, should open new opportunities for retaining U.S. dominance of the seas.

Summary

So, for naval force planning, the future offers both an opportunity and a challenge. The opportunity relates to the positive trends in technology. The challenge relates to the negative trends in the numerical size and the mission flexibility of the fleet. The issue is how to exploit the promise of technology and to procure the numbers of platforms at an affordable cost.

U.S. SECURITY OBJECTIVES: GENERAL

A primary goal is and will be the deterrence of nuclear threats or war against the U.S. and its allies. This study does not address forces for nuclear warfighting. It does, however, address the relationship between general purpose naval forces and the three primary national security objectives described earlier:

- Maintain stability
- Contain crises
- Deter worldwide war.

Since World War II, the U.S. has actively pursued the goal of worldwide stability. A principal means has been a forward strategy, linking U.S. forces and security to those of friends and allies across the Atlantic and Pacific Oceans. A second objective has been the containment of crises, even in regions not in themselves vital to U.S. interests. The purpose has been to avoid the unraveling of stability—a disintegrating process which would impact critical U.S. interests. A third objective has been the deterrence of another world war in this century. This goal requires not just strong allies, strong forces in place in Europe and the assurance of timely reinforcement. It also demands skill in containing crises and supporting orderly global change, for a world war would most likely stem from the failure of the West to respond appropriately to lesser conflict.

SECURITY OBJECTIVE: MAINTENANCE OF STABILITY

Forward Deployments

A stable world order in which the nation states favor international cooperation rather than conflict is a reasonable national security objective. Naval forward deployments in sensitive areas are intended, as is U.S. troop commitment in Europe, to maintain stability and to deter serious conflicts in sensitive areas from arising.

Since 1945, policymakers in successive Administrations have seized upon sea-based power as a means of affecting the behavior of decision-makers in other nations. On a daily basis, this influence is projected by naval forward deployments whose presence in a region is intended to reassure allies, deter enemies, ensure quick response, and demonstrate U.S. interest and resolve in the region. In a phrase: to undergird stability and to foster relationships favorable to U.S. interests.

Except in war, the tempo of naval operations is driven by the pattern of forward deployments. These deployments center on the amphibious ships and the carriers, for they represent the ability of America to influence events ashore.

The Sixth Fleet in the Mediterranean, with its two battle groups,* and one Marine Amphibious Unit (MAU), is not only the pivotal power reassuring U.S. allies on the Southern Flank. The Sixth Fleet is the single most powerful entity, American or otherwise, in a maritime region of 17 nations and 300 million people. Many of those states, while not within the NATO alliance, look to the United States for reassurance and support—states such as Spain, Morocco, Tunisia, Israel, Egypt and Jordan. The Sixth Fleet symbolizes American steadfastness in that region of the globe where the Soviets keep most of their forward deployed naval power. In the face of the improving Soviet Navy, it would be difficult to withdraw one of the two U.S. battle groups and believe the stability and the power balance of the region would not be affected.

On the other side of the globe, geography renders the vast Pacific a naval region. One battle group operates in the area of Japan, the PRC and the Soviet Far East. Another battle group operates sometimes in joint support near Korea, sometimes in the South China Sea, sometimes in the Indian Ocean.

In recognition of the fact that friends and potential adversaries alike are watching U.S. actions in the Pacific following the announced withdrawal from Korea, the President has directed that there be no further force reductions. The Seventh Fleet remains the most significant manifestation of U.S. presence.

Current force levels are such that any further reduction would probably result in the withdrawal, for at least part of each year, of one of the four carriers currently forward deployed. Since U.S. national security rests upon a forward strategy which links our forces to those of allies around the globe, the question is not whether a reduction in forward deployments would affect our foreign policy; but rather, how much.

* A battle group presently contains a carrier, surface combatants, SSNs, and an underway replenishment ship.

General Perceptions of the U.S.-Soviet Naval Balance

A second and equally important measure of the naval contribution to peacetime stability is the perception of the Soviet-U.S. naval balance. Forward deployments are visible reminders that in a crisis or a major war, U.S. naval power will assure sea control and contribute to the outcome ashore. Were those forward deployments to be discounted either as too vulnerable or too few, their contribution to regional stability would be severely curtailed. The trend in the public literature has emphasized Soviet gains at sea as well as elsewhere.

It is not inevitable that the U.S. concede to the Soviets parity in all military capabilities. The forward strategy linking the U.S. to other continents requires use of the seas, while the perception that the Soviets could deny the U.S. control of the seas is particularly damaging. Such perception is not warranted by the projected trends in technology. Whether it will be warranted by a steady reduction in the size of the American fleet and the amount of forward deployment remains to be seen.

SECURITY OBJECTIVE: CONTAINMENT OF CRISES

Background

In some crises a President may wish to commit U.S. troops immediately to preempt certain potential moves by an adversary or to rectify a time-urgent problem, such as evacuating Americans in jeopardy. Or he may wish to ferry quickly supplies to one side in a conflict, either to provide critical resources or to display American commitment. The quick response of airlift provides the President with a valuable tool. But airlift has limitations such as base availabilities or cargo size and weight restrictions. In some cases airlift may be the preferred implement, but in others it may not provide the flexibility demanded by a President.

In many crises, naval forces are a preferred means of leverage for a policymaker. Forward deployed naval forces can be employed without being committed to battle and without committing allies. Such demonstrations manifest both U.S. concern and capabilities. In over 200 crises since 1945 in which the U.S. was involved, U.S. Navy and Marine forces were deliberately employed in 177 cases, while U.S. land-based air or ground forces alone were demonstrated in fewer than 90 cases.

The reasons are obvious. From a domestic standpoint, naval forces may be the most acceptable form of responsive action by the U.S. in crisis situations. They can convey, if the policymaker chooses, calculated ambiguity and a calibrated response capability. Their presence does not irrevocably commit the United States to a given course of action. They do, however, seriously complicate the calculations of opposing parties in

assessing the consequences of their potential counteractions. The deployed naval force can be tailored to the mission and through its force components convey a clear message. If further steps are to be taken, U.S. fighting forces can be assembled for action without using bases in other nations. If the crisis is resolved satisfactorily, naval forces can be withdrawn with limited fanfare. Land-based troops and aircraft tend to become locked into longer-term commitments.

In sum, naval forces provide a policymaker with vitally needed flexibility and a tool for orchestrating events.

The Calibrated Use of Force against the Shore

This mission applies basically to Marines and carrier air. Most crises do not peak overnight. The National Command Authority (NCA) will have sufficient warning time to deploy naval forces near the scene. This is frequently done with our amphibious forces. In 30 serious crises since World War II, Marines were deployed on 21 occasions.

Each of the three Marine Amphibious Units (MAUs) constantly deployed can land over 1,000 troops, most by helicopters to avoid or to envelop some fixed defenses. In a crisis setting, where the objective is to settle matters without escalation to major war, a thousand heliborne Marines who can range far from their logistics base at sea represent a substantial, self-contained fighting package. The presence of such a capability sends a clear signal to the other side (e.g., Lebanon, 1976).

In regard to air, the striking power of a carrier force is a powerful weapon. One carrier, for instance, holds more and better aircraft than the combined Ethiopian, Soviet and Cuban aircraft currently involved in the Horn of Africa. The ordnance delivery capability per carrier is increasing, and given "smart" weapons the per carrier increase in effectiveness is even more dramatic.

A primary use of naval forces—because they have the power to influence decisively the outcome—is to contain conflicts and so to prevent the outbreak of major conflict. Concern about such crises is not unwarranted. That naval forces can be brought to the scene in the time of crises reduces the risk of conflict escalation.

U.S. Superiority at Sea in a Crisis Setting

A second mission related to the containment of crises reflects the new use, or business, of U.S. naval forces: how to counter Soviet influence adverse to U.S. interests. In the past, the knowledge that a President faced with a crisis could deploy a superior force enabled him to tolerate a period of tension. The question is how to maintain the benefits of that advantage for the future, given Soviet naval programs. The benefit of naval superiority was that it signaled to the Soviets and others that their adventurism

overseas took place against the backdrop of superior, yet appropriate, U.S. power. This facilitated the U.S. use of diplomatic or economic leverage, confident that the Soviets could not credibly counter with a military option. Regardless of whether the U.S. chose to deploy its applicable naval superiority, its existence enabled policymakers to maintain a stance of calculated ambiguity.

However, the net effect of the Soviet and U.S. trends in naval forces is that the next decade will *not* look like this current one in terms of crisis management.

The Soviets are building a sufficient number of submarines and surface combatants to challenge American seapower in key regions of the Eastern Hemisphere.

A comparison of U.S./Soviet force deployment postures and transit times for representative crises in the Eastern Mediterranean, Persian Gulf, Southeast Asia, and Northeast Asia shows that the potential for regional maritime confrontation exists in all areas of interest. Neither side holds a large edge in expected response/reinforcement time. Nor do the Soviets have to threaten the employment of bombers flying from their homeland to challenge U.S. naval forces deployed to the scene of a regional crisis. Confidence that U.S. naval forces on scene would survive and that Soviet naval forces would not is essential to the avoidance of a Cuban missile crisis in reverse. By this measure of survivability, technology now in hand and programmed for the fleet will reduce U.S. surface ship vulnerability to missiles, be they fired from a submarine, bomber or surface combatant.

Moreover, Soviet ships and submarines run grave risks today in such a conflict, due to U.S. carrier air and submarines. Those risks will become even larger as antiship missiles are installed on U.S. combatants throughout the fleet.

Summary

In past crises the U.S. has tended to dispatch carriers because their air power could be applied against the shore and also constituted the prime naval weapon for sinking Soviet surface combatants. However, in serious crises, carriers must be massed to provide around-the-clock operations and to hedge against Soviet opposition. As long as American naval power appropriate to crisis management remains concentrated in carrier battle groups, there are very finite limits to our response capabilities and further reductions in U.S. naval forces require careful consideration of the consequence. Given the growth in Soviet naval power, in a serious crisis in the next decade (comparable to Cuba in 1962, Jordan in 1970, or the 1973 Mideast War), American policymakers will have to take into account the effect of their actions or inactions upon regions of the world far removed from the scene of the crisis. To withdraw from one set of commitments, because of unduly constrained naval resources, or upset one

power equilibrium to rectify another, would impact adversely upon the post-crisis position in the United States.

SECURITY OBJECTIVE: DETERRENCE OF GLOBAL WAR

Background

A conventional worldwide war is unlikely. If Western Europe were attacked, the risk of nuclear war might be great. Such a war could only stem from the most profound shift in Soviet calculation about the steadfastness and the strength of the West in general and of the United States in particular. Such calculation in turn could only stem from American failure in a series of crises and tests beyond the boundaries of NATO.

If the U.S. becomes involved in a conventional worldwide war, both land-based and naval forces will be absolutely essential. The contribution of naval forces to the deterrence of a global war should be assessed first in terms of the containment of crises and the maintenance of stability. It should be assessed secondarily in terms of four missions related to the deterrence of worldwide war.

SLOC Defense

Little more than a decade ago, there was considerable pessimism about the North Atlantic SLOC, given the hundreds of Soviet submarines and the poor state of ASW in the West. Today, there is guarded optimism.

However, there is no optimum set of forces for ensuring security of the sea lanes against submarines. SLOC interdiction is guerrilla war at sea. The forces directly applicable to SLOC defense are the land-based P-3 aircraft, attack submarines, and surface escorts of the frigate class. The battle groups and nuclear attack submarines used for area ASW indirectly aid the SLOC by keeping Soviet forces on the defensive.

The Backfire bomber represents a significant threat against our battle groups. But it is equally capable of striking convoys supporting/reinforcing friends and allies worldwide.

Reinforcement of Allies

In addition to ensuring that supplies can move from America to Europe, naval forces contribute to deterrence of a global war by a clear demonstration of an ability to support allies or strategic friends on the flanks of the Soviet Union.

In the Atlantic, it may be necessary to reinforce or regain territory, a very difficult task in the face of Soviet Naval Aviation (SNA) and one which would be approached with careful tactics and strong land-based air support. Ideally, no allied surface naval

movement would be made into certain areas until the Soviet submarine and Soviet Naval Aviation (SNA) threat has been attrited. Unfortunately, it is by no means clear that land-based air could, as a practical matter, provide such support. Necessary bases are not now available nor is it likely for political reasons that they will be during peacetime.

Moreover, the U.S. has not programmed either the major expenditures necessary to develop such land bases nor to provide the aircraft for such bases. Until, and unless, such problems can be solved, carrier air remains the mainstay of credible reinforcement. Aside from its military importance, it carries high political and psychological value.

While the U.S. may well wish to explore land-based air as a long term alternative, neither political nor military analysis to date suggest this as a high probability solution. Fortunately carriers, while clearly vulnerable to some attrition, are believed capable of carrying out major military actions despite the air and submarine threat.

Allied control of the Eastern Mediterranean in the face of SNA will require multiple (depending on the availability of USAF assets) battle groups. Clearly, before war's end, the West must control the Eastern Mediterranean. Extensive analysis of forward operations to reinforce those highly exposed allies demonstrates that while difficult, carrier air can provide a reasonable degree of protection. Specifically, even assuming heavy land-based air assistance from allies and the U.S. Air Force, the analysis shows a grouping of carriers is needed to attrite the Backfire bomber force without grave damage to the naval strike force. The battle group thereafter is at liberty to perform strike missions. This is a shift in the trend of surface force survivability as significant as that which has led to the ASW advantage enjoyed by the West.

The carrier can be offered reasonable assurance not just of surviving but of carrying out its mission in protection of allies and in attacks against Soviet capability. There is no reason to believe that U.S. carrier aircraft cannot engage and destroy Soviet Naval Aviation before such saturation attacks can be launched.

Pressure upon the Soviets

The possibility of offensive options would help relieve pressure against the SLOC, complicate Soviet planning and give the Soviets pause before the initiation of hostilities. The policy worthy of such options probably resides more in their effect upon Soviet behavior in crises and upon the equilibrium of the worldwide power balance than in their employment in the remote possibility of a global war. Two offensive options suggest themselves.

The first is the threat to open up a second front in the event of Soviet attack in Europe.

Combined land-based and sea-based air threat against Soviets could destroy a portion of the SNA and other important military facilities. It would pose an implicit threat to the U.S.S.R., tying down major Soviet assets, since the results in the Pacific could not be foretold. It would help to insure that the sea link to Japan and Korea was maintained. Above all, knowledge that in this troubled time U.S. military planners felt strong enough in their Pacific forces to contemplate a second front should help to allay concerns about the correlation of forces in the Pacific.

The second option is the destruction of the Soviet fleet and the denial to the Soviets of access to the ocean. This can be done by an aggressive and coordinated use of all naval forces, surface, air and submarine.

Hedge against Uncertainty

In planning for the long term, hedges against what is not known cannot be neglected. Four particulars (although a contradiction in terms) bear mention. First, an assumption of some losses on D-day is prudent. So, too, is recognition that some naval forces may continue to be tied down at the scene of the original crisis after the global war has begun.

Consequently, this study looked at the potential advantages of organizing non-carrier Surface Action Groups (SAGs). The SAGs would consist of an AEGIS antimissile ship, several surface combatants with antiship missiles, some SSNs and no carriers. They would be designed to destroy Soviet surface ships and submarines. U.S. SAGs would increase the flexibility of the policymaker and permit him to retain a visible presence in several sensitive areas around the globe. SAGs might be useful in crises where the U.S. desires to send a muted signal (i.e., not threaten areas ashore), but to have a credible seafighting force (for protection of SIGINT collection, blockade, counterblockade, etc.).

Second, the Persian Gulf region cannot be ignored. It may be a dormant theater. But it may erupt.

Third, before the end of this century the Soviets may acquire one or more overseas bases. These would have to be dealt with in a global war, or the host nations dissuaded from permitting Soviet usage. In the future, the capability for an amphibious assault on a Soviet overseas base could become an additional role.

Fourth, naval air support could be called upon for the major land battle.

In summary, a worldwide war is extremely unlikely, fraught as it is with danger of nuclear war. If it ever occurred, it would most likely evolve slowly, following from a complete unraveling of stability as the U.S. failed to contain crises and keep the West together.

SECURITY OBJECTIVES AND NAVAL MISSIONS: A SUMMARY

Naval forces contribute to national security objectives across a broad spectrum of missions. Prominent among them are:

TABLE C

Objectives and Missions

Security Objective	Naval Mission
• Maintenance of Stability	• Forward deployments
• Containment of Crises	• Calibrated use of force against the shore
	• Superiority at sea in a crisis setting
• Deterrence of a Global War	• SLOC defense
	• Reinforcement of allies
	• Pressure upon the Soviets
	• Hedge against uncertainties of the distant future

No priority among the missions is advocated. The maintenance of stability, the containment of crises and the deterrence of global war are as tightly interwoven as are the international politics and economics of today's world. It is imperative that the U.S. neither lose control of events at the crisis level nor give the appearance of losing control. The unraveling of stability just prior to World War I is an example of the consequences when nations lose control of events. The flexibility of U.S. naval forces enables the President to contain crises outside the Eurasian land mass which threaten to shatter the international equilibrium. And, so far as Europe itself is concerned, clearly the area of first importance to U.S. interests, the ability to support allies separated by a vast ocean remains of vital importance.

That other nations believe the U.S. has appropriate controlled power, with a will to use it if required, is equally important. World War II stemmed from small aggressions which the West had neither the will nor the capability to resist. In the final analysis this led to a major world war, an experience we would repeat at our own peril.

In order not to neglect any of the seven missions set forth in this section, all three major options for a long term naval force goal presented in the next section keep a balance among their force types.

FORCE/FUNDING OPTIONS

SEA PLAN 2000 suggests that a policymaker should have in mind a long-term plan for naval forces—their direction and purpose—before becoming immersed in program and shipbuilding details. This report tries to develop the framework for such a plan. U.S. naval force capabilities are examined in terms of their contribution toward three

TABLE D
Illustrative Alternative Force Levels

Type	Option 1 1%	Option 2 3%	Option 3 4%
CV*	10	12	14
AEGIS ship	10	24	28
Cruiser/Destroyer	74	100	114
Frigate	136	152	158
SSN	80	94	98
SSBN	25	25	25
Amphibious ships	52	66	78
UNREP ships	38	46	55
Support ships	49	60	61
Total ships	474	579	631
MSC/NRF	-35	-44	-46
Total active ships	439	535	585

*CV levels do not include a carrier in SLEP. (Service Life Extension Program.) Thus, total carriers would be 11, 13 and 15 in the three options.

basic national security goals: maintenance of stability; containment of crises; and deterrence of war.

To assess the naval missions explained in the preceding section, the quantitative and operational analyses of the study used a naval force assumed to have 3% real growth in the mid-80s and mid-90s time frames. This starting point stemmed from President Carter's decision that the overall resources for national security required about 3% a year real growth, given the trends in the threat. Two other force levels are also evaluated: a decremented force of little or no real growth; and an incremented force of about 4% per year real growth. These force options are shown in Table D. This study concentrated upon the capabilities of naval forces to carry out different missions. The column on type of ships is not intended to substitute for specific program tradeoffs: i.e., for CV one can substitute CVV, or VSS, etc.; for SSNs, the 637 class or a SSN-X may be preferable for a given amount of dollars to more 688s, etc.

These options represent long term planning goals. All three options keep a balance among their force elements. None advocates a sudden, radical force change. The situation with naval forces and new technologies is analogous to the maintenance of a trust fund for one's heirs. A balanced portfolio provides the optimum insurance against uncertainty. Blue chip stocks that have demonstrated a good return on investment are not divested without the reasonable certainty of a better investment. New issues are sampled as possible blue chips of the future (new technologies). The most exciting technologies relate not so much to platforms as to weapon systems. AEGIS-type antimissile defenses and electronic warfare show special promise in the near term.

ASSESSMENT OF SEA PLAN 2000 FORCE ALTERNATIVES

Option 1 is judged to be a high risk option with a low degree of flexibility, with minimal capability across the range of naval tasks.

Option 2 hovers at the threshold of naval capability across the spectrum of possible uses, given the risks associated with technical and tactical uncertainties.

Option 3 provides a high degree of versatility in the form of a wider range of military and political actions at a moderate increase in cost over *Option 2*.

This assessment is summarized in Table E below.

TABLE E

Comparison of SEA PLAN 2000 Force Options

Measure	Option 1	Option 2	Option 3
Maintain Stability	• Relax current forward deployment • Reduced U.S. visibility	• Maintain current deployment • Resolve versus Soviet growth	• Current deployment at objective rotation • Enhanced perception
Contain Crises	• Crisis/deployment tradeoff • High D-day shootout loss	• Sustain forward deployments during a crisis • Create SAGs	• Sustain forward deployments during crises • Significant residuals
Deter Global War	• Some SLOCs • No forward ops • At best, defensive	• Protects SLOCs • Enables 2–4 forward ops • Second front option	• All-around superiority
Risk Assessment	• High risk; minimal capability; not flexible	• Minimum acceptable risk; maintains selective superiority vs. Soviets	• Lower risk; provides hedge and options

FISCAL ASSUMPTIONS

Certain fiscal assumptions have been made with regard to the three force level options for an FY 2000 Navy. The key assumptions, applied to all options, include the following:

- The current operating to investment allocation of DON dollars will remain at about the current ratio.
- Historical trends in shipbuilding real cost growth due to technology will continue into the future.
- Historical trends of real cost growth in shipbuilding due to increase in ship size can be arrested by better management as attested to by recent constraints on ship size.

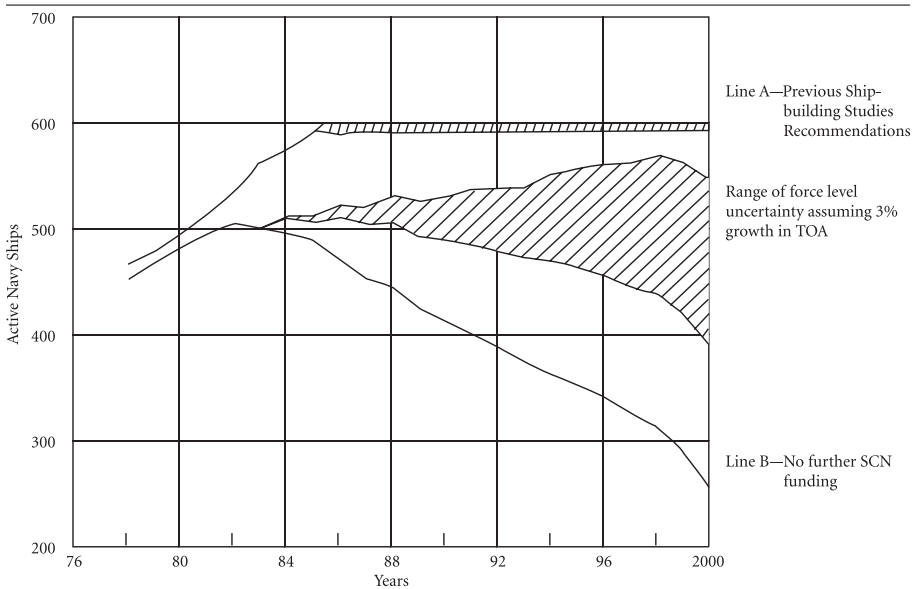
Using these assumptions it has been determined that some real growth in DON funding will be necessary to attain each of the levels examined.

Clearly any variance in these assumptions can have a significant effect on the attainability of any force level. If the operating to investment ratio increases, then one of two decisions must be made:

- Hold constant the number of ships needed and increase funding; or
- Hold constant the percent of real growth and accept the risk of operating a smaller force.

Figure A is an example of what happens to the force level, holding constant the 3% real growth in DON funding, but varying the assumptions. The shaded area indicates the range of uncertainty associated with this funding.

FIGURE A
Active USN Ship Inventory for Various Funding Options



Future Shipbuilding Plans

Since all three options propose the procurement of ships, the number of alternative shipbuilding plans is huge. The opportunities are also numerous for a series of cost and managerial efficiencies which would increase the mission effectiveness of each option or unbalance the force and run an increased risk in one mission area to reduce the risk in another.

This Table Illustrates the Magnitude of the Shipbuilding Program for Each of the Options through the Year 2000

Option	1	2	3
Average annual SCN dollar costs in constant FY79 dollars	\$6.29B	\$8.8B	\$9.5B
Total number of new construction ships in program	290	395	447

Dealing with SCN at 3% real growth has certain problems as well as benefits. Obviously, such a funding profile would be considerably smaller in the near term and would, due to compound growth, increase in the outyears. To maintain a stable shipbuilding industry and interim military capabilities, however, a smoother growth could be desirable. It was assumed that programming action by SCN experts within the Navy and OSD could smooth shipbuilding and overall top line costs to achieve a reasonable 3% real growth budgetary target.

The Future of U.S. Sea Power

On 1 July 1978, at the midpoint in the administration of President Carter and the tenure of Secretary of Defense Harold Brown and Secretary of the Navy W. Graham Claytor, Jr., Admiral Thomas Hayward took office as the Chief of Naval Operations. A naval aviator, Hayward had previously served as Commander, U.S. Seventh Fleet, in 1976–77, and Commander, U.S. Pacific Fleet, 1977–78. In these positions, he had developed some of his ideas about a new approach to naval and U.S. Pacific Command strategy, which he developed in Project SEA STRIKE. The study laid out a rationale for the offensive use of naval forces in the Pacific for the purpose, in the event of war, of weakening a Soviet invasion of Europe. These thoughts became a key starting point in U.S. naval strategy in the 1980s. Hayward's concept in SEA STRIKE drove Pacific Command planning under Admiral Robert Long, who had been primed for it earlier as Vice Chief of Naval Operations and when overseeing work on SEA PLAN 2000.*

Hayward wanted to shift the terms of discussion to strategic issues, away from the budgetary and force-planning issues that had come to dominate. As a first step in this process, Hayward and his executive assistant, Captain William A. Cockell, began to develop an outline for a worldwide maritime strategy for the U.S. Navy. Cockell, an expert on the Soviet Navy, had served as director of the CNO Executive Panel under Admiral Zumwalt and had been familiar with Zumwalt's "Project SIXTY" effort. Hayward and Cockell completed the first phase of their work over a four-month period ending in early January 1979. The first product was a document entitled "CNO Strategic Concepts." Circulated as a classified memorandum to flag officers in February 1979, it formulated seventeen major points as the bases for thinking about strategy.† Hayward used this document as the basis for discussions about naval strategy that he initiated with flag officers throughout the Navy. Reinforced by these discussions, Hayward and Cockell developed them as the basis for Hayward's briefings to Congress, the Joint Chiefs, the CNO Executive Panel, and other groups, as well as in the Navy's annual posture statements.

* On Project SEA STRIKE, see Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986*, Newport Paper 19 (Newport, R.I.: Naval War College Press, 2004), pp. 17–20.

† See *ibid.*, pp. 38–39, for a summary of the memorandum and its seventeen points. No surviving copy of the original classified document has been located.

On 15 February 1979, Hayward testified before the Subcommittee on Seapower and Strategic and Critical Materials of the House Armed Services Committee; his remarks were published three months later in revised form as an article in the annual “Naval Review” issue of the Naval Institute Proceedings in May 1979.† Captain Cockell drafted the article on the basis of Hayward’s congressional testimony and his classified memorandum on strategic concepts. The article, reproduced below, lacked the depth and sophistication of the classified memorandum but expressed Hayward’s basic approach to thinking about naval force in strategic terms.‡* ♦

The Chief of Naval Operations talked before the Subcommittee on Seapower and Strategic and Critical Materials of the House Armed Services Committee on 15 February 1979 on the questions of “Why do we need a navy?” and “What kind of navy should it be, anyway?”

Because it deals with the central issue of the naval profession, and because it does so concisely and clearly, the Editorial Board of the Naval Institute obtained permission to publish this text in *Naval Review*.

I would like to lead off with a broad examination of the responsibilities facing the Navy, in order to provide a baseline from which we might judge the adequacy of our naval forces to meet our national needs—and from which we might come to grips with the questions nagging the analysts these days, such as, “Why do we need a Navy?” and “What kind of Navy should it be, anyway?”

An excellent starting point is a discussion of the U.S. requirement for “maritime superiority.” I wish to emphasize this point of maritime superiority because it is a concept that has been given insufficient recognition in recent years, yet it is one which must form the basis for the planning of all our naval forces. It provides a clear and unambiguous yardstick against which to measure the adequacy of our naval forces—present and prospective. Its opposite is “maritime parity,” or worse, “inferiority”—both of which are anathema to me, and which are wholly inconsistent with this country’s most essential national interests.

* House Armed Services Committee, *Hearings on Military Posture and H.R. 1872 [H.R. 4040] and H.R. 2575 [S. 429], Part 4*. Feb. 14–16, 21, 28, Mar. 6, 9, 14, 21–23, 29, Apr. 5, 9, 10, 1979. *Continuation of Hearings on Military Posture and DoD Authorization Request for FY80 and Supplemental Authorization Request for FY79*. . . before the Subcommittee on Seapower and Strategic and Critical Materials, testimony of Admiral Thomas B. Hayward, 96th Cong., 1st sess., 15 February 1979, pp. 37–109.

† Adm. Thomas B. Hayward, USN, “The Future of U.S. Sea Power,” *Naval Institute Proceedings* 105, no. 5 (May 1979), pp. 66–71.

‡ Hattendorf, *Evolution of the U.S. Navy’s Maritime Strategy*, pp. 42–43.

The requirement for maritime superiority recognizes the strategic realities of our geographic position as an island nation connected to overseas allies by two broad oceans, and confronting a great land power which has chosen, for reasons of its own, to challenge our traditional supremacy on the seas. It is not surprising that the Soviets see benefit in doing so, for they recognize, as we must, that control of the seas is absolutely essential for the survival of the United States as a viable economic entity—as it is to any island nation which wishes to preserve its independence and freedom of action. I personally regard maritime superiority as the “first principle” of our national strategy—indeed, the foundation upon which all other aspects of it rest.

Maritime superiority does not mean that we must control all the ocean expanses simultaneously. It *does* mean that we must control those areas which we need to use in peace and war, against whatever forces may challenge that control. These essential sea areas include the strategically critical waters around the Eurasian periphery, and the economically vital sea lines of communication (SLOCs) through the Atlantic, Pacific and Indian Oceans on which the advanced industrial economies of the United States, Western Europe, and Japan so heavily depend. In controlling the seas we must look to our allies and sister services for important support. But in the final analysis, the United States must have the clear ability to prevail over any maritime adversary if it is to protect its interests worldwide, and to deter actions which could lead to a major war.

That, in a nutshell, is what maritime superiority is all about, in my judgment. Without it, we can neither prevail in war nor protect our essential interests in peace.

In the NATO area I believe it is almost universally understood today that the U.S. Navy would play a critical role in the reinforcement and resupply of allied forces in the Central Region, if the war lasts more than a few days. It is similarly recognized that the Navy is uniquely suited to play a key—some would say the predominant—role in the defense and support of NATO’s flanks which, washed by the Mediterranean and Norwegian Seas, are theaters with very heavy maritime overtones.

What is less clearly recognized, on occasion, is the importance of the role our Navy would play in the Pacific and Indian Oceans during a NATO war, although I must confess that with the unsettling effects caused by the recent turmoil in Afghanistan, Iran, and elsewhere in the Mideast, people are beginning to understand what I have been trying to impress upon them—that there is a direct linkage between our security objectives in central Europe and stability in the Persian Gulf. We should never forget that in war the U.S. Navy would confront substantial Soviet naval and air forces in these regions, and we would have the predominant responsibility, not only for assuring allied access to oil from the Persian Gulf, but for supporting U.S. forces and allies throughout the Western Pacific—which is one of the Soviets’ most important strategic frontiers.

The consequences of our letting this vital region go by default would be incalculable, and would directly impact on the outcome of a NATO-Pact War and the post-conflict global balance of power.

In peacetime, our Seventh Fleet, operating in the Western Pacific—and backed by the full strength of the U.S. Pacific Fleet—gives credence to our oft-repeated statement that we are, and intend to remain, a Pacific power. It is the visible manifestation of our commitment to Japan; and clearly signals to the PRC, and the other nations of the Pacific, that the United States has the capability and will to defend its interests, to maintain stability and balance, and to support its friends and allies in that part of the world. Our routine deployments in the Indian Ocean, which include periodic augmentation by a carrier battle group from the Western Pacific, clearly demonstrate our capability to control the oil SLOCs which are vital to the industrialized world in general, and to our European and Japanese allies in particular.

One would hope that the capability to control the SLOCs would never have to be demonstrated in combat. It is obvious that so long as we possess a clear margin of maritime superiority, the incentive to challenge our capability will be greatly diminished. But if that margin becomes tenuous, not only do we invite challenge, but in a more subtle way we undermine the faith which our friends and allies have in our ability to meet our commitments, and risk setting in motion profound political realignments that would be wholly inconsistent with our most basic national interests.

For these reasons, I believe it is essential for the U.S. Navy not only to possess the ability to prevail over any maritime challenger, but to be *perceived* by the rest of the world as possessing such capability. A thin margin of superiority puts both of these objectives at risk. Indeed, there are so many subjective measurements involved in calculating relative maritime power that a thin margin is really no margin at all. For that reason I personally prefer the term “maritime supremacy” to characterize the naval posture which our country’s interests require, as I believe it connotes a margin of superiority substantial enough to leave little doubt as to the likely outcome should U.S. naval forces be challenged. A posture of maritime supremacy strongly enhances deterrence, while assuring an outcome favorable to our interests should deterrence fail.

Looking at the requirements levied on our forces in peace and war, there are several basic principles which I believe must guide the structuring and employment of those forces. The familiar concepts of Sea Control and Power Projection, which have had some utility in the analytical world, do not serve us well in understanding the real world. Indeed, they have the potential to confuse the issue by suggesting that Sea Control and Power Projection are discrete categories when, in fact, they are closely intertwined. Projecting power against the sources of Soviet naval strength may well be the

most rapid and efficient way to gain control of the seas (as contrasted with the simplistic concept held by many that Sea Control simply means escorting convoys to Europe and little else).

So I would like to discuss with you several fundamental principles which I believe are essential to a more complete understanding of naval supremacy as I have outlined it.

The first of these principles is the premise that any conflict between NATO and the Warsaw Pact will inevitably be worldwide in scope. This principle is consistent with Soviet doctrine, and with the geopolitical realities of Soviet and Western interests which, in war, would come into conflict at a number of points around the Eurasian periphery. At sea, a NATO-Pact war would be a multiocean conflict, since our critical SLOCs pass through the Atlantic, Pacific, and Indian Oceans, as well as the Mediterranean and Norwegian seas. Additionally, it is clearly in our interest to maintain a worldwide naval strike capability which threatens potential enemies from a variety of directions, tying down defensive forces, greatly complicating the enemy's strategic calculations and force deployments, and inhibiting his freedom of action.

The second principle is that U.S. Navy forces must be offensively capable. The geographic range of the Navy's responsibilities is too broad, and its forces far too small, to adopt a defensive, reactive posture in a worldwide conflict with the Soviet Union. I can't believe any Americans would want their navy to be one that is only reactive to Soviet initiative, that doesn't have the capability to be sent wherever necessary, under whatever conditions, and to be able to survive and win that battle. We must fight on the terms which are most advantageous to us. This requires taking the war to the enemy's naval forces with the objective of achieving the earliest possible destruction of his capability to interfere with our use of sea areas essential for support of our own forces and allies. As I suggested earlier, under most circumstances the prompt destruction of opposing naval forces represents the most economical and effective means to assure control of those sea areas required for successful prosecution of the war and support of the U.S. and allied war economies. Our current offensive naval capabilities, centered on the carrier battle forces, are optimally suited for execution of this strategy.

The third principle relates to the fact that the U.S. Navy is outnumbered by our principal adversary and is likely to remain so for the foreseeable future. Our sea-based tactical air superiority, our general technological superiority, and the at-sea sustainability of the U.S. fleet compensate for this significant deficiency and currently provide the critical margin over the Soviet Navy. It is essential that we retain this competitive edge while continuing to place heavy emphasis on maintaining technological superiority across the board.

The fourth principle stresses that we must exploit Soviet geographic disadvantages and continue to deploy naval forces in locales which provide us strategic advantage. It is important that we make the Soviets understand that in war there will be no sanctuaries for their forces. Keeping the Soviets preoccupied with defensive concerns locks up Soviet naval forces in areas close to the USSR, limiting their availability for campaigns against the SLOCs, or for operations in support of offensive thrusts on the flanks of NATO or elsewhere, such as in the Middle East or in Asia.

The fifth principle recognizes that the current narrow margin of U.S. Navy advantage requires that every effort be made to integrate relevant capabilities of the other U.S. services and U.S. allies into the campaign to defeat the Soviet and Warsaw Pact navies. In this respect the trends suggest a continuation of the existing division of labor under which the U.S. Navy provides the bulk of offensively capable forces while the allies complement our effort with forces for convoy escort, mine clearance, and port protection.

The sixth principle is that we will fight a major war with essentially what we have at its outset, augmented by the Naval Reserve, which will enhance our capabilities in certain specialized warfare areas and provide some unit and personnel augmentation for active forces. As General Haig says, it will be a "come as you are war." Given the long lead time for production of today's complex ships and aircraft, neither side will have a substantial opportunity to reconstitute major naval units, even if the war is relatively protracted. Every major engagement must, therefore be regarded as potentially decisive in terms of its impact on the naval balance; and every U.S. naval unit must have the maximum offensive capability we can build into it consistent with its mission. It also means that our total force structure in peacetime, including the important supplement represented by the Naval Reserve, must be sufficient in size, capability, and readiness to prevail in war. There will be little opportunity to expand it significantly once war has begun.

The seventh principle is that U.S. naval commanders must be governed by the concept of calculated risk. That is, in war they must select engagement opportunities which promise attrition ratios clearly favorable to the U.S. side. This is a critically important point for any navy that lacks the numbers needed to assure a reliable margin of superiority. It was the principle, you may recall, which Admiral Nimitz enjoined Admiral Spruance to follow at the Battle of Midway—which Spruance then translated into a brilliant tactical victory, which proved the turning point of the naval campaign in the Pacific. Given the nature of the U.S.-Soviet naval balance and our essential inability to reconstitute battle losses, achievement of distinctly favorable attrition ratios offers the only prospect of progressively defeating the Soviet Navy in a worldwide war at sea. Even a one-to-one exchange ratio is a strategy for defeat.

The final principle relates to the adequacy of our residual forces. Though often overlooked in planning, the force balance existing at the end of a NATO–Warsaw Pact conflict would be of critical importance in determining not only the terms of settlement, but in protecting U.S. vital interests in what would undoubtedly be a highly unsettled and conflict-prone world. The inherent mobility of naval forces, and their relative lack of need for land bases, would make them particularly useful in this kind of a post-conflict environment.

I have not thus far addressed the question of Soviet naval capabilities. I know you are familiar with the trends in that area, and their very unsettling implications—particularly when measured against the projected U.S. Navy posture post-1985. The trend line projected by the current five-year shipbuilding plan forecasts an inevitable decline in the size of the Navy, commencing in the mid-1980s. The Soviet Union, at the same time, is embarked on an aggressive program to expand the quality and quantity of its high seas naval forces (including naval aviation), to extend their reach and sustainability, and to optimize their combatant capabilities against the U.S. Navy. The picture is one of a dynamic program to increase Soviet capabilities for offensive operations worldwide. This effort is sustained by an expanding submarine and aircraft construction base, and a heavily financed naval investment program. As might be expected, given the Soviet aim of reversing the naval balance, the trend in Soviet ship construction is very much towards larger, more complex, more expensive, and more capable units, with the 25- to 30-thousand-ton nuclear-powered cruiser we believe to be under construction in the Baltic (about twice the size of our own CGNs), the *Ivan Rogov* amphibious assault ship, the *Kiev* class carrier, the *Berezina* class underway replenishment ship, and the Delta III SSBNs being prime examples—all pointing to the kinds of priority which Admiral Gorshkov has determined best suits his Navy.

Looking at the implications of all this for our own naval posture, I think several general conclusions follow.

First, addressing the threat realistically compels us to seek sophistication in our own naval forces. There is no cheap or easy way out of the situation the Soviets have put us in. To put it simply, there is no free lunch in this maritime superiority business. We must control the seas to survive. The Soviets do not need to; but gaining control would give them immeasurable strategic advantage—a fact they clearly recognize. They have made—and are continuing to make—a massive investment in highly capable forces designed to wrest control from us. We must respond with forces capable of defeating that threat. We have no control over the size or sophistication of the Soviet Navy; we can only sit back and watch it grow. At the same time we have no alternative but to respond to the threat it poses with forces that clearly have the requisite capability—hence, sophistication—and probably, expense.

The second conclusion is that in all likelihood quality cannot be traded off in any significant way for quantity, at least not at today's fiscal levels. We can easily substantiate a requirement for greater numbers of ships; but attaining quantity at the expense of quality (which is another name for *capability*) simply invites the piecemeal defeat of units which are incapable, either individually or collectively, of coping with the threat. Unfortunately, this conclusion runs immediately afoul of the attractive proposition that the future force posture of the U.S. Navy should rely on many more ships, much cheaper and smaller and less capable.

The third conclusion is that twelve carrier battle groups represent the absolute minimum in capability needed to discharge our missions—in *both peace and war*. Our present forces, and the sailors who man them, are severely stressed to meet peacetime commitments. They would be very heavily taxed to discharge their global responsibilities in war. We would, in fact, have to rely on sequential campaigns to attrit the threat and successively gain control of essential sea areas, with all the risk and uncertainty such an approach implies. While our numbers of ships will go up in the near term as previously funded forces come into inventory, the trend projected by the building level contained in this and last year's budgets forecasts an inevitable decline in total ship numbers when the momentum of past years' investments will run out of steam.

The fourth conclusion is that we must encourage our allies to make a greater naval contribution in those areas I previously described, where their capabilities effectively complement our own. This can help alleviate some of the overall numbers shortfall, and add capability in specialized areas (such as mine warfare); but we should realistically recognize it will add only marginally to our capability for offensive action against the main battle forces of the Soviet Navy.

The fifth conclusion is that we must make attainment of substantially greater standoff capability in our weapons systems a major objective, over the longer term, in order to destroy the increasingly capable Soviet launch platforms before they attain strike range of our own forces. At the same time, we should strive to distribute our own offensive capability among a greater number of platforms, to the extent we can do this within resources available and—most importantly—without diluting the total strike capability of our battle groups.

The final conclusion, which clearly flows from all the rest, is that any major changes in our naval force structure will be evolutionary in nature. Our primary aim must be to preserve the essential capability of our 12 battle groups and keep them responsive to the threat. The fiscal margin for development and deployment of radically new platforms and systems will be small indeed, severely limiting our ability to innovate in major ways. This means we must carefully select those initiatives which appear to offer

significant payoff—such as non-CTOL aircraft—and pursue them in a deliberate and carefully structured way so as to maximize the potential technological payoff from our investment.

In summary, we must continue to put sophistication and highly capable systems into our ships and aircraft to meet a rapidly increasing threat. We cannot turn our backs on a realistic assessment of Soviet capabilities. Units which are incapable of meeting the threat are, in a sense, worse than none, because they give some a false sense of our total capabilities *vis-a-vis* the Soviets. This means that quality cannot generally be traded off for quantity. At the same time, quantity does matter and there is clearly an absolute minimum in numbers of combatant units below which we cannot safely go. In my judgment, at twelve battle groups we have reached that limit. Allies can—and must—complement our capabilities in important areas—but the fact of life is they are unlikely to add significantly to our capability to deal with the main striking forces of the Soviet Navy. Looking to the future, it is clear that we must stress greater standoff capability, and rigorously explore the potential of non-CTOL aviation, so we can identify and capitalize on the most promising technological avenues for the improvement of our force structure. Change, however, will inevitably come slowly.

The essential question is, what must we do to ensure that we retain a clear margin of superiority over a very vigorous and dedicated competitor who fully understands the importance of sea power in the global strategic balance?

I hope that the foregoing thoughts provide some useful insights into the principal considerations which I believe must guide our future decisions on naval force structure.

List of Abbreviations and Acronyms

A	AAA	antiair artillery
	AAW	antiair warfare
	ABFC	Advanced Base Functional Component
	ADCON	administrative control
	ADGE	Air Defense Ground Environments
	AEW	air early warning
	AGI	intelligence collector (auxiliary) [Soviet]
	ARG	amphibious ready group
	ASCM	antiship cruise missile
	ASUW	antisurface warfare
	ASW	antisubmarine warfare
	ATSS	auxiliary training submarine
B	AVCAL	aviation consolidated allowance list
	AWACS	Airborne Warning and Control System
B	BBBG	battleship battle group
C	CASREP	Casualty Report
	CAST	Canadian Air-Sea Transportable [Brigade]
	CGN	guided-missile cruiser (nuclear powered)
	CINC	commander in chief
	CINCEUR	Commander in Chief, Europe
	CINCLANT	Commander in Chief, U.S. Atlantic Command
	CINCLANTFLT	Commander in Chief, U.S. Atlantic Fleet

CINCPAC	Commander in Chief, U.S. Pacific Command
CINCPACFLT	Commander in Chief, U.S. Pacific Fleet
CINCUSNAVEUR	Commander in Chief, U.S. Naval Forces Europe
CNOR	command not operationally ready
COD	carrier onboard delivery
COMIDEASTFOR	Commander, Middle East Force
COMSEVENTHFLT	Commander, Seventh Fleet
COMSIXTHFLT	Commander, Sixth Fleet
CONMAROPS	concept of maritime operations
CONUS	continental United States
COR	command operationally ready
CTOL	conventional takeoff and landing
CV	aircraft carrier
CVA	attack aircraft carrier
CVAN	attack aircraft carrier (nuclear powered)
CVBF	carrier battle force
CVBG	carrier battle group
CVV	aircraft carrier (vertical takeoff)
C3	command, control, and communications
DAS	direct air support
DD	destroyer
DE	destroyer escort
DG	defense guidance
DLG	guided-missile frigate [destroyer leader]
DLGN	guided-missile frigate [destroyer leader] (nuclear powered)
DON	Department of the Navy

	DPQ	Defense Planning Questionnaire [NATO]
E	EASTLANT	Eastern Atlantic [NATO]
	EMPSKD	employment schedule
F	FBM	Fleet Ballistic Missile [program]
	FER	Fleet Employment Planning Operational Data Report
	FLEETEX	fleet exercise
	FLTCINC	fleet commander in chief
	FY	fiscal year
	FYDP	Five Year Defense Program
I	I&W	indications and warning
	ICBM	intercontinental ballistic missile
	INDRON	Indian Ocean squadron [Soviet]
	INF	Intermediate Nuclear Force
	IOC	initial operational capability
J	JCS	Joint Chiefs of Staff
	JSCP	Joint Strategic Capabilities Plan
	JSPD	Joint Staff Planning Document
L	LAMPS	Light Airborne Multipurpose System
	LCAC	landing craft (air cushion)
	LHA	assault ship
	LHD	assault ship/dock landing ship
	LIC	low-intensity conflict
	LLC	lower-level conflict
	LPD	landing platform dock
	LSD	landing ship dock

M	MAB	Marine amphibious brigade
	MAF	Marine amphibious force
	MAGTF	Marine air-ground task force
	MAU	Marine amphibious unit
	MEB	Marine expeditionary brigade
	MIW	mine warfare
	MK	mark
	MLSF	Mobile Logistics Support Force
	MNC	major NATO contingency
	MOA	memorandum of agreement
	MOVREP	Movement Report
	MPA	maritime patrol aviation
	MPN	Military Procurement (Navy) [account]
	MPS	Maritime Prepositioning Ship [or Squadron]
	MSC	Military Sealift Command
N	NATO	North Atlantic Treaty Organization
	NAVFORSTAT	Naval Force Status [report]
	NCA	national command authorities
	NCAPS	naval control and protection of shipping
	NCCS	Navy Command and Control System
	NIE	national intelligence estimate
	NPS	naval protection of shipping
	NRF	Naval Reserve Force
	NSDD	national security decision document
	NSOF	Naval Status of Forces [database]
	NTPF	Near-Term Prepositioning Force

	NWP	naval warfare publication
O	O&M	Operations and Maintenance [account]
	OPCON	operational control
	OPFLT	operational fleet commander
	OPNAV	Navy Staff
	OSD	Office of the Secretary of Defense
	OTH-T	over-the-horizon targeting
P	PG	patrol gunboat
	PGH	patrol gunboat (hydrofoil)
	PGM	patrol gunboat (missile)
	PHM	patrol hydrofoil (missile)
	POM	program objectives memorandum; preparation for overseas movement
	PPBS	Planning, Programming and Budgeting System
	PRC	People's Republic of China
R	R&D	research and development
	READEX	readiness exercise
	RFS	ready for sea
	RFT	refresher training
	ROE	rules of engagement
	ROH	regular overhaul
S	SACLANT	Supreme Allied Commander, Atlantic [NATO]
	SAG	surface action group
	SAM	surface-to-air missile
	SCN	Ship Construction, Navy [account]
	SIGINT	signals intelligence

SIMA	shore intermediate maintenance activity
SLBM	submarine-launched ballistic missile
SLEP	Service Life Extension Program
SLOC	sea line of communication
SNA	Soviet Naval Aviation
SOSUS	Sound Surveillance System
SPECWAR	special warfare
SPECWARGRU	special warfare group
SSBN	ballistic-missile submarine (nuclear powered)
SSN	attack submarine (nuclear powered)
START	Strategic Arms Reduction Treaty
SUBROC	submarine rocket
TACAIR	tactical aviation
TAD	temporary additional duty
TAO [T-AO]	oiler [MSC]
TAP [T-AP]	transport [MSC]
TASM	theater antiship missile
T-ATF	fleet tug [MSC]
TLAM-C	theater land-attack missile (conventional)
TLAM-N [TLAM/N]	theater land-attack missile (nuclear)
TYCOM	type commander
UCP	Unified Command Plan
ULMS	Underwater Long Range Missile System
URG	underway replenishment group
USAF	U.S. Air Force
USCINCLANT	Commander in Chief, U.S. Atlantic Command

USMC	U.S. Marine Corps
USN	U.S. Navy
USSR	Union of Soviet Socialist Republics
VISTA	Volunteers in Service to America
VOD	vertical onboard delivery
VP	maritime patrol [squadron]
VSS	VSTOL support ship
VSTOL [V/STOL]	vertical/short takeoff and landing

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