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RESEARCH MEMORANDUM

THE OFFENSIVE NAVY SINCE WORLD WAR II: HOW BIG AND WHY

A Brief Summary

Michael M. McCrea
Karen N. Domabyl
Alexander F. Parker

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A handwritten signature in cursive script that reads "Christopher Jehn".

Christopher Jehn
Vice President
Navy-Marine Corps Planning
and Manpower

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INTRODUCTION

This research memorandum is a condensation of the summary report on a project on Naval force levels and strategy. This paper examines past force levels and their rationales in order to gain insight for force levels of the future.

The project focused on the Navy's offensive components: fleet (or attack) carriers, amphibious lift, and attack submarines. This summary addresses the justification for having each component and the reasons for the various force levels of each component since the end of World War II.

The purpose of this project was to provide answers or insights to the following questions about Naval force levels:

- What were force levels in the past and why?
- Will future force levels be different from the past?
- What factors might change future force levels?

No references are included in this brief summary. The sources of information for the postwar and early cold war were the original documents, many of which have been declassified. References to these and other sources are contained in the forthcoming project summary and the reports covering each component.

This paper first considers the foundation of post-World War II force levels of the Navy's offensive components. It compares the forces planned versus the forces actually available during the postwar era. The force levels of the three components are then compared with each other and their time variations examined. The report then isolates those factors that influenced postwar force levels and considers their implication for changes in future force levels.

FOUNDATION OF POSTWAR FORCE LEVELS

The size and nature of the postwar Navy was determined by two factors: the composition and experience of the Navy in World War II and its immediate aftermath; and the beginning of the cold war which, in 1950, resulted in the drafting of National Security Council Memorandum 68 (NSC-68) and the start of the Korean war.

In the Pacific, World War II was a maritime war, and the Navy's role was offensive, both strategically and tactically. The carriers and the amphibious forces were used for the projection of power onto the

Japanese empire. In the central Pacific the Navy and the Marines were the spearheads of the amphibious assaults. The attack submarine force was used in a campaign of strategic interdiction, strangling Japan's means of existence.

In the Atlantic, the Navy's role in the campaign against Germany was primarily a logistic one, and hence had a tactically defensive cast. The concern was with resupply of the forces in Europe, and the threat to successful resupply was the German submarine. Hence, antisubmarine warfare (ASW) was a primary Navy mission in the Atlantic. The amphibious assaults in the European theater were the largest in history, but they were operations of the Navy and the Army, not the Navy and the Marines. Few Marines were killed in the European theater.

Planning for the postwar Navy began in late 1943, before the war was even over. It was completed in December 1945, having had the direct involvement of both Secretary of the Navy James V. Forrestal and Chief of Naval Operations Ernest King. Additionally, the Pacific fleet aviators and submariners who figured so critically in the victory had participated in the planning.

The second set of events that shaped postwar force levels was the drafting of National Security Council Memorandum 68 (NSC-68) and the start of the Korean war, both in 1950. NSC-68 defined the cold war threat as the Soviet Union, and the invasion of South Korea confirmed the threat and its nature. NSC-68 also defined the U.S. response to the threat.

As with planning for the postwar Navy, plans were made for a Navy suitable to the needs of the cold war. The precepts used in such planning are considered next.

Postwar Planning Precepts

At the end of World War II, the U.S. Navy enjoyed absolute naval supremacy. No other nation had a navy that could seriously challenge it, and no other nation had a navy even close to it in size. The U.S. Navy had over 28 fleet carriers, enough amphibious lift for over 400,000 troops, and over 250 submarines, plus a host of other combatants and craft.

The problem facing the planners of the postwar Navy, therefore, was not buying or building a Navy, but deciding what forces to keep; in particular, what ships to keep on active duty, what to put in reserve, and what to mothball as a mobilization base. In deciding what forces to

keep on active duty, the Navy planners were guided by three self-imposed precepts: they wanted a balanced navy, a forward navy, and a navy second to none.

The planners used the term "balance" in a variety of ways, without seeming to have had an explicit definition. They knew what they meant by balance, though, and it was apparently understood among them in a collegial sense. In one statement of "balance" used in the planning documents by then-Vice Admiral Harry W. Hill and in Congressional testimony by the then-CNO, Admiral Ernest King, balance meant that some of each type of ship and weapon that had proved useful during the war would be kept on active duty until it was clear it would not be useful in the postwar Navy. The ratio of carriers to surface combatants to be kept on active duty would be determined by the relative number used during the war. For example, the Commander of Naval Air Forces, Pacific, calculated the ratio of carriers to surface combatants in each of the major engagements in the Pacific as a basis for planning the postwar balance.

The active postwar Navy was to be a forward navy, operating not in waters contiguous to the United States, but instead, overseas. The U.S. Navy assumed responsibility for the entire Pacific and the western Atlantic, and the approaches thereto. The idea behind a forward navy and its concomitant overseas base structure and protected lines of communication was for the Navy to be in a position to preclude any "disturbances to the peace of the world"--to have forces on or near the scene of any troubles so that any small disturbance could be quickly quelled before it grew into a more serious disturbance. Although the models for these "disturbances" were Germany and Japan and the events leading up to the war, the experience of the war was such that the planners determined "never again."

Additionally, the postwar planners wanted a navy second to none. Given the size and composition of the other navies of the world at that time, this was not terribly difficult. (The British navy by itself was larger than all the other navies combined, except that of the United States.) Initially, the precept of a navy second to none was to be accomplished on a type-by-type basis, e.g., number of submarines versus number of submarines, battleships versus battleships, etc. Ultimately however, a navy second to none was taken to mean that the U.S. Navy should have superiority in each ship type compared to the next largest navy.

Using these precepts, the planners of the postwar Navy determined that an active-duty navy should have about 320 combatants, plus amphibious and support ships. As will soon be discussed, the postwar Navy envisioned in these plans did not come to fruition, however, until well after the planned period. Immediate postwar budgets precluded much

of what the Navy planners had desired; declining budgets for the Navy led to declining force levels.

Cold War

Before World War II, most Americans did not believe in becoming entangled in European affairs; they were content to leave Europe to the Europeans, together with all their feuds and internecine conflicts. Immediately after the war, this attitude reappeared, with troops overseas rioting to come home and to be relieved of their service obligations. They had fought the war and won, and they were ready to be done with it. In less than a year after the end of the war, the size of the Army and Navy dropped from over 12 million men to less than 3 million. The armed services were demobilized, precipitously.

At the end of the war, there were very few, in government or out, who realized that the Soviet Union would turn from a wartime ally to a peacetime threat. The realization was slow in coming, but there were many indications of future enmity. Just after the war, the Soviets initially refused to take their troops out of Iran and seemed intent on annexing some of its northern provinces (1946). They wanted territorial rights in the Sudan and control over the Bosphorus and the Dardanelles (1946-48), and they began to assert control over eastern Europe (1946-49). Their supporters attempted to take control of the Italian government (1946-47), and that of the Greeks as well (1947-48); they were instrumental in fomenting the Greek civil war and the atrocities associated with it. They blocked Allied access to Berlin (1948-49). These events, as well as many others, led to the eventual realization that the Soviet government was and would be inimical to the United States and any interest it represented.

In 1947, President Truman had declared the so-called Truman Doctrine, which declared that the United States would "help free peoples to maintain...their national integrity against aggressive movements that seek to impose upon them totalitarian regimes." Although not mentioning them by name, the doctrine was directed at the Soviet Union and its activities in Greece and Turkey. In 1948, Truman signed and promulgated National Security Council Memorandum 20, which was concerned with the U.S. objectives with respect to the USSR, to counter Soviet threats to U.S. security. It labeled the USSR as the "gravest threat to...the United States" and called for greater military readiness. The Marshall Plan, designed to restore economic vitality to the western European nations, was started in 1948. In 1949, in spite of over 150 years of history, the United States joined with European nations to form the NATO Alliance.

The final step on the path to realization was the drafting of NSC-68, and the Korean war.

NSC-68 and the Korean War

The Korean war and the drafting of NSC-68 were coincident in that the Korean war started after the basic draft of NSC-68 was completed but before the policy was approved by the President and promulgated. President Truman had initiated the drafting of NSC-68 (by the Department of State) in January 1950 and had seen the basic document in early April. He sent the draft to the National Security Council for a determination of the military forces and costs implied by the policy. The first estimates of the military forces and the costs were due in early July, with a final determination due in early September. On 25 June 1950, the North Koreans invaded South Korea; hence, at the start of the Korean war, the basic policy had been determined but the associated military forces and total costs of the policy had not. President Truman approved the conclusions of the policy in September and approved the military forces and costs in mid-December, followed shortly by a declaration of a national emergency.

NSC-68, as a matter of national policy, identified the government of the Soviet Union as hostile to the very idea of freedom and as a direct threat to the United States. The Soviet Union was declared to be expansionist in nature and an "aspirant to hegemony," by which the drafters meant world hegemony. The policy called for the "containment" of the Soviet Union, as a response by the United States to the perceived threat. Containment was to be a policy of blunting or denying any further Soviet expansion, together with an effort to isolate the Soviet Union until its behavior changed to conform to generally accepted international standards.

Because it made explicit reference to the maintenance of a strong military posture as essential for the policy of containment, NSC-68 added a sense of urgency to the general rearmament started in 1948. The containment policy called for not only a strong military posture but made explicit the notion that such a posture would need to be maintained for an indefinite period of time. The military forces required by the policy were originally intended to be achieved by 30 June 1954. Events in Korea led many to believe that war with the Soviet Union was much closer than had previously been believed, and the date for achieving the required military forces was advanced to 30 June 1952.

The Korean war was a surprise to the policy-makers and posed an immediate military problem. Although NSC-68 called for greater military strength, such strength was meant to be directed at the Soviet Union and not a country like North Korea. Moreover, NSC-68 had initially envisioned a four-year period to build up the requisite military force. Unfortunately, at the time of the invasion of South Korea, the force levels of the United States were at a postwar low; hence, not only did the United States need to rearm to satisfy the policy dictates of

NSC-68, but forces also had to be raised to fight the war. Although the Chairman of the Joint Chiefs of Staff (JCS) believed that the Korean war was "the wrong war, at the wrong time, in the wrong place, with the wrong enemy," the war was viewed as an effort to block Soviet expansionism, i.e., part of the effort to "contain" the Soviet Union.

Additionally, while it is not clear that the drafters of NSC-68 initially envisioned the use of surrogates on the part of the Soviet Union, the notion of surrogate wars had been considered by the time President Truman signed the document for promulgation in December 1950. U.S. participation in surrogate wars would henceforth be viewed by many as part of the policy of containment.

NSC-68 Objectives for Military Forces

As with planning the postwar Navy, there were precepts for planning the forces associated with NSC-68. The military forces were sized to meet two objectives. The first was to "protect against disaster," i.e., to ensure that in a war against the Soviet Union the U.S. forces would be large enough to give the country time to mobilize but not so large that they would prevail without mobilization. This set both a lower and upper limit on the force levels.

The second objective in sizing the military forces was that they should be large enough to support the foreign policy goals of containment. This set an additional lower limit, and the limits from these two objectives were used as guides to force levels.

Defense Consensus

The events of 1950 led to the reforging of the defense consensus of World War II. There was general agreement among the President, the Congress, and the American people on the need for rearmament and the defense of freedom. NSC-68 was deliberate in saying that the Soviet government was anathema to the very notion of freedom and a free people and that Soviet enmity towards the U.S. stemmed from this rather than old-style power politics. There was a general acceptance by the citizenry that the U.S. must defend the cause of freedom, not solely because it could but because it was their duty as a free people.

Even with this consensus, President Truman was fearful of the economic impact of a trebled defense budget. In his declaration of a national emergency in December, he said he would ask Congress to reimpose some of the recently lifted economic controls. Reservists, many of whom were veterans of World War II, had already been called back to duty, and some National Guard units were activated.

Despite the general reluctance to return to war, with the necessity for the callup of the Reserves and the imposition of economic controls, President Truman, the Congress, and the American people acted in concert. This defense consensus and the economic underpinnings of it have essentially lasted throughout the postwar period.

Since World War II, the Presidents, the Congress, and the American people (via the ballot box) have had a chance to consider how much should be spent on defense and the context for this expenditure, such as for strategic arms, to support alliances such as NATO, and for general defense.

Since 1950, each President has chosen relatively high levels of defense spending. However, all of them have explicitly recognized that American strength was ultimately measured by the health of its economy, and that if the U.S. were to prevail against the Soviet Union, the economy would be the reason. Every President (but Reagan) expressed concern about the impact of defense spending upon the economy as a whole. Yet, each still spent, although Truman, Eisenhower, Nixon, Ford, and Carter were perhaps more frugal than Kennedy, Johnson, or Reagan. There were real force reductions under Nixon, Ford, and Carter, but the defense posture was only marginally changed.

Regardless of what the President requests, the Congress must decide on the total defense appropriation and its parts. Since 1950, the Congress has largely agreed with the President, appropriating roughly what he has desired. Congress has provided no redirection of U.S. defense policy; it has authored no radical shifts in the defense posture of the U.S.; nor has it prevented any shifts suggested by the President. Historically, if the President wants to spend less on defense, Congress agrees; if the President wants to spend more, Congress will appropriate more.

Opinion polls have shown that most U.S. citizens have agreed with defense spending and general defense measures since 1950. Moreover, if they disapprove, the voters can always register desired change every two years when they elect their Representatives. As noted, the Congress as a whole has gone along with the President. In a functioning democracy, agreement on defense among the President, the Congress, and the people should perhaps not be surprising. What is surprising, however, is its stability over a period of more than 40 years--historically, democracies have not been known for their ability to forge long-term consensus.

One of the reasons for the defense consensus is that the American people have believed that they were the defenders of freedom and democracy--that if they did not act, no one would. The postwar Presidents have each evoked this notion, generally linking it to defense. There is the "bear any burden, pay any price...to assure the success of liberty"

from Kennedy, with the notion that "...any hope the world has...for freedom will be determined by...the American people" from Nixon, to being "...by destiny...the watchmen on the walls of world freedom" from Reagan. All the other postwar Presidents have made similar statements, equally dramatic.

Another reason for defense consensus is that defense spending has been affordable. The ability of the U.S. economy to sustain the defense expenditures requested by the President has been a concern of both the President and the Congress. However, each time there has been a significant increase in defense spending (such as that under Truman and Eisenhower, when the defense budget tripled, or the increase under Kennedy), the economy has not suffered, nor have the lives of the general populace been adversely and noticeably affected. In a sense, the U.S. could bear the mantle of defender of freedom because it could afford to economically.

PLANNED VERSUS ACTUAL FORCE LEVELS

Table 1 shows a comparison between the results of the planning for the postwar Navy, the cold war Navy, and the reality of the past 44 years, on average. The first column shows the force levels recommended to the President by Secretary of the Navy James V. Forrestal in his annual report on 1 December 1945. As mentioned earlier, these force levels were not adopted in the immediate postwar period. The second column shows the naval forces called for by NSC-68 and approved by the President in December 1950. The last column shows the actual postwar average from 1946 through 1989.

The similarity of these three sets of numbers is striking. One might believe that such a similarity is largely accidental and that the force levels varied much more widely over the 44-year period. Such is not the case. Force levels remained at about these levels throughout the period.

Figure 1 shows the force levels from 1946 through 1989 for the Navy components of interest here: attack carriers, amphibious lift, and attack submarines. The force levels of the three components are consistent among themselves, that is, each shows the same pattern over time. Each is characterized by a steep drop from 1946 to 1950, followed by a sharp increase, and is then roughly constant thereafter, with a dip in the late 1960s and early 1970s.

Table 1. Planned versus actual force levels

	Navy planning Dec 1945	NSC planning Dec 1950	Actual 1946-89
Attack carriers	13	12	13-2/3
Attack submarines	90	100	92
Amphibious lift (troops)	45,000 ^a	39,000 ^b	48,000

a. Assumes a division size of 18,000 and lift for 2-1/2 divisions.

b. Assumes a division size of 19,500 and lift for 2 divisions.

The steep drop of 1945-50 is due to the very stringent budgets of President Truman. It was widely believed then that a Defense Department budget of much more than \$13 billion would ruin the economy of the United States. There was also a widespread belief that the nation could simply not afford to maintain large military forces in peacetime. There was virtual unanimity that the forces needed to prevail in war could not be maintained during peace.

The Air Force believed (and convinced many others) that it was the premier service and that the atomic bomb had made the Navy and Army obsolete. War in the future would be conducted by the Air Force dropping atomic bombs. Acceptance of such arguments was reflected in the proportion of the defense budget devoted to each of the services. During this period, the force levels of the Navy declined and those of the Air Force grew. When the size of the overall Navy had to be cut back, each component had to cut back as well, to maintain a balanced Navy.

The steep drop of 1945-50 was followed by a steep increase in 1950-51. The defense budget increased threefold from 1949 to 1951. The increased budget was due to the cost of the containment policy of NSC-68, as well as the exigencies of the Korean war. NSC-68 called for relatively large military forces for the foreseeable future. In fact, the force levels of the policy alone implied about a threefold increase in the budget of the Department of Defense.

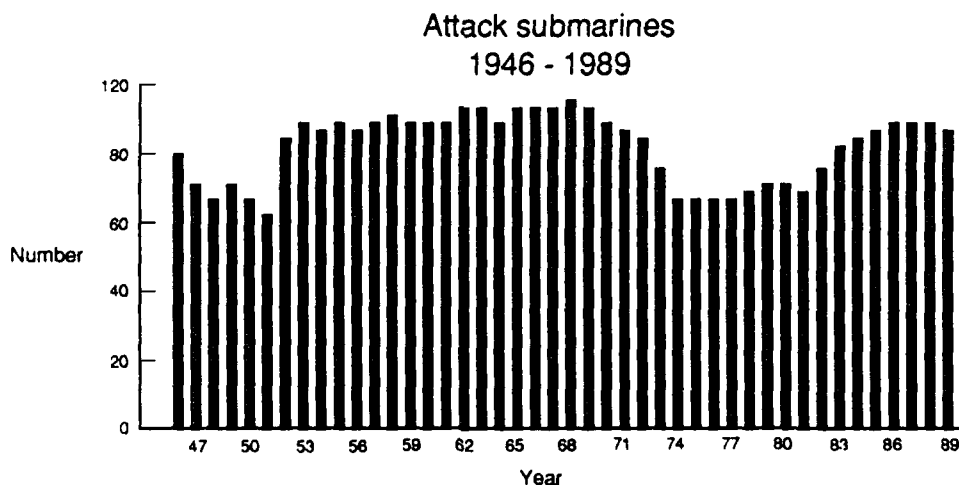
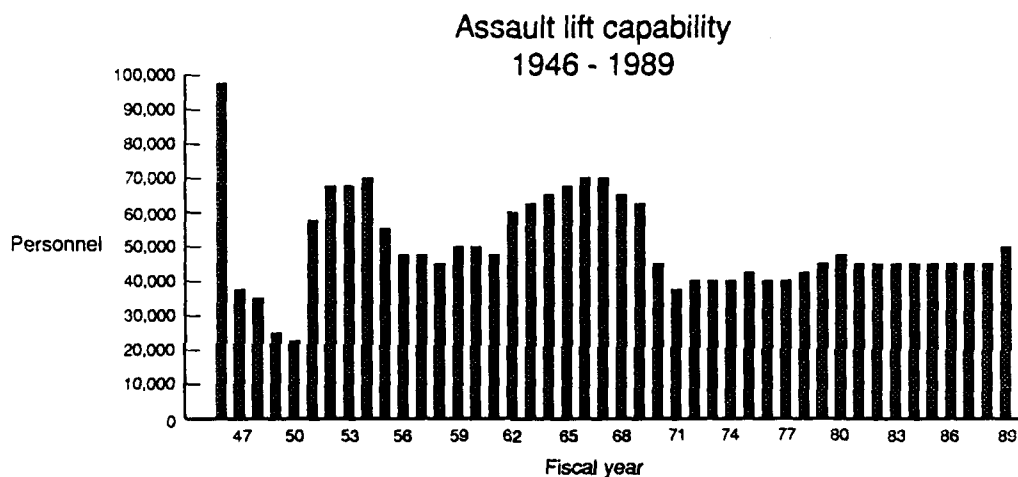
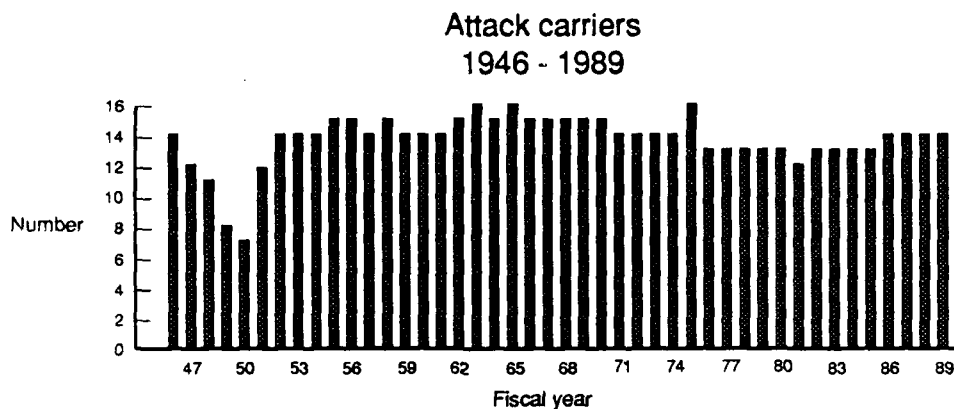


Figure 1. Consistent force levels, 1946-1989

After the (naval) force-level goals of NSC-68 had been reached (by mid-1952), the force levels remained relatively flat. Each of the components had a common dip in the late 1960s and early 1970s. The dip was caused by the mass retirement of ships of the World War II era.

As well as being consistent across ship types, the force levels of each ship type were roughly constant after the mid-1950s. Also, the force-level goals for each type were largely constant over the last 40 or so years, with the exception of amphibious lift in the period 1961-67. This constancy within each ship type is examined next.

FORCE LEVELS FOR ATTACK CARRIERS

Over the years, there have been many types of aircraft carriers: antisubmarine warfare carriers (CVSs), escort carriers (CVEs), and fleet carriers (CVs). This project considers only those carriers with the attack mission. The carriers of interest here are the CVs of World War II and their successors, the attack carriers (CVAs), and the successors of the CVAs, the modern general-purpose carriers, CVs. Even though these carriers are general purpose, their primary mission is attack. This section examines the force levels of attack carriers--why they were needed and what numbers were needed.

Reasons for Carriers

At the end of World War II, the planners believed that the Navy would continue to be required to project military power against hostile forces or territories. A balanced Navy would have some carriers in it, because carriers had proven to be the preeminent Naval instrument for projecting power. This had been the experience in the Pacific.

Another lesson from the Pacific was that aircraft carriers provided an extremely flexible means of employing military force. The Navy planners explicitly recognized the value of the mobility of the carriers and the fact that a carrier force was inherently modular. One could tailor the size of the carrier force to the size of the military problem by merely adding or deleting carriers. Moreover, the movement of the carrier force was subject only to the control of the United States.

The planners recognized that in addition to being flexible in terms of its mobility, modularity, and U.S. control, a carrier force spanned the complete level of military violence, from merely a show of force up to the delivery of atomic weapons. (The carrier Navy had achieved a very limited capability for delivering atomic bombs by late 1948, having worked toward this goal since the explosion at Hiroshima.)

It was widely believed at the end of World War II that airpower would be the predominant military force of the future; hence, the only

way for the Navy to remain a viable military entity was to take airpower to sea, i.e., on aircraft carriers.

A final reason for having aircraft carriers was the experience after the war, especially in responding to crises requiring a show of force. The Navy planners had never accepted the Air Force argument that all future disputes or wars would be settled quickly with atomic weapons, an atomic blitz if need be, and believed instead that a range of military force would be required. The immediate postwar experience seemed to validate Navy beliefs.

The years since World War II have consistently shown the usefulness of the carrier force. It was useful in the past and will probably continue to be so in the future. All the rationales of the planners of the postwar Navy remained valid as has been seen repeatedly in the many hearings and discussions on the need for carriers. A more difficult question for planners was how many carriers were needed.

Attack Carrier Force Levels Over Time

Figure 2 shows the number of attack carriers in the force from 1946 to the present. The count was taken at the end of each fiscal year (30 June prior to 1977 and 30 September thereafter).

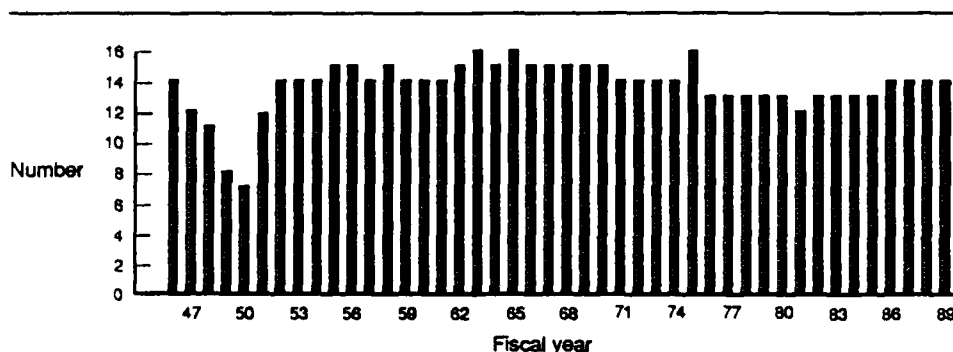


Figure 2. Attack carriers, 1946-1989

At the end of the war, the Navy had 28 fleet carriers and wanted to keep 13 on active duty. By 1950, the number of carriers on active duty had been reduced to 7. Although this lowered number reflected the stringent Truman defense budgets, it was also a reflection of a belief promulgated by the Air Force that the Navy had no real role to play in national war plans. Although the carriers were included in most of these Joint Chiefs of Staff (JCS) plans, their inclusion was less than wholehearted.

The jump from 7 operational carriers in 1950 to the 12 carriers called for by NSC-68 was the largest postwar increase in carrier force levels. The NSC-68 goal was supposed to be reached by 30 June 1952; it was actually reached earlier. Twelve was the Navy's original requirement and was the goal ultimately set, but in discussions in the JCS, the number of carriers ranged from a low of 8 to a high of 12.

The next major change was the increase from the NSC-68 goal of 12 to the postwar average of 14. In early 1952, President Truman personally authorized the "temporary" operation of 2 additional carriers, raising the number of operational carriers from 12 to 14. The Commander in Chief (CINC) Far East, General Douglas MacArthur, had repeatedly requested more airpower for the Far East and had been repeatedly told by the JCS that none was immediately available. After discussions in the JCS about the availability of additional carriers to meet MacArthur's request, especially taking them from the six in the Atlantic, the JCS decided to ask the President to authorize recommissioning two additional carriers for deployment to the Far East. The Navy, Army, Chairman of the Joint Chiefs, and the Secretary of Defense all favored recommissioning two carriers, while the Air Force was against it and in favor of taking two existing carriers from the Atlantic fleet. At the time, each fleet had six operational carriers. The additional carriers were not intended for Korea and the Korean war but to provide airpower near Taiwan, Indochina, and other places where the Soviets might make a military thrust either directly or through a surrogate such as the Chinese or Vietnamese Communists. Later, President Eisenhower personally had to continue the "temporary" authorization of the two additional carriers, and like Truman, he did so for the same reason: the need for mobile airpower in the Far East. In particular, airpower was needed to protect Taiwan, but Eisenhower did not want to station any U.S. troops on Taiwanese territory. The situation in the Far East was such that carriers were wanted near Indochina, Taiwan, Korea, and Japan.

Even with the addition of the two "temporarily" authorized carriers, there were only eight carriers in the Pacific theater, of which four were continually deployed to the Far East. The Secretary of Defense asked the Navy, via the JCS, to deploy five carriers to the Far East. The answer was no, even when the request was repeated. In 1957,

events in the Far East did not seem to be so menacing, and the Navy was allowed to reduce the number of carriers deployed in the western Pacific from four to three. This level of deployment was maintained until the war in Vietnam in the 1960s, when the Navy was authorized to operate 15 carriers.

Although the Kennedy administration had wanted the Navy to operate more carriers in the short term, fewer were desired for the long term. Secretary of Defense MacNamara decided in early 1963 that the carrier force should be reduced to 13 operational carriers by 1972. His decision was based upon the planned removal of the carriers from the nuclear war plan (the single integrated operational plan, or SIOP), his view of their vulnerability, and his view that land-based air was cheaper than sea-based air. While he was eventually convinced to retain 15 carriers for the future, he planned to reduce the number of airwings to 13. This led to the reduction of the carrier force in the mid-1970s to a force of 13. It also contributed to a period of indecision about what type of carrier to procure in the future, with the result that none were procured and force levels fell even further.

The reduction of the carrier force in the mid-1970s was furthered by the Nixon administration, which reduced the number of airwings from 12 to 11. The goal was to reduce the carrier force to 12 and cover the same area by homeporting one carrier in the Mediterranean and one in Japan. Homeporting arrangements with Greece proved too difficult, however, and this, together with the desire for occasional deployments to the Indian Ocean, delayed the planned reduction to 12 carriers. It was recognized that with a 12-carrier force, even with one homeported overseas, previous deployment patterns would not be feasible. Although in the past the Navy had deployed two carriers to the Mediterranean and three to the Pacific, in the future there would be only two deployed in the Pacific and two in the Mediterranean. Although the deployment patterns were adjusted, a force level of 13 carriers was maintained to provide for a contingency.

Rationale for the Size of the Carrier Force

The size of the carrier force has been driven by two factors: policy and geography--the containment policy of NSC-68 and the Navy's means of implementing it, forward deployment.

The policy of containment ensured the need for military forces and their use, while the policy of forward deployments helped dictate their size. By 1953, the Navy had realized that forward deployments meant that if one carrier was to be deployed forward continuously, a total of three carriers were needed. The three-to-one ratio was found to provide time for training and maintenance prior to deployment and to provide deployments of reasonable length. There have been periods, however,

when this three-to-one ratio was violated--usually by extending deployments, shortening the time between deployments, and sacrificing ship maintenance time.

Geography has driven postwar carrier force levels because, for the United States, the areas of interest, of unrest, or response to perceived Soviet thrusts have remained constant. The level of U.S. interest in these areas has been largely constant. The Mediterranean has been an area of unrest since the end of the war, and carriers have deployed there since 1948. The western Pacific (particularly Korea, Taiwan, and Indochina) has also been an area of constant postwar interest, and the United States has had carriers deployed there since 1950, typically two to three of them. One carrier has been homeported in Japan to increase the deployed forces in the western Pacific. While the Indian Ocean has seen more carrier deployments in the past decade, it has been recognized since the mid-1950s that maintaining a continuous carrier presence in the Indian Ocean would require an increase in force levels or a decrease in other deployments. The Indian Ocean is so far from the United States (and U.S. bases abroad) that the transit time to and from there has an impact on the number of carriers needed to keep one deployed. Because the areas of interest to the United States have been stable geographically, the areas of deployment have also been stable.

The actual number of carriers in the postwar years has been largely constant, between 13 and 15, because this number provides almost global coverage in both time and space. Carriers can be near potential trouble spots in the Mediterranean and Pacific because they are (and have been) deployed there. Even with a force of 15 carriers, a carrier deployed to the Indian Ocean would preclude two deployed in the Mediterranean and two or three in the Pacific.

Summary

To summarize, after the war, planners faced the question of how many carriers to keep on active duty, both in an absolute sense and relative to the other combatants. Although Navy planners knew how many they wanted, they could not convince the other services nor the Truman administration. With the advent of NSC-68, which called for military power, Navy planners at least had a vehicle to carry their argument. By 1949, carriers had been committed to the Mediterranean and had proved useful there. In the early 1950s, the need for airpower in the Far East had been met with carriers, and here too the carriers proved useful both militarily and diplomatically (show of force). By the mid-1950s, the Navy and the national authorities had learned (or knew) that at least 14 carriers were needed to meet routine deployment schedules.

Once a force level of 14 carriers was reached, it was maintained for several reasons. For example, the policy of containment implicitly called for intervention, militarily or otherwise. Such intervention was to be the response to a Soviet attempt to extend their dominance. With Korea, the United States learned that such attempts might be made by Soviet surrogates. The areas of interest to the United States have been geographically stable in the postwar period, and hence the areas to which carriers deploy have remained stable. The amount of coverage provided by a carrier, in both time and space, has remained constant as well. Taken together, these elements imply stable force levels.

FORCE LEVELS FOR AMPHIBIOUS LIFT

An amphibious assault is one of the most complicated types of military operations and, as such, involves many different operational aspects. An amphibious assault today could have multiple echelons: an assault echelon, a fly-in echelon, a follow-on echelon, and perhaps troops landed administratively after the assault. The size of the assault echelon is commonly used to measure the amount of amphibious lift, but the other echelons are also important, perhaps critical. Here, only the assault echelon is considered.

Even an assault echelon has multiple aspects and, hence, multiple measures. The most common measures of an assault echelon are the number of personnel, the number of square feet of stowage available for vehicles (such as trucks and tanks), the number of cubic feet of stowage for general cargo, the number of landing craft stowed for the assault, and the number of helicopters for the assault. Because the point of an amphibious assault is to land men on a (hostile) shore, the number of personnel liftable in the assault echelon is used here as the measure of amphibious lift.

Reasons for Amphibious Lift

Before the drafting of NSC-68 or the Korean war, the Navy maintained an amphibious force as part of a balanced navy. Between the end of World War II and the beginning of the Korean war, the Marines (and the Navy) were under attack as being obsolete or unneeded. Amphibious assaults were viewed as things of the past, not viable in an atomic age because they required concentrating men and equipment in a small area, becoming good targets for atomic weapons. Many military professionals shared this view, including Chief of Staff of the Army General Omar Bradley. Although the Navy viewed the amphibious force as part of a balanced Navy and the Marines continued to try to find a viable way to do amphibious assaults under the threat of atomic weapons, the other services and the Office of the Secretary of Defense did not view the amphibious force as part of a balanced military.

As a result of the successful landing at Inchon, however, amphibious assault regained credibility with the rest of the national military establishment. Ironically, the execution of the landing was approved by the then-Chairman of the Joint Chiefs of Staff, General Omar Bradley.

The intense scrutiny of the Navy and Marines in the immediate post-World War II period led planners for both to consider a wide range of questions regarding the viability and sense of amphibious assaults of the future. The Navy and Marine planners knew that many of the areas of potential trouble were vulnerable to seaborne approach and assault, at least in a nonnuclear environment. The value of this vulnerability of potential enemies or "disturbers of the peace" was more widely acknowledged after the Korean war and the adoption of NSC-68.

Additionally, the Marines had always viewed themselves as a ready force, "the first to fight." Since January 1948, a landing force of Marines had been attached to the Sixth Fleet in the Mediterranean. These forward-deployed Marines, and others like them, were viewed by both political and military authorities as an on-scene, ready force. In the years after the Korean war, Marines in amphibious ships proved useful to political authorities, either for a show of force or to intervene militarily, such as in Lebanon in the 1950s and in the Dominican Republic in the 1960s.

In the post-World War II period, then, amphibious lift has had continuing utility. The lift allows the Marines to be forward deployed at sea, not too far from likely trouble spots, and yet not stationed on anyone else's sovereign territory.

Force Levels for Amphibious Lift Over Time

Figure 3 shows how the size of assault lift has varied in the postwar period. The figure shows the number of personnel of an assault echelon that can be placed ashore (or "lifted") from amphibious ships. The measure is taken at the end of each fiscal year.

As noted earlier, the variation of amphibious lift over time largely parallels that of the carrier force, with the exception of the hump in lift capability in the 1960s. There is a sharp decline between 1946 and 1950, followed by a sharp rise in the early 1950s, with a plateau in the late 1960s. The decline between 1946 and 1950 was due to the Truman budget limitations. This lack of funding mirrored the notion that there was no national need for amphibious forces, that amphibious warfare was obsolete. Of particular note, amphibious lift was not covered by JCS guidance. In the JCS majority view, amphibious lift was purely a Navy affair. This attitude changed with the very successful assault at Inchon.

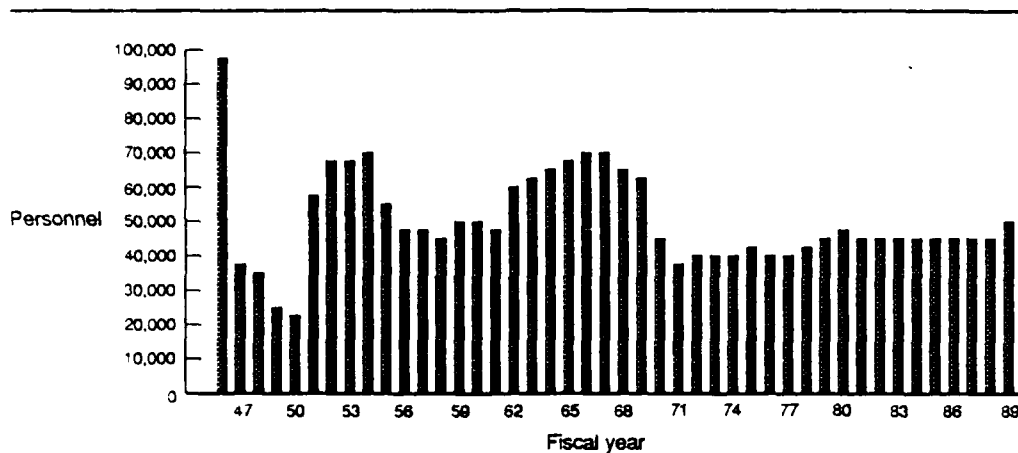


Figure 3. Assault lift capability, 1946-1989

In figure 3, the steep rise in lift in FY 1951 was the buildup of amphibious lift needed for the landing at Inchon. A steep drop occurred after 1954. The reasons for this reduction in lift were as follows. After Korea, amphibious lift was no longer viewed as obsolete, and the Marines continued the development of their solution to the problem of atomic weapons: vertical assault. The concept of vertical assault led to the need for ships with flat tops to operate the helicopters carrying the troops. These ships had to be designed, built, and bought. The military budgets of President Eisenhower, however, were insufficient to meet even the force-level goals of NSC-68. Because of the limited budgets and a cap on enlisted Navy end-strength, the Navy planned in December 1953 to reduce amphibious lift from two to one and one-third divisions from 1956 on. This accounts for the drop in amphibious lift after FY 1954. One and one-third divisions of lift were thought by the Navy to at least be in "balance" with the rest of the Navy, considering the reduced budget. Although both the Army and Marines were concerned with the reduction, the JCS as a whole and the Eisenhower administration supported it. One division of lift was to be stationed in the Pacific, and one-third division of lift was to be stationed in the Atlantic.

The hump between 1962 and 1969 in figure 3 is not because of the war in Southeast Asia but because of the policy of President Kennedy and later President Johnson to increase the general-purpose forces as part of the strategy of "flexible response." The lift goal was changed from the one and one-third divisions of the Eisenhower administration to two divisions. Mothballed amphibious ships were recommissioned to reach this goal--ships that had been built during World War II. The buildup

to two divisions was unsustainable, however, and the Eisenhower goal of lift for one and one-third divisions was readopted between the waning days of the Johnson administration and the beginning of the first Nixon administration. Ultimately, the lift was to be split evenly between the Atlantic and Pacific, with two Marine Expeditionary Brigades' (MEBs) lift in each. A mass retirement of World War II-era ships led to a precipitous drop in lift between 1968 and 1970.

As with the drop after FY 1954, the decrease after FY 1968 in both the actual lift and the lift goal was due to budgetary restrictions. Although the drop after FY 1954 was initiated by the Navy, the drop after FY 1968 was initiated by the Office of the Secretary of Defense (OSD) and was agreed to only later by the Navy. The decrease in the lift goal also meant a readjustment of the then-current plans for the use of amphibious lift, the adoption of the so-called "swing strategy" of lift. The swing strategy meant that if the long-standing contingency plan of a division-sized assault in either ocean were to be realized, the additional amphibious forces needed must come from the other ocean, that is, they would "swing" over to the other ocean.

After the mass retirement of the World War II-era ships between 1968 and 1972, the average age of the amphibious fleet dropped to only seven years. From 1970 to 1988, the force-level goal was one and one-third Marine Expeditionary Forces (MEFs) of lift, except for two years of the Carter administration, when the lift goal fell to a single MEF. Throughout this period, the force levels were roughly constant, with sufficient lift for about one MEF or two or three MEBs, depending upon the definition of MEFs and MEBs and how one counts ships in overhaul or being modernized.

Rationale for the Size of Amphibious Lift

The goal of one and one-third divisions of lift has been in consonance with the needs of policy. The Marines have had, since 1946, a goal of lift for two divisions, split evenly between the two oceans. This was based upon the notion that lift for a division-sized force might be needed simultaneously in each ocean. Apparently, a division-sized contingency was the largest contingency for which forces could be maintained during peacetime.

The Navy, however, has apparently found that one and one-third divisions of lift are sufficient. The geography seems to have been covered, with continuous deployments to both the Mediterranean and the Pacific.

At the national level, apparently one and one-third divisions have also been sufficient. Foreign policy goals seem to have been met. When this force-level goal was first set by the Navy in 1953, the Eisenhower

administration concurred. Moreover, with the exception of the Kennedy administration, all others adopted this goal. The goal has proven sufficient to provide at least two or three MEBs' worth of lift.

Summary

To summarize, the question again for planners after the war was how much amphibious lift capability to keep on active duty. The Navy believed that amphibious forces should be part of a balanced navy, but the rest of the national military establishment did not. Even in the lean postwar years, the Navy maintained some amphibious lift because of this belief. The Korean experience with the successful landing at Inchon proved the continuing utility of an amphibious assault, at least in a nonnuclear environment. Although the Marines had wanted sufficient lift for two divisions (and still do), the Navy reduced the amount of lift after Korea to one and one-third divisions, and the administration did not try to change or adjust this choice.

After Korea, the national military establishment agreed that amphibious lift is part of a balanced military. The policy of NSC-68, calling for the containment of the Soviet Union, implicitly called for military intervention. The Marines have continually advertised themselves as a ready force (and proven this when called upon) and have been forward deployed near sites of potential trouble--in a position to intervene. The means of deploying them has been the amphibious lift. Since the Korean war, the Marines, via their amphibious lift, have been used in a variety of crises and proven useful to the policy-makers.

FORCE LEVELS FOR THE ATTACK SUBMARINE FORCE

A primary tenet of postwar planning was balance, or the decision to keep at least some of all of the forces that had contributed to victory in World War II. The submarine had proven its usefulness for the U.S. in the Pacific, strangling Japanese commerce and sinking many naval vessels as well. Additional evidence of the submarine's worth was provided by the German U-boats, which had come close to shutting down U.S. resupply and reinforcement in the Atlantic. The submarine had also proven itself versatile. This mission flexibility combined with burgeoning technological advances to ensure that the postwar Navy would include at least some submarines.

Attack Submarine Force Levels Over Time

The story of the attack submarine force is somewhat different from that of carriers and amphibious forces. Its postwar history has been characterized by revolutionary advances in capability--due primarily to

the advent of nuclear propulsion. Today's SSN is a far cry from the diesel-electric fleet boat of 1945. In short, the submersible has become a true submarine.

During the past 40 years, the submarine has also undergone changes in both mission and employment concept, changes made possible by the technological advances. Most prominent among these changes was the addition of ASW to the attack submarine's mission.

In the midst of all these changes, however, attack submarine force levels have remained roughly constant, at about 90. Figure 4 shows the variation of attack submarine force levels with time. The count is as of 1 January of each year.

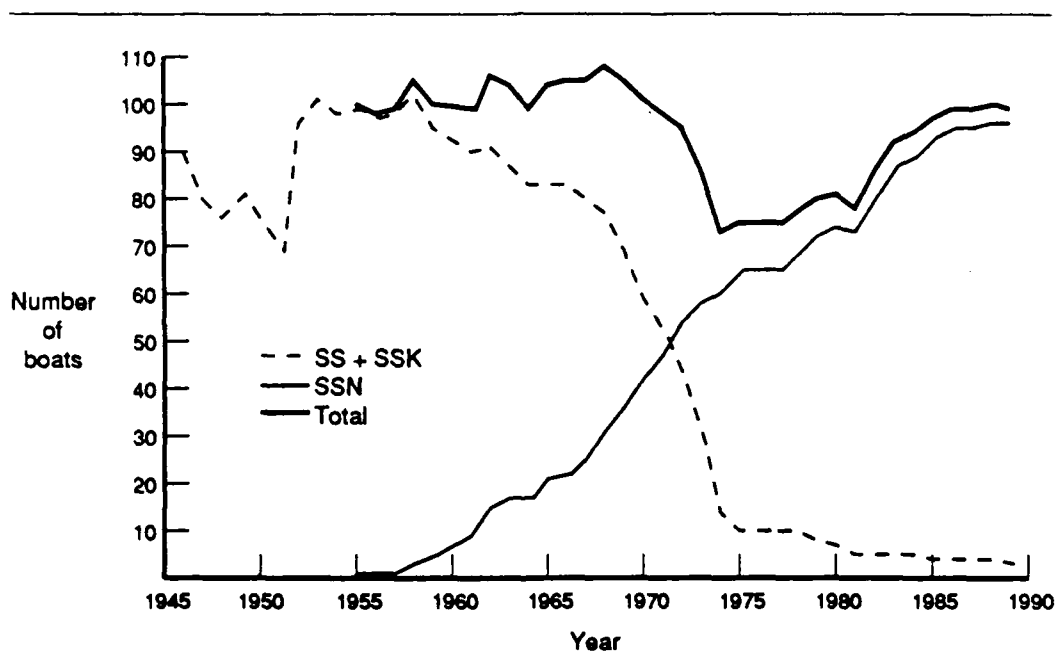


Figure 4. U.S. attack submarine force, 1946-1989

The most prominent fact about the postwar submarine force is the transition to nuclear power, as shown in figure 4, which breaks the force into diesel and nuclear. While the decline and rise of the two technologies are dramatic, overall attack submarine levels remained fairly constant.

Figure 4 shows two dips and subsequent recoveries. The first occurred from 1946 to 1951 and paralleled the decline in the other components brought about by the Truman administration's fiscal stringency. After reaching an all-time postwar low of 69 in January 1951, the force was back up to 96 a year later, spurred by NSC-68's submarine goal of 100.

The second decline in the force, caused by the block obsolescence of World War II-era vessels, again was paralleled in the carrier and amphibious components. In the case of submarines, 67 diesels retired in the space of eight years, leading to a low of 74 submarines in 1974. This dip was exacerbated and extended by the shipyard delays in constructing the first of the *Los-Angeles* class SSNs.

The rest of the period, however, featured remarkable constancy. Force-level goals varied between 90 and 105, and actual force levels remained within 20 percent of the 90 submarines originally retained at the end of World War II.

Rationale for the Size of the Submarine Force

Why did the Navy settle on 90 submarines out of the 260 on hand at the end of the war? Without an enemy dependent on maritime commerce, why did the U.S. Navy want to retain so many submarines?

To answer these questions, there was first the enunciated principle of a navy second to none. In planning documents, the next largest navy, that of the United Kingdom, was listed as having 141 submarines; the U.S. submarine force was sized at only 90, with the notation "type differential considered." Perhaps equally important, the Soviets' submarine force was listed as 104, and they were soon to have equal access to the latest German submarine technology.

The initial operational impetus for a sizable submarine force was the need for submarines to provide training services to air and surface ASW forces. Soviet naval emphasis on submarines combined with the submarine's acquisition of the ASW mission to provide continuing rationale to maintain a large attack submarine force.

Additionally, as the submarine's capabilities increased over time (most dramatically with the addition of nuclear power), it also gained new missions. Thus, while fewer nuclear submarines were needed to

accomplish some of the submarines' missions, their improved capabilities allowed them to do more things (such as direct support and land attack), thus maintaining the rationale for a sizable force.

But why did the force level stay steady at 90? First, as already noted, the other two components also remained level, with ups and downs for the most part occurring in concert. No all-out war took place to either test or prove the platforms. Therefore, in the absence of any compelling operational reason to alter the original balance among the components, the ratio among the three has remained fairly constant and the original balance has been maintained.

Second, the need to incorporate new technology ensured that a stream of new acquisition kept flowing. Consequently, shipyards stayed in business, a nucleus of trained designers and builders was maintained, and block obsolescence was for the most part avoided.

For practically the entire 44-year period, the SSN force had a powerful voice in Admiral Hyman Rickover. Whenever the Secretary of Defense, or even, at times, the Navy, faltered in supporting a continuing stream of submarine production, Rickover could be found before Congress making the submarine's case.

One final combination of factors was key in maintaining a constant force. The high cost of the nuclear-powered submarine exerted downward pressure on the force size. But at the same time the submarine was growing in cost, its lifespan was increasing. High quality meant not only high cost but longer life as well, from the 13-year statutory life of the World War II-era SS to the 30-year life today. Thus, fewer SSNs needed to be built over time to maintain a constant force level, offsetting the higher unit cost.

The long life and long construction time of the modern warship have an additional, related implication. Once a force of a given size is reached, it is not going to rapidly expand or contract; it is more likely to remain fairly constant.

Summary

To summarize, the number of submarines has remained in balance with the other offensive components of the Navy at roughly the ratios set in the mid-1950s. For the submarine force, those factors arguing for more have been offset by those arguing for fewer, leading to a state of equilibrium.

To illustrate, consider this quotation from the Chief of Naval Operations Admiral Thomas Hayward in testimony before Congress in 1981:

Ninety was a fiscally constrained, arbitrarily set ceiling, and the 100 is the same, limited to keeping a balanced force within a 600-ship Navy framework.

This reasoning explains the upping of the attack submarine goal from 90 to 100. In essence, adding ten more submarines would maintain the traditional balance if the Navy grew to 600 ships.

FORCE-LEVEL SUMMARY

Each of the three parts of the Navy's offensive forces has been considered and the consistency among force types noted. Their overall constancy is now considered.

As noted earlier, the constancy of the carrier force levels was due to two major factors: policy and geography. Policy was the foreign policy of containment (NSC-68) and the manner in which the nation and the Navy chose to implement the foreign policy--with forward deployments. These forward deployments have been geographically stable, i.e., the carriers have deployed to the same areas in the postwar period.

For amphibious lift, the most important factor just after the war was the idea of a balanced navy and the Navy's belief that an amphibious force was part of that balance. Policy was also important, because NSC-68 implicitly calls for intervention, and the Marines, with amphibious lift, have historically been used as an interventionary force. The goal of one and one-third "divisions" of lift, first enunciated in the early 1950s and readopted in the late 1960s, seems to have provided sufficient lift to meet the demand.

The attack submarine force is the component tailored specifically to the Soviet threat; thus, its constancy can be traced to the constancy of the foreign policy that identified the Soviet Union as the threat. The notion of balance has contributed to the constancy as well; the quote from Admiral Hayward is quite telling. Finally, forces arguing for more submarines have been offset by arguments for fewer, leading to a state of equilibrium.

POSTWAR CONSTANTS AND POTENTIAL CHANGES

Given the constancy of and consistency among force types in spite of the many changes in the world since World War II, it is now of value to consider the question of future force levels and try to decide what might affect them, having seen what affected force levels in the past.

Before considering potential changes, however, it is worth reiterating the basic factors of the postwar era that led to both the consistency among and constancy of the Navy's offensive components:

- Defense consensus
- Postwar planning precepts
- NSC-68 policy
- Military objectives of NSC-68
- Policy implementation
- Stability of the areas of interest.

Based upon the historical record, one or more of these factors must change if force levels are to change. Each of these has been constant in the postwar world, and taken together they are responsible for the constancy of the force levels of the Navy's offensive components.

The defense consensus that arose in the early 1950s was based on the fact that Western Europe, Japan, South Korea, and a host of other countries could not be expected to defend themselves against the Soviet Union; that the U.S. populace believed that they had a duty to defend the freedom of others and not merely their own; and that the U.S. could afford the defense outlays necessary to assume the role. These foundations may not last. Western Europe, Japan, and South Korea have all become viable economic entities, competing with and at times besting the U.S. economically. Some believe that it does not make sense for U.S. to continue defense outlays in their behalf, given their economic strength. It is not obvious that U.S. citizens still believe that they have a general duty to defend the freedom of others. Some believe that the current debt burden, both government and individual, together with the trade deficit, makes defense of others a luxury no longer affordable, and defense outlays for the U.S. itself must be restricted for the health of the economy.

The postwar planning precepts of balance, forward posture, and a navy second to none are still used today. Congressional testimony, for example, is filled with statements about the need for a balanced force;

but while the idea of balance may be immutable, what constitutes balance is not. A change in the idea of having a Navy second to none could lead to changes in force levels. Does the United States still want or need a navy second to none?

NSC-68 identified the Soviet Union as the threat and also identified the response of the United States to the threat: containment. Force levels might change if either the Soviets are no longer identified as a threat or if countries previously viewed as surrogates for the Soviets become a threat to interests of the United States regardless of the Soviets. Moreover, even if the Soviets remain a threat, a different response might be identified. If the policy of containment were dropped, it could be argued that the United States would need fewer interventionary forces such as carriers or amphibious lift.

The existence of a mobilization base, which included stockpiled equipment as well as people, was fundamental to the forces called for by NSC-68. Active-duty forces were only supposed to be large enough to prevent disaster while the mobilization base was activated. Except for the Naval Reserve Force, the Navy has no mobilization base and has not had one since the late 1960s; hence, any war must be fought with the forces in being.

The Navy and national authorities have implemented the policy of containment by adopting a forward strategy, with forces deployed forward. Other force postures have been suggested in the past, however, such as Eisenhower's idea of a central reserve. With the maritime prepositioned ships (MPS) and other overseas stockpiles, the United States has moved to a mix of prepositioning plus a forward posture. A change in force posture would seem to imply a change in force level.

The United States' interests in various areas of the globe could change in the future. Will forces be deployed to the Mediterranean forever? Even after 1992, when the Europeans might be expected to care for it? Given the continued world dependence upon oil, the United States may become more concerned about events in the Indian Ocean and make more frequent deployments there. Because of trade developments, the Southern Hemisphere also might warrant more deployments.

Some or all of these changes may occur or may be occurring now. Based upon the historical record, one might expect force levels of the Navy's offensive components to change as well. Based upon the historical record, however, if none of these basic factors change, neither will force levels.