OPERATIONALIZING SEA POWER: THE EVOLUTION OF NAVY DOCTRINE, <u>1946-2016</u>

by

Joseph Petrucelli A Dissertation Submitted to the Graduate Faculty of George Mason University in Partial Fulfillment of The Requirements for the Degree of Doctor of Philosophy Political Science

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DEDICATION

This paper is dedicated to my wife, Stefanie, and children, Joey, Jack, and Abby. Without their support and understanding of the many distractions, late nights, and missed events, this project would not have been possible.

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That being said, any errors or mistakes contained herein are my own.

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ABSTRACT

OPERATIONALIZING SEA POWER: THE EVOLUTION OF NAVY DOCTRINE, 1946-2016

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George Mason University, 2022

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This thesis studies the evolution of US Navy doctrine throughout the post-World War II period, a period of relative superiority by the US Navy. Examining doctrinal change through these historical cases improves the understanding of how doctrinal change is implemented in large bureaucracies and what mechanisms are the key drivers of change. While the specific doctrinal choices are highly contingent on the personalities and strategic context of each case, the historical record does show that learning organizational capacity, a cultural "fit," and enduring leadership attention were key elements in making a doctrine sticky. Bureaucratic politics and civilian intervention play a role, but appear unable to make a lasting doctrinal change, as organizations revert to their preferred path as soon as pressure is lifted. Understanding how these mechanisms impact doctrinal change is valuable to a military organization in shaping its response to the ever-changing geostrategic situation.

CHAPTER ONE: RESEARCH DESIGN

"To change anything in the Na-a-vy is like punching a featherbed. You punch it with your right and you punch it with your left until you are finally exhausted, and then you find the damn bed just as it was before you started punching." —F.D.R.

Introduction

With major conflicts very rare, military organizations spend most of their time preparing for war without knowing what it looks like. Understanding how to prepare for the next war is the challenge, as the wrong doctrinal choice can result in a major disadvantage. The French discovered this during the early days of World War II, as did the Royal Navy when it failed to capitalize on the power of aircraft carriers. With that in mind, it is important to note that although the US Navy has seen nearly constant combat operations since in the post-World War II period through today, it has not engaged in high seas combat since 1945. Doctrine is the tool to evaluate and formalize strategic choices made during peacetime, ranging from employment concepts to platform and weapons procurement decisions. In an ideal world, doctrine is the framework to guide the military bureaucracy in the development of a coherent plan and preparation for future conflict. While militaries can and do evolve during a conflict, wholescale change amid a conflict takes time and hardware may take many years to replace – particularly for naval forces that tend to be very capital intensive. Therefore, a process to evolve doctrine during peacetime and stay ahead of evolving threats is critical to future viability of a military organization. As Norman Schwarzkopf said "the more you sweat in peace, the less you bleed in war" but what he left out was the need for an understanding of what the next war would look like to ensure you are sweating the right way. This dissertation studies the process of doctrinal change in large military organization, identifying the factors that contribute to successful lasting change.

The Puzzle

Emerging victorious from Second World War the US Navy was clearly without a peer, with a proven naval doctrine that had been validated in the great naval battles of the Pacific War. Yet, despite this recent resounding success and no direct naval challenges to its position, the US Navy did not remain entirely stagnant and reinvented itself over the upcoming decades, from the "Balanced Fleet" of the immediate post-World War II era, to the offensive strategy embodied by the 1980s "Maritime Strategy" and the immediate post-Cold War shift to expeditionary and power projection operations. This evolution involved more than just a technological change, although the Navy did field important new technologies, as it included non-material changes and new missions for the Navy.

These changes were doctrinal in nature, as they affected the shared conception of the role of Naval forces in combat, as much as they were organizational or technical. Unfortunately, as Captain Wayne Hughes memorably noted, "American naval officers today are – it is difficult to pick the right word – wary of doctrine,"¹ and the US Navy has

¹ Wayne Hughes, *Fleet Tactics and Coastal Combat*, 2nd ed. (Annapolis, Maryland: Naval Institute Press, n.d.), 31.

a relatively poorly defined formal defined doctrine, at least as compared to other services. However, just because the U.S. Navy did not have a neatly defined written doctrine does not mean that an informal understanding of naval doctrine did not and does not exist, one that can be identified from other sources.

By conducting a series of case studies of the U.S. Navy after World War II and examining both contemporary doctrine and how it changed, I examine the question of doctrinal change and understand how a peacetime navy was about to reorient itself. To do so, first I examine contemporary sources to develop a definition of Naval doctrine during key transition points in the post-World War II U.S. Navy. Having identified key doctrinal transition points, I then compare the inferred doctrinal statements and look for cases of change (or no change when otherwise one would expect innovation). Secondly, I analyze each case for the causal factors that may explain the observed doctrinal change (or lack of change), relying on the multiple explanations for military change, both innovation and lesser included changes, present in the literature. By assessing which variables have explanatory power in each case, how they interacted, and the relative importance of each variable in driving change during each case study, I seek to draw some general conclusions about doctrinal change.

How and why this doctrinal change in the post-World War II U.S. Navy occurred is understudied and may hold important implications for the understanding of how Naval forces change, as well as how simply explaining what the role of the Navy was and is in the modern era.

Research Question

The primary research question is why Naval service-level doctrine changes and how those doctrinal changes occur. I am interested in understanding the factors that influence change in military organizations in order to understand the broader implications to the field and inform how military leaders should navigate change in the future. While general military change has been extensively studied and a variety of theories propose answers to the question of military change, there is no existing systematic study of naval doctrinal change similar to the approaches towards Army and Marine Corps doctrinal change.² Additionally, notwithstanding FDR and Stimson's complaints about the intractability of naval organizations, the US Navy today looks dramatically different from the Navy of 1945. Coming out of the Second World War as the predominant naval power it would seem the US Navy lacked the natural incentive of a peer maritime competitor (although the Soviet state as a whole was certainly a peer competitor) to encourage innovation, yet the Navy did evolve, innovate and change, both doctrinally and technologically. These changes resulted in a Navy that, while still centered around surface, air, and submarine assets, has also embraced new missions and operating concepts. By identifying how this change happened and what explanatory variables, or combination of variables, best explain the casual mechanism in these cases, a better understanding of the unique characteristics of naval innovation may be determined.

Dependent Variable

² Specifically, Rosen looks at a number of cases of innovation, but solely in the Interwar period. Jensen and Gallo both conduct in-depth studies of doctrinal innovation, but limited to ground forces. For more examples, see Krepenivich, Johnson, Jensen, Davidson, Kuo, Cote, and Sapolsky

The dependent variable for this study is Naval doctrinal change, which I've defined as a *change in the broad guidelines for the employment of Naval forces in support of national strategy at the operational level of war*. This service-level doctrine can be understood as a grouping of concepts that define strategic role, employment, deployment, and procurement of Naval forces. And although the first step is to define the doctrine at each transition point, this study will seek to understand the causes of doctrinal innovation within the US Navy, in the context of these cases. As previously noted, this definition of doctrine exists at the "service-level" and does not explore joint doctrine or operational-tactical level doctrinal developments. Since the Navy, in Wayne's Hughes words is "wary of doctrine,"³ the Navy traditionally has been hesitant to write down its doctrine and operationalizing this variable is difficult when compared to similar cases in the US Army, such as the transition from "Active Defense" to "AirLand Battle."

Rather than being able to reference a set of neatly defined doctrinal documents, identifying this dependent variable required first building a definition of service-level doctrine in these cases where one does not formally exist. Despite the lack of a formal written doctrine, a common conceptual model of the Navy's role clearly does exist in most of these cases and can be inferred from other sources. In order to do so, and thus identify the changes in doctrine, I primarily rely on a number of Naval service "Capstone"⁴ documents. Variously called strategies, strategic concepts, operating concepts, and doctrines, these documents describe the Navy's self-assigned role in

³ Hughes, *Fleet Tactics and Coastal Combat*, 1.

⁴ These "Capstone" documents were identified and sorted by Peter Schwartz.

national security, which by my definition is the Navy's service-level doctrine. By analyzing and categorizing the missions and roles the Navy assigned itself to infer a contemporary Navy doctrine, I am then able to compare these doctrines across cases, identify what changed, and examine the mechanisms of doctrinal change.

Key indicators of naval doctrine that I considered include: capstone documents and other statements of naval missions; organization of the Navy's operating forces; wartime employment plans; observed deployment patterns of operating forces; and changes in Navy force structure, both absolute and relative. To better understand the different facets of Naval service-level doctrine, I've sorted Naval service doctrine into four concepts, discussed in more detail below. These four Concepts are the critical elements that shed light on the underlying, and unwritten, naval service doctrine.

Strategic Concept

The Strategic Concept is the Navy's Theory of Victory. As Samuel Huntington describes, this is the "description of how, when, and where the military service expects to protect the nation against some threat to its security."⁵ For the Navy, this is expressed as the mission, or set of missions, that the fleet would execute that results in victory, ranging from commerce raiding, open battle with an enemy fleet, projecting power ashore (amphibious/bombardment), or standoff blockades. While strategies are tied to a specific adversary or strategy, the Strategic Concept reflects the essence of the service, or what irreplaceable role the Navy believes it plays in the broader defense strategy. It can be

⁵ Samuel P. Huntington, "National Policy And The Transoceanic Navy," U.S. Naval Institute 80, no. 5 (May 1, 1954): 615.

derived from many of the service's high level documents, including mission statements and strategies. A few examples of potential Strategic Concepts are discussed below, and while not all inclusive is intended to describe the range of options available. In practice many of these elements are merged to develop comprehensive strategic concepts.

Command of the sea via offensive fleet battle is the classic naval Strategic Concept. Most commonly associated with Mahan, this option would see opposing fleets seek direct battle in order to obtain sea control. As Mahan promoted, this sea control would enable the holder to directly influence events ashore via blockades and control of vital sea lanes of communication.

Sea Denial via a "Fleet in Being" is an alternate Strategic Concept available, generally associated with a weaker naval power. Merely by possession of a battle fleet, a Navy could tie down an adversary's fleet without ever leaving homeport since the adversary had to keep a concentrated force capable of defeating the fleet in being at all times. In theory, this strategy prevents the strong naval power from obtaining the benefits of sea control discussed above.

The *Transoceanic Escort Force* Concept describes the unique value of the Navy as keeping vital sea lanes of communication open. Instead of defeating the enemy fleet, the Navy contributes to the Joint Force by transporting supplies and military forces across the oceans. This Concept places the Navy in a supporting role, where the land forces are the primary element of national strategy and the Navy's primary contribution is by providing escort forces.

Sea Denial via Commerce Raiding (or guerre d'course) was the classic Early American wartime strategy, and also that of unrestricted submarine warfare in the World Wars. Instead of challenging a stronger fleet head on (or even having a sufficiently large fleet to execute the fleet in being concept, the navy would be made up of small warships that could scatter across the ocean and present an asymmetric threat to the stronger adversary.

Power Projection Ashore is another concept where the Navy's role is not to win the war at sea, but influence events ashore via strikes, raids, and amphibious operations. This is not just escorting military forces across the ocean, but utilizing naval power against enemy weak points from the sea.

Closely associated with power projection is *Irregular Warfare* (Guerre d'razia). This concept describes the value of the Navy as providing presence to conduct operations to influence operations ashore, but unlike the Power Projection described above, at a lower level of conflict. Historically this can be seen as interventions to defend US commercial interests, and more modern variations include humanitarian assistance, littoral operations, and counter insurgency operations.

Coastal Defense is the last option discussed here. This is an entirely defensive concept, where small naval forces only goal is to prevent an adversary from projecting power ashore. During the Early American era, coastal defense was a primary mission of the Navy and Army, and was frequently paired with commerce raiding to allow the weak US Navy to defy stronger adversaries.

Deployment Concept

The Deployment Concept is how the fleet deployed, differentiated largely by peacetime homeporting and underway missions. This Concept is most applicable to peacetime operations but does support wartime missions as it describes the fleet posture going into conflict. This is the easiest to observe, as it is informed by historical deployment patterns and has been extensively analyzed by Peter Swartz.⁶ Similar to the above, a few examples of potential Deployment Concepts are discussed below, and while not all inclusive is intended to describe the range of options available.

A Forward Station Navy maintains presence at globally dispersed operating stations. These forward stations are dispersed, and typically individual or small formations of ships operate at each station. This is not a forward based fleet, and while ships conduct port visits overseas, these are generally not at US bases overseas. This is a very light footprint type deployment strategy.

Homeported Surge Fleet keeps the fleet primarily in homeport. This can be to reduce cost, to allow for increased training opportunities or to keep the fleet concentrated for strategic reasons. The plan is for the fleet to surge forward for crisis response or combat operations.

A Cruising Navy is similar to the Surge Fleet except that it includes periodic, routine deployments. The fleet conducts these global cruises, not as individual ships but

⁶ Peter M Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002" (Center for Naval Analysis, July 2002).

as a combined formation in order to show the flag and provide increased deterrent posture.

Rotationally Deployed Credible Combat Power is a strategy of continuous deployment by combat formations of capital ships. Unlike the Forward Station Navy, this construct has full task forces and task groups deploying to any number of "deployment hubs." This requires forward based command and control capabilities, and generally some about of staging bases to maintain and resupply the deployed forces.

Forward Based Fleet differs from the above in that combat forces are permanently forward based at overseas homeports. This can include forward basing of secondary forces or of capital ship formations, but the difference from the rotational deployment model is that extensive forward bases are required.

Employment Concept

The Employment Concept is how the fleet plans to operate in battle. This is not necessarily tactics, although it is informed by tactics, but considers aspects such as the primary and supporting maneuver elements, task group or fleet makeup, and operational goals supporting the Strategic Concept. This can be inferred from exercises, organizational changes, doctrinal tactical manuals, and force structure choices. Unlike the above, there isn't as much of a short list of options, but instead a number of considerations that inform Employment Concept, discussed below.

The main considerations for this Concept are what the main line of effort is, what the supporting lines of effort are, and how these are organized. The fleet can be designed to operate as a concentrated unit, or via multiple independent (albeit generally mutually supporting) formations. The Employment Concept may emphasize one specific capability at the expense of others, while other Concepts may emphasize merging multiple capabilities into a composite organization. Lastly, the Employment Concept may call for merging Naval capabilities with joint forces or may propose almost entirely naval operations.

To illustrate Employment Concept, the Strategic Concept may be that the Navy provides safe, secure transoceanic transit to provide ground forces for the main focus of land combat. To do so, the fleet has a number of choices. It could develop an offensive Employment Concept, focused on eliminating the threats to the transoceanic crossing. Alternately, it could develop a defensive Employment Concept focused on ensuring that the sea Lines of Communication can survive enemy attack. To execute either of these Concepts, the Navy can develop different force packages including theater level fleet command structures, task forces such as Carrier Strike Groups and Surface Action Groups, or independently maneuvering tactical units.

Fleet Architecture Concept

The Fleet Architecture Concept is what platforms the fleet believes it needs to execute the concepts discussed above. While overall force structure is part of this, it is more than just overall numbers and reflects the force mix and prioritization between different ship types within the constraints of the achievable fleet size. Force size tends to be a lagging indicator, particularly force structure since naval forces are capital-intensive, are in service for decades, take a long time to design, and are subject to the whims of Congressional appropriations. However, decisions in near-term procurement and

investment do reflect doctrinal priorities. The numbers and types of ships in the US fleet, as well as the number and types of ships procured in any given year, are readily accessible. Similar to the Employment Concept, there are not a small set of options to consider but instead a number of considerations that an analysis of force posture can reveal, discussed below.

Force posture and structure do not fall neatly into easy categories since there are any number of possible options. So instead of listing even a subset of options, important considerations for force posture are discussed. First, what is the "capital ship" or the primary ship that the fleet is designed and organized around, if there is one. Second, what is the balance between main combatants, other combatants, escorts, and support ships. And lastly, what is the balance between high end platforms (generally main combatants) and lower end (but more affordable) platforms. These platforms and changes in their type over time are relatively complex and are discussed in more detail in the following chapters.

Explanatory Variables

Drawing from the military innovation literature, the cases of Naval doctrinal innovation will be analyzed for five explanatory variables: balance of power; civilian intervention; bureaucratic politics; culture and ideas; and experimentation.

Balance of Power. This is the simplest of the theories, and basically indicates that there is nothing special about doctrinal change. As a form of balancing, Balance of Power predicts that Navies (or other services) innovate in response to changing strategic threats. Although most studies of innovation have concluded that by itself a change in strategic

situation is not sufficient to explain innovation, this explanatory variable cannot be ignored. Certainly, most of the other theories rely on some perceived external threat to justify the need for change, and the idea that the military is just responding to the balance of power sounds reasonable.

Domestic Politics and Budget. Since the Navy is an element of the US government with its priorities and budget established by civilian authority, the role of domestic factors is an important consideration. Doctrinal change can be driven by factors outside pure geostrategic considerations. Unlike the Civilian Intervention theory below, this theory doesn't have civilians intervene in military affairs as enlightened actors overruling a hidebound military, but as political actors with their own priorities, whether budgetary or political.

Civilian Intervention. Drawing primarily from Posen's theory, this explanatory variable expands on the Balance of Power to approach. Since Posen predicts that military leaders will be reluctant to change due to organizational biases, he argues that when faced with an external threat, civilian leaders will intervene to impose a doctrinal change from above, generally aided by mavericks within the service. Operationalizing this variable can be done by observing the actions directed by civilian leaders that run contrary to military leadership's preferences and public statements in the context of doctrinal innovation.

Bureaucratic Politics. This explanatory variable is that competition between military services or branches is the determinant of innovation. When the organizations compete with each other for influence and budget share, they will be incentivized to seek

new ways of accomplishing the mission and taking missions (and associated budget share) aware from competing organizations. On the other hand, when organizations do not compete with each other, there is less incentive to develop a new capability. There are two main types of competition, between military services and between branches within a military service. Generally, bureaucratic competition can be observed in official records and inferred by bureaucratic incentives.

Learning Organization Capacity. Rather than the top down approach the previous explanatory variables represent, this variable measures mechanisms for experimentation and feedback. These mechanisms, such as incubators, advocacy networks, or experimental/developmental exercises, are seen as key enablers for innovation, by proving that new concepts or technologies and enabling a bottoms up approach to doctrinal innovations.

Culture, Norms, and Ideas. This last explanatory variable looks inside the service to explain how innovation occurs. Changes in service culture and more specifically the values of the service and the ideas espoused by service strategists and spokesmen can serve to drive change, by creating a need to adjust doctrine to reflect the new values of the service. While harder to measure, the ideas that motivate a service can be observed in the public statements that leaders and strategists.

Hypotheses

Based on these six possible explanatory variables, six hypotheses emerge that can be tested against each case of naval innovation. H_0 : In response to changing strategic situation and balance of power, Naval organizations will change doctrine to mitigate these shifts in the balance of power.

 H_1 : In response to domestic political pressures and changing defense budgets, the Navy will change doctrine to adapt to these external factors

 H_2 : External threats will encourage civilian leaders, possibly aided by mavericks, to intervene and force Naval leaders to change doctrine to address these perceived threats.

 H_3 : Bureaucratic competition between military services or internally within branches of the Navy, will cause the Navy to innovate doctrinally to gain influence and/or budget share.

*H*₄: The presence of mechanisms for experimentation, feedback, and organizational learning within Naval forces will cause the Navy to change doctrine as better options are identified.

 H_5 : Evolving service culture, norms and ideas will cause certain doctrinal innovations to be embraced, while those that do not fit service culture are rejected or ignored.

None of these hypotheses are novel theories and have separately been tested against other cases, but I approach the use of these hypotheses in two new ways. First, I examine the cases of Naval doctrinal change by looking for all the casual factors discussed above, rather than developing a new, monocausal explanation. Second, rather than the parsimonious monocausal explanation that most theories of military innovation are trying to develop, I accept that multiple variables may have explanatory power at the

same time. Moreover, from a level of analysis perspective, some of these hypotheses may explain why an innovation occurs, while others explain how the innovation occurs (or more specifically why one possible innovative path over another). So, for these cases, what is interesting is how they interact and the relative importance of these variables across multiple cases.

Methods & Data Gathering

This project is a set of structured, focused case studies, relying primarily on published strategic capstone documents, supplemented by secondary sources and publicly available government documents such as plans, testimony, and budgets. The approach is qualitative and would utilize process tracing techniques as appropriate. It will rely on one institutional actor but vary cases chronologically to provide a number of cases to compare, cases that are not necessarily well examined. Required data for this analysis is available from a number of primary, both archival and published, and secondary sources.

First, the US Navy has published a series of "capstone" documents since the Second World War that describe how the Navy would be employed in conflict, as well as its peacetime mission. While some of these were described as "strategies," I argue that first they are not properly strategies, but instead a hybrid of doctrine, strategic concepts, and mission statements, and thus can reveal the shared informal doctrine. Additionally, even if we were to accept that these publications were strategies, relevant doctrinal information can still be inferred from them. Additional public information is available, particularly naval budget, force structure, and organizational changes, and in some cases

congressional testimony and other public statements are available to supplement the official publications and help define the Navy's doctrine in each case.

Second, for Cold War cases, a variety of records have been declassified and are published as part of the Navy War College's Newport Paper's series of manuscripts. Many of these documents contain not just analysis, but reprints of the original documents. Similarly, in many cases Naval strategists were active in published forums such as the Naval Institute's *Proceedings*. Additionally, all the cases have been researched from a historical perspective and these secondary sources can provide valuable data to explore these cases.

Lastly, for more recent cases, and even the late Cold War era, the doctrinal changes occurred within living memory. Key leaders and action officers who worked on these documents have and are documenting their experiences via oral histories, published interviews and blogs. These sources provide important insights, at least from their perspective, as to what they remember as the motivation behind changes in Navy posture and implied doctrinal innovations. These sources can supplement the official record when not available or incomplete, particularly for more recent events that have not been fully declassified.

Case Selection

Selecting cases is important to scope this research project, and to constrain the scope. I analyze four primary cases of service-level doctrinal change in the post-WWII era by the US Navy, along with a shorter shadow cases covering the US Navy's doctrinal change throughout the early 21st Century. This specifically excludes non-US, non-Navy,

technological and operational-tactical level changes, to focus exclusively on the question of doctrinal change within the US Navy after World War II. The primary cases are three Cold War Cases associated with the late 1940s "Revolt of the Admirals," the 1970s, and the 1980s "Maritime Strategy" and a post-Cold War Case focused on the 1990s "From the Sea" adaptation to the post-Cold War era. The vignettes cover the 21st century responses to transformation, irregular warfare and the "Pivot." Other cases of Naval change, including the interwar period and the development of the SSBN force are well covered by existing literature.

Restricting the cases to solely US Naval doctrinal change does limit the generalizability of this study, but it also allows a more focused comparison of a naval force and how it changed across time. First, military doctrinal innovation within the US Army (and a lesser extent within the US Marine Corps) is well addressed by existing literature, so there is less that another study would add to this research.⁷ As discussed above, naval innovation has much less attention in the literature, especially in the post-WWII period, leaving a gap in the literature that this study can help fill. Second, while the US case does limit its generalizability, the US Navy was uniquely positioned as the predominant naval power from the end of World War II through the present day. Although there were certainly challenges during this time frame, the Navy arguably did not face a true peer competitor. This lack of a peer maritime competitor is a unique situation and not easily comparable to any other cases. Lastly, the post-WWII era is

⁷ In fact, Jensen's book on post-WWII military doctrinal innovation served as the inspiration for this project.

interesting, because of the potential for lessons for peacetime doctrinal change that are relevant today. While the "great" innovations of the interwar period, where the Navy developed carrier warfare, amphibious warfare, and submarine warfare, are the most cited case of Naval change, the lessons of the post-WWII era are less studied and may be appropriate for the era of renewed great power competition.

While technological and tactical innovations do occur in the US Navy during this time, they don't help answer the question of how the Navy viewed itself and justified its role to itself and to the public. These non-doctrinal innovations are not trivial and have significant doctrinal impacts, including important issues such as the development of the SSBN force, an entirely new mission set for the Navy, and the development of critical systems such as the Tomahawk missile and Aegis defense system. However, many of these developments are addressed within the current literature, at least in the case of the major technological innovations. Innovations at the operational-tactical level are not generally well covered by much literature but, although of great interest to naval tacticians and practitioners, these discussions appear to be more niche issues of a less generalizable interest to strategists, and not directly related to the question of doctrinal innovation.

To ensure some variation between cases, I selected three from the Cold War and one from the post-Cold War period. The presence of the Soviet Union, even if it never directly challenged the US Navy for control of the seas, is an important external pressure that drove many of the force structure decisions within the Navy. By selecting cases with and without a near peer competitor, I hope to account for that possible explanation.

Similarly, my study ends before the acknowledged return of "great power competition" from either China or Russia, which could influence the post-Cold War case. These three cases also show significant changes in naval doctrine, ranging from the "Balanced Fleet" to a more Mahanian-offensive "Maritime Strategy" and the post-Cold War emphasis on expeditionary operations, power projection, and humanitarian operations.

Mapping what follows

Having described how I intend to approach this study naval doctrinal change, the last part is briefly to map out the remainder of the paper.

Chapter Two explores the definitions of doctrine and military change, reviews the literature explaining the sources of military change, and assesses the specific gaps in our understanding of naval doctrinal change.

Chapter Three looks at the development of naval doctrine in the years leading up to the case studies explored in this paper,

Chapters Four through Eight constitute the majority of the study, with the four case studies and the additional set of vignettes in Chapter Eight.

Chapter Nine concludes by looking across the cases and assessing what overall lessons may be drawn.

Lastly, an Appendix provides some background information on modern naval organization, platforms, and force structure, to explain some of the service-specific concepts that are discussed throughout the case studies.

CHAPTER TWO: SOURCES OF DOCTRINAL CHANGE

Defining Doctrine

Doctrine is unfortunately defined many ways, and has various meanings at different levels of analyses, ranging from the strategic-, operational-tactical- or servicelevel. At the turn of the century, in one of the first times doctrine was discussed in the United States, then-Lieutenant Commander Dudley Knox defined doctrine as the "general *guides to the application* of mutually accepted principles, and thus furnish a practical basis for coordination under the extremely difficult conditions governing contact between hostile forces."⁸ This theme of providing general principles and guidance, rather than directive orders, is a recurring theme in naval discussions of doctrine.

More recently, the US Department of Defense officially defined doctrine in Joint Publication 1-02 as the "fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application."⁹ Somewhat similarly, the 1994 Naval Doctrine Publication 1 describes doctrine as a starting point for addressing warfighting demands and a "a shared way of thinking that is not directive...With doctrine we gain standardization, without relinquishing freedom of judgment and the commander's need to exercise initiative in battle."¹⁰ Thus we can easily observe continuity over the past century in how different

⁸ Dudley Knox, "The Role of Doctrine in Naval Warfare," U.S. Naval Institute, March 1, 1915, https://www.usni.org/magazines/proceedings/1915/march/role-doctrine-naval-warfare.
 ⁹ "Joint Pub 1-02," accessed September 21, 2019, https://fas.org/irp/doddir/dod/jp1_02.pdf.
 ¹⁰ "NDP 1. Naval Warfare," accessed September 21, 2019,

http://www.iwar.org.uk/military/resources/aspc/pubs/ndp1.pdf.

military officers have described doctrine. From these official definitions, it is clear that doctrine is not just Tactics, Techniques and Procedures (TTPs) and while TTPs may be "doctrinal", TTPs tend to focus on more tactical issues (e.g., proper squad patrol formations or proper configuration of Aegis radar systems), but the official definitions do not seem to fully capture exactly what doctrine is, other than a shared way of thinking about issues.

In his 1986 work Barry Posen describes how doctrine changes and although problematically he does not fully define doctrine in his work, he does describe it as the "subcomponent of grand strategy that deals explicitly with military means"¹¹ His classification of doctrine as offensive, defensive, or deterrent is unfortunate in that it does not clearly separate doctrine from strategy, but his overall concept that doctrine is what connects grand strategy to military means does fill a gap in understanding of doctrine, or at least the doctrine of interest at the service level.

More recently, Gallo describes doctrine as "*how a military organization plans to fight in combat*. More specifically, doctrine is the *formal collection of documents sanctioned by the military organization that military forces use to guide their actions in combat*." Gallo is analyzing doctrine at the "operational-tactical" level of doctrine, hence his focus on how an organization fights. At the same time, he specifically looks at the formal documents that make up doctrine. While this may be appropriate for some services, particularly ones like the US Army that view doctrinal documents as helpful,

¹¹ Barry Posen, *The Sources of Military Doctrine : France, Britain, and Germany between the World Wars,* Cornell Studies in Security Affairs (Ithaca, N.Y: Cornell University Press, 1986), 13.

doctrine can likely exist outside of formal documents. More simply, Janine Davidson defines doctrine as "what armies are supposed to know."¹²

Benjamin Jensen proposes the construct of service-level doctrine. This is clearly differentiated from those other lower-level doctrinal documents and "formally prescribes how the military professional should execute critical tasks in support of national security objectives."¹³ In his definition, doctrine serves as a link between national strategy and military forces and force structure. Samuel Huntington, writing explicitly about naval doctrine following the "Revolt of the Admirals" describes doctrine as a "unifying purpose which shares and directs their relations and activities towards the achievement of some goal of national policy."¹⁴ This is in line with a more recent definition by Posen, who argues that doctrine serves multiple purposes, amongst them: defining what a military service does; providing a shared conceptual framework for service leaders; and providing a purpose to individual members of the service.¹⁵ This service-level definition of doctrine, that both Jensen and Posen seem to endorse, aligns with my definition of doctrine.

For this case, I define Naval service-level doctrine as describing *broad guidelines* for the employment of Naval forces in support of national strategy at the operational

¹² Janine. Davidson, *Lifting the Fog of Peace: How Americans Learned to Fight Modern War* (Ann Arbor: University of Michigan Press, 2010), 130.

¹³ Benjamin M. Jensen, *Forging the Sword: Doctrinal Change in the U.S. Army* (Stanford, California: Stanford Security Studies, an imprint of Stanford University Press, 2016), 5.

¹⁴ Huntington generally refers to this as a "strategic concept of the service", but uses doctrine (e.g. Mahanian doctrine) interchangeably. For my purposes I treat his definition as doctrine; Huntington, "National Policy And The Transoceanic Navy."

¹⁵ Barry R. Posen, "Foreword: Military Doctrine and the Management of Uncertainty," *Journal of Strategic Studies* 39, no. 2 (February 23, 2016): 160, https://doi.org/10.1080/01402390.2015.1115042.

level of war. Naval doctrine at the operational-tactical level has a lot to say about how to conduct carrier battle group operations, but that is not service-level doctrine which instead describes how the fleet (and its constituent parts) conduct operations that support the national strategy. Doctrine is not a naval strategy, strategy being how to use the Navy against a discrete individual adversary or challenge. Nor is it a concept of operations tied to a specific campaign or operation. But at the same time, observing how a strategy or strategic concept is built, may tell us a lot about how naval leaders think about sea power and the role of the Navy. Doctrine helps the Navy inform its budget, its force design, and its force structure investments, even if it is not the sole casual factor. Given the capitalintensive nature of naval operations and the length of time it takes to build a modern warship, getting doctrine right in peacetime is important, since there is little the Navy can do to change material solutions during the early stages of a conflict. Although the Navy does not have much formal, written doctrine, by communicating the Navy's mission to the public and its own members, the shared understanding that is informal doctrine, and some limited naval written doctrine, still plays an important role in determining a Navy's ability to operate in peace and war. The question remains how and why doctrinal change happens, and what constitute a military change.

Defining Military Change

Military change is more than just a technological innovation, such as the development of aircraft, tanks or submarines, and the literature consistently emphasizes that change is not just a question of material or equipment but also how that equipment is used. Analyzing the specific issue of doctrinal change, Benjamin Jensen defines

"doctrinal change as a formal shift in how military professionals articulate the critical tasks required to achieve the ends of national strategy."¹⁶ Jensen's definition of doctrinal change and reliance on formal documents, while perhaps appropriate for the Army, is limiting for services that have less formal documentation of doctrine. Zisk similarly defines precisely doctrinal change as a "major change in how military planners conceptualize and prepare for future war. In particular, it involves a reconceptualization of what sorts of military tasks need to be performed in wartime, or major alterations in how existing tasks are performed."¹⁷

Many of the studies of military change focus on innovation, which Stephen Rosen describes innovation as the "change in one of the primary combats arms of a service in the way it fights or alternatively, as the creation of a new combat arm"¹⁸ In his 1994 study, Rosen's definition sets a relatively high bar for innovation, since the creation of a new combat arm is a relatively infrequent occurrence, but the important point in his definition is that innovation is not about just what equipment a military service has, but how it intends to use it. The classic case he cites is the different approaches of French and German armies towards warfare early in WWII, resulting in two very different ways of employing military forces despite relatively similar force structures. Additionally, Rosen notes "change in formal doctrine of a military organization that leave the essential workings of that organization unaltered do not count as an innovation."¹⁹ As he argues,

¹⁶ Jensen, *Forging the Sword: Doctrinal Change in the U.S. Army*, 10.

¹⁷ Kimberly Zisk Marten, *Engaging the Enemy Organization Theory and Soviet Military Innovation, 1955-1991* (Princeton, N.J: Princeton University Press, 1993), 4.

¹⁸ Stephen Peter Rosen, *Winning the next War: Innovation and the Modern Military* (Ithaca ; Cornell University Press, 1991), 7.

¹⁹ Rosen, 8.
formal documents can be rewritten, but if they do not affect how that military organization operates, by themselves they would not be an innovation.

A more flexible definition is that proposed by Farrell and Terriff, who define military change as a "change in the goals, actual strategies, and/or structure of a military organization"²⁰ While Farrell and Terriff do differentiate between different types of military change including an adaptation²¹, emulation²², and innovation²³, they assess that these three concepts are mechanisms by which change can happen, but a military change is determine by the outcome described above, and not the mechanisms that innovation, emulation and adaptation describe. Notwithstanding Farrell and Terriff's useful and precise definitions, for my purposes innovation and adaptation seem to be merely a matter of scale. Emulation, while it may avoid some first mover costs, still feels pretty innovative to the service undergoing it, and for the scope of the study I propose, there seem to be few possible cases of emulation. So, the specific phenomenon I propose to study, namely change in military doctrine, can be seen as any type of military change and not just an adaptation or innovation.

In the end, I define naval doctrinal change as a *change in the broad guidelines for the employment of Naval forces in support of national strategy at the operational level of war*. Since there is relatively little written doctrine, formal doctrine is less relevant in this case, but instead change in the informal concept of US naval doctrine is implied by

²⁰ Theo Farrell and Terry Terriff, *The Sources of Military Change: Culture, Politics, Technology*, Making Sense of Global Security (Boulder, Colo: Lynne Rienner Publishers, 2002), 5.

²¹ Minor adjustments in organization and technology that over time can be aggregated into an innovation.

²² Copying other military organizations or adopting their practices/technologies.

²³ Developing new technologies, organizations, and tactics.

operational/strategic concepts for employment of naval forces, naval exercises, organizational structure changes, and changes in force structure.

Theories of Military Change

A large literature that discusses how and why militaries innovate or fail to innovate, even if there is nothing approaching agreement on the answer to this question. In general, military organizations are seen as large bureaucracies that are resistant to change, both due to being a bureaucracy but also due to factors unique to military organizations including strict hierarchy and strong traditions. The Navy, for example, is not an easy institution to change, due to what Stimson described as "the peculiar psychology of the Navy Department, which frequently seemed to retire from the realm of logic into a dim religious world in which Neptune was God, Mahan his prophet, and the United States Navy the only true Church."²⁴ Yet at the same time, military organizations have led the way on innovations, not least of which being the interwar developments of carrier and submarine warfare, leading to entirely new branches of military organizations.

The "easy" answer to innovation is that militaries change because it makes sense to do so. Reflecting the theories of neorealism, this explanation would argue that as adversaries develop new capabilities that shift the balance of power, other militaries will naturally internally balance to mitigate the increased capability and threat of foreign forces.²⁵ Another variant is that military innovation is the result of domestic factors, as

²⁴ Henry L. (Henry Lewis) Stimson, *On Active Service in Peace and War*, [1st ed.] (New York: Harper, 1948), 506.

²⁵ Kenneth N. (Kenneth Neal) Waltz, *Theory of International Politics*, Addison-Wesley Series in Political Science (Reading, Mass: Addison-Wesley Pub. Co., 1979), 124.

budget and political pressure may drive a military change, often in response to a geostrategic shift. This eliminates the need for any complex explanations since change or innovation is a merely a logical response to the balance of power. However logical this may be on the surface, there is consensus among scholars of military innovation that, for a variety of reasons, militaries will not always innovate in the face of increasing adversary threats. Thus, since balance of power reasons are not accepted as the general answer to the puzzle of military change, starting with Posen a series of theories of military innovation have propose their answers.

While the theories of military change are all unique in their own way, there are clearly some common themes and groupings that can be observed. Adam Grissom argues that there are four schools of thought: civil-military relations; interservice politics; intraservice politics; and organizational culture.²⁶ Grissom's four schools are certainly the best articulated analysis of the state of the literature from 2006, but more recent literature has emphasized the role of bottom-up change, an aspect of military change that had not emerged when Grissom was writing. While not inconsistent with Grissom's presentation, I would argue that interservice and intraservice politics are two manifestations of bureaucratic politics, with the only difference being the level of analysis (whether military services or branches within a service are the unit being analyzed). Therefore, I propose that the military change field today comprises four primary schools of thought:

²⁶ Adam Grissom, "The Future of Military Innovation Studies," *Journal of Strategic Studies* 29, no. 5 (2006): 908, https://doi.org/10.1080/01402390600901067.

civil-military relations; bureaucratic politics; organizational culture; and learning organizations. These schools of thought are addressed briefly below.

Civil Military

Writing in 1986, Barry Posen proposed that civilian intervention is the key explanatory variable for innovation. He does consider the basic theory of realism as a source of military change, namely that internal balancing in the face of an external threat would result in a military service changing to mitigate that threat. However, Posen argues that by itself balance of power does not explain military innovation, since militaries have failed to adapt to changing military balances. Since military services tend to be unwilling to change (at least until too late), it is only when civilians feel the balance of power turning against them that they intervene in military affairs to adjust military doctrine to address the imbalance of power, generally aided by maverick officers within the service.²⁷

Posen relies on case studies of interwar development of military doctrines of France, England, and Germany, considering two theories of military innovation: organizational theory and balance of power theory.²⁸ Organizational theory predicts that military services would naturally prefer offensive doctrines since those maximize their importance and that military services would only change given defeat or fear of defeat. On the other hand, his balance of power theory predicts that during time of competition

 ²⁷ Posen, *The Sources of Military Doctrine: France, Britain, and Germany between the World Wars*.
 ²⁸ Posen never really defines doctrine in this work, although he does categorize them as offensive, defensive, and deterrent. I'd argue that rather than doctrine, he is describing grand strategy, but that is just a quibble with his definition, not necessarily the overall analysis.

and balancing, civilian intervention in military sphere more likely. Civilians tend to intervene if contemplating aggression, under threat of war, or if the current doctrine poses unacceptably high costs. The bottom line is that barring this external civilian intervention, Posen believes that military organizations will stagnate and much like the French army, fail to be ready for the challenges they face.²⁹

Deborah Avant comes to similar conclusions about the importance of civilian intervention in military affairs to ensuring military effectives, by comparing the US lack of adaptation to counterinsurgency in Vietnam with the experience of the British in the Boer War. She concludes that the civilian institutional division in the US, with power split between legislative and executive branches, led to an inability to exert control over military doctrine, hence why the US Army was able to resist Kennedy's demands to realign Army force structure to emphasize counterinsurgency. This contrasts with the British Parliament's strong control over military personnel assignments and ability to easily replace commanders, which Avant argues leads to very different military responses to similar challenges.³⁰ Although discussing policy at the strategic, vice doctrinal level, Eliot Cohen makes a similar argument about the role of civilian leadership in shaping effective military strategy, at times against the wishes of the uniformed leadership.³¹

 ²⁹ Posen, *The Sources of Military Doctrine: France, Britain, and Germany between the World Wars*, 79.
 ³⁰ Deborah D. Avant, "The Institutional Sources of Military Doctrine: Hegemons in Peripheral Wars," *International Studies Quarterly* 37, no. 4 (1993): 409–30, https://doi.org/10.2307/2600839.

³¹ Eliot A. Cohen, *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime*, 1st Archor Books ed. (New York: Anchor Books, 2003).

Bureaucratic Politics

While Posen posited that bureaucracies were resistant to change and only external civilian intervention would allow change to happen, an entirely different school of thought argues that military services bureaucratic inward-looking behavior encourages innovation in the face of competition from other services that threaten their core meaning. This view of military organizations as bureaucratic actors has its basis, at least in academic thought, to Graham Allison's analysis of the Cuban Missile Crisis. Focusing on the independent bureaucratic actors that make up the US government, he developed a Model II, or organizational processes theory, where organizational dynamics drive decision making and Model III, or bureaucratic politics theory, where these bureaucratic actors are motivated primarily by increasing their influence. Particularly for Model III, actors tend to promote foreign policy activities that highlight their importance and increase their budget share. Thus, foreign policy decisions need to be seen as originating from this bureaucratic competition, vice a purely rational cost-benefit decision at the national level.³²

Specifically addressing these issues, Morton Halperin writes that "an organization will accept new functions only if it believes that to refuse to do so would be to jeopardize its position with senior officials or if it believes the new function will bring in more funds and give the organization greatest scope to pursue its own activities"³³ and that "organizations with expensive capabilities will be particularly concerned about budget

 ³² Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (S.I: HarperCollins, 1971).
 ³³ Morton H. Halperin, *Bureaucratic Politics and Foreign Policy* (Washington: The Brookings Institution, 1974), 40.

decisions and the budgeting implications of policy decisions...stands on issues are affected by desire to maintain influence³⁴ He cites the example of a US Navy stricken by intraservice politics between surface, submarine and carrier tribes to prove his case.³⁵

Halperin argues that these bureaucratic politics are strongest where they directly affect the organization's "essence," which is the "image of the essence of an organization shapes an organization of its interests."³⁶ Military services fight hardest for those capabilities that most directly affect its essence and resist efforts to take away functions related to its essence, which he argues explains why both Air Force and Navy have fought to keep their respective airborne and waterborne transport missions, even if of only tertiary importance to their core missions. Similarly, Evangelista identifies that in some cases, rather than react to threats, as balance of power might predict, military organizations instead "invoke threats to advance their cause,"³⁷ regardless of how real that threat might be. So, although in some cases services cloak their actions as a response to external threats, they may just be justifying what they want to do for more self-interested, bureaucratic reasons instead.

Interservice Bureaucratic Politics

One form of bureaucratic politics identified by scholars is between individual military services. Writing in 1961, Samuel Huntington argues that historically military

³⁴ Halperin, 27.

³⁵ Halperin, 27–33.

³⁶ Halperin, 39.

³⁷ Matthew Evangelista, *Innovation and the Arms Race: How the United States and the Soviet Union Develop New Military Technologies*, Cornell Studies in Security Affairs (Ithaca: Cornell University Press, 1988), 61.

services fought amongst each other for allocation of budget between services, not against overall topline. On one hand, this interservice rivalry toughened the services and encouraged them to innovate in order to increase their share of the defense budget. This interservice conflict was only mediated by allowing services to pursue duplicative efforts, such as Army and Air Force missile programs. While he acknowledges that intraservice competition does occur, he positions it as a lesser rivalry, due to loyalty to home service and the institutional structures of the service organization.³⁸

Specifically analyzing the Polaris missile system, Sapolsky argues that fears of Air Force strategic missiles eating a greater percentage of the defense budget stimulated interservice rivalry, which had been dormant since the late 1940s "Revolt of the Admirals." The Navy and Army, who had a relatively weaker program at risk of cancellation by the Air Force reached a deal to cooperate, the Army counting on the Navy to strengthen their claims for developing a new system. Together they were able to defend their combined program against Air Force (and broader DoD) attempts to eliminate it. As the program matured and gained technical credibility, the Navy quickly moved beyond the collaboration with Army on Jupiter and by 1956 was proposing a Navy-only program known as Polaris.³⁹

Owen Cote similarly argues that interservice competition can act to create doctrinal innovations but adds the consideration that interservice cooperation can

 ³⁸ Samuel P. Huntington, "Interservice Competition and the Political Roles of the Armed Services," *The American Political Science Review* 55, no. 1 (1961): 41–44, https://doi.org/10.2307/1976048.
 ³⁹ Harvey M. Sapolsky, *The Polaris System Development; Bureaucratic and Programmatic Success in Government* (Cambridge, Mass: Harvard University Press, 1972), 7–22.

suppress such doctrinal innovation. He agrees with Sapolsky that Polaris was a major innovation, creating a new combat arm inside the Navy and dramatically reorienting Navy investment and personnel. This innovation occurred due to a Navy concern that the Air Force would gain a disproportionate share of the nuclear budget.⁴⁰

Unlike Sapolsky, Cote also provides an example of what happens without interservice competition. Analyzing the same story of the SSBN force, by the 1970s an informal truce had emerged between the Air Force and the Navy, resulting in both services structuring their nuclear forces to complement, rather than compete with each other. By this time the Navy was developing the technical capability to develop a hard target kill capability for the Trident II. However, this new capability, given that previous SLBMs were supposedly inaccurate second-strike weapons, threatened the existence of the Air Force's ICBM force.⁴¹ While in the 1950s interservice rivalry had encouraged each service to develop competing capabilities to gain a greater budget share, by the 1970s the services were actually united against the DoD in preserving equal budget shares. In Cote's estimation, this interservice collusion explains why the Navy did not aggressively pursue a hard target kill capability for its Trident II ballistic missile when it technically could have, as the Navy sought to avoid challenging the justification for Air Force's ICBM forces.⁴²

⁴⁰ Owen Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles" (Massachusetts Institute of Technology, 1996), 166.

⁴¹ The key difficulty was that ICBMs are launched from fixed sites, so they know where they are upon launch, simplifying navigation systems, while SLBMs lack that accurate location upon launch, or at least did in the early days of the SLBM program. Various technical improvements allowed the Navy to significantly improve the accuracy of the ballistic missiles despite these challenges.

⁴² Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 98.

Intraservice Bureaucratic Politics

If one manifestation of bureaucratic politics is rivalries between military services, another theory is that bureaucratic politics manifests itself in rivalries within individual services. In their analysis of bureaucratic politics, Kozak and Keagle describe the Department of Defense not as a unitary actor, but one made up of hierarchical sub-organizations, each made up of smaller directorates and branches, with their own position to advocate for that reflects their aggregate interests. This description is applicable to service rivalry, but as they point out the DoD is a nested set of organizations and each sub organization, or branch within a service, may compete internally as much as services compete externally.⁴³

The leading case for intraservice politics is that made by Stephen Rosen. Analyzing 21 cases of peacetime, wartime, and technological innovations, largely concentrated on innovation in the interwar period among US and British forces, Rosen rejects the theories of Posen that rely on mavericks and external civilian intervention, arguing that these supposed mavericks were not isolated from the rest of the military but generally supported at multiple levels. He argues that if these innovators were in fact truly mavericks, they would have lacked institutional support to make lasting change happen. In the case of the British air defense, "it was steady doctrinal development within the military, not intervention by civilians or 'mavericks."⁴⁴

⁴³ James M. Keagle and David C. Kozak, *Bureaucratic Politics and National Security: Theory and Practice* (Boulder, Colo: L. Rienner Publishers, 1988), 109–17.

⁴⁴ Rosen, Winning the next War: Innovation and the Modern Military, 18.

Rosen instead proposes that we look at military services as made up of multiple sub-units (e.g. aviation and the submarine force within the US Navy). Innovation emerges as these different tribes compete with each other for precedence within the service, most notably associated with the struggle for preeminence between the US Navy's battleship "Gun Club" and the rising set of carrier admirals. Moreover, he identifies that within the military organization, power comes from controlling promotion opportunities – these promotion pathways can only be created by those who have power within the bureaucracy. This idea that promotion pathways are a key indicator of potential for innovation is further validated by President Nixon's Blue Ribbon Panel of the Defense Department that concluded "The fact that promotions are within the exclusive authority of an officer's parent service creates an incentive for an officer...to adhere closely to the official service position of his parent Service."⁴⁵ So while individuals can propose innovations, without a path to promotion they will be gain sufficient power within the organization to cause a truly lasting change and thus requires at least a high-level supporter within the military service (e.g. one associated with leadership of a particular branch or sub-unit) to protect their disruptive ideas.⁴⁶

On the other hand, Ed Rhodes examines parochialism and bureaucratic politics within the US Navy, looking at role of CNO's previous affiliation with a particular navy branch between 1950 and 1990. He finds no statistically significant correlation between the branch affiliation of the CNO and changes in naval force posture or new

⁴⁵ Halperin, *Bureaucratic Politics and Foreign Policy*, 86.

⁴⁶ Rosen, Winning the next War: Innovation and the Modern Military, 20–21.

procurements. So contrary to what intraservice politics might predict, surface CNO's did not shift towards a larger or more capable surface fleet.⁴⁷ While Rhodes was not looking purely at innovation, his findings would seem to disconfirm the idea that naval leaders are motivated solely by their "tribal" identification since the composition of the fleet did not change as a result of changes in leadership. On the other hand, that doesn't mean that jockeying for position between aviators and submariners in the Navy doesn't drive force structure decisions and that one branch isn't encourage to innovate to mitigate a relatively weaker position, just that that isn't purely tied to who the leader happens to be at the time.

Culture, Norms, and Ideas

Another theory of military innovation identifies culture as the explanatory variable.⁴⁸ Kier argues that culture is the best explanation for doctrinal changes. More specifically, it is the "interaction between constraints set in domestic political arena and a military's organizational culture"⁴⁹ that determines what doctrinal choices a state makes, and it is not just about pressures in the international system. Military organizations may be constrained by their own cultures and ignore international system imperatives that otherwise would seem obvious.⁵⁰

⁴⁷ Edward Rhodes, "Do Bureaucratic Politics Matter? Some Disconfirming Findings from the Case of the U.S. Navy," *World Politics* 47, no. 1 (1994): 30–34, https://doi.org/10.2307/2950678.

⁴⁸ See also Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, A Rand Corporation Research Study (Baltimore: Johns Hopkins University Press, 1989); Jeffrey W. Donnithorne, *Four Guardians: A Principled Agent View of American Civil-Military Relations* (Baltimore, Maryland: Johns Hopkins University Press, 2018).

 ⁴⁹ Elizabeth Kier, *Imagining War : French and British Military Doctrine between the Wars*, Princeton Studies in International History and Politics (Princeton, N.J: Princeton University Press, 1997), 5.
 ⁵⁰ Kier, 20.

Farrell and Terriff in their 2002 edited volume investigate three possible sources of military change: cultural norms; politics and strategy; and new technology. They specifically argue that militaries may reject change due to not matching their culture or in the case of developing militaries adopt a change for reason of cultural fit rather than purely military effectiveness. Similarly, political developments (such as emergence of revolutionary regimes or end of Cold War) changed the strategic environment in ways that required military innovation. Lastly, militaries may reject technology that seems to threaten core interests, but military "techno-enthusiasm" may also seek to drive military change.⁵¹

They argue that changes in strategic environment can drive change just as culture can shape state action, especially when a potential military change would affect the culture of a military. Regarding technology, they conclude that technology by itself does not drive change, but instead interacts with strategy, politics, and culture, effectively providing opportunities for innovation, but only those that fit the culture and strategic views of the state are actually embraced. Instead, citing the case of the Irish Free State Army's emulation of British military organization and practices (and thereby abandoned their guerrilla heritage), Farrell argues that norms gained from observing other professional, western militaries drove this decision.

Ed Rhodes also identifies the role of ideas in explaining military innovation, in this case the dramatic shift in the US Navy around the turn of the century. He asks why the US Navy, which since the founding of the US had been a coastal defense, commerce

⁵¹ Farrell and Terriff, *The Sources of Military Change: Culture, Politics, Technology*, 8.

raiding, and naval diplomacy organization, dramatically shifted its force posture and structure to seek to be a great power navy. He finds that the strategic environment did not change appreciably, but instead the conception of the role of the navy was dramatically revised by naval strategists. As they embraced the Mahanian view of seapower, the US Navy underwent a cultural revolution and dramatically reinvented itself over the course of a few decades.⁵²

Learning Organizations

More recent analysis has focused on the role of institutional learning capacity, and part played by the lower-level players in building a bottoms-up case for doctrinal change. While the previous three theories rely on leadership intervening (whether at the civilian, service, or branch level), the various bottom-up theories propose that instead it is the result of experimentation by variously defined lower levels of a military organization and feedback to codify the lessons of experimentation. Combining some of the ideas of culture and learning organizations, Nagl analyzes the US and British armies' experiences in counterinsurgency and explains that different organizational cultures led to differing abilities to learn and adapt to the demands of counterinsurgency.⁵³ Similarly, Davidson argues that while historical doctrinal innovation may have been directed by leadership at the top, at least in the US it has recently shifted to a bottom-up approach driven by midlevel officers. According to her theory, "internal institutional structures and processes can

⁵² Edward Rhodes, "Constructing Peace and War: An Analysis of the Power of Ideas to Shape American Military Power," *Millennium - Journal of International Studies* 24, no. 1 (1995): 53–85, https://doi.org/10.1177/03058298950240010501.

⁵³ John A. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam*, Pbk. ed. (Chicago: University of Chicago Press, 2005).

prevent, promote or *permit* military change"⁵⁴ but change comes from below and thus it is these structures that can explain why doctrinal change happens, and is effective, in some cases while it is not in others.⁵⁵

Analyzing doctrinal innovation in the US Army, Benjamin Jensen asks how "continual change in an entrenched bureaucracy" happens, since as he notes the US Army has rewritten its doctrine seven times since the end of Vietnam. He proposes that this doctrinal change requires advocacy networks and incubators, "ranging from special study groups to war games, test beds, and field exercises."⁵⁶ These incubators, insulated from the rest of the bureaucracy, enable effective experimentation while advocacy networks provide a venue for championing the results of this experimentation and gaining a highlevel sponsor to actually carry through on their proposed changes. Additionally, he notes that small groups were more successful in producing doctrinal change, not falling prey to the demands of consensus.⁵⁷

Using case studies of the French, British and German militaries in WWI, as well as US Army in Vietnam and Iraq, Michael Hunzeker argues that doctrinal evolution, in this case during wartime, emerged due to tactical experimentation. He specifically identified three characteristics leading to "doctrinal optimization," namely: "moderately decentralized command cultures, established assessment mechanisms, and centralized training structures."⁵⁸ Decentralized command cultures allow for this tactical

⁵⁴ Davidson, *Lifting the Fog of Peace: How Americans Learned to Fight Modern War*, 192.

⁵⁵ Davidson, 132.

⁵⁶ Jensen, Forging the Sword: Doctrinal Change in the U.S. Army, 1–2.

⁵⁷ Jensen, 144–45.

⁵⁸ Michael A. Hunzeker, *Dying to Learn: Wartime Lessons from the Western Front*, Cornell Studies in Security Affairs (Ithaca [New York]: Cornell University Press, 2021).

experimentation to occur and to test innovative ideas, serving as the well spring for innovation. The top-down aspects of his theory serve to identify the useful innovations and transmit them to the rest of the military organization, but they clearly begin at a lower level and are not developed by senior leaders, just embraced by them.

Vincent Davis, writing much before the rest of these authors, similarly argued that innovation in the Navy comes from mid-grade officers. These mid-grade officers, generally similar the Army's field grade officers, have sufficient experience to have an organization-wide perspective and passionately care about the state of the Navy, but are not yet jaded or stuck in their ways as one might assume more senior officers would be. In the examples he examines, nuclear submarines were advocated by then-CAPT Rickover, Commanders Ashworth and Hayward were responsible for carrier-based nuclear weapons, and Fleet Ballistic Missiles was result of advocacy by mid-level officers, including Commander Freitag and Abraham Hyatt, a civilian scientist at the Bureau of Aeronautics. All these officers were mid-grade officers who drove significant naval innovations.⁵⁹

While these officers normally begin with a horizontal political alliance, building support among peers, even these innovation advocates eventually must recruit supporters at a higher rank for top cover. Thus, the Fleet Ballistic Missile advocates eventually obtained Chief of Naval Operations Admiral Arleigh Burke's backing to move from experimentation to implementation. As the same time, they seldom take it "outside the

⁵⁹ Vincent Davis, *The Politics of Innovation : Patterns in Navy Cases*, Social Science Foundation and Graduate School of International Studies, University of Denver. Monograph Series in World Affairs ; v. 4, Monograph No. 3, 1966-67 (Denver: University of Denver, 1967), 33–34.

family," seeking support from the naval hierarchy, not civilian leadership. He argues that innovations tend not to be driven by a grand strategy, but instead to find a way to better do what the Navy is already doing.⁶⁰ At the same time, Davis does appear to endorse interservice rivalry, stating that "Naval officers therefore increasingly felt that the Navy would have to produce rival innovations in weapons systems and related capabilities in order effectively to compete with the Air Force."⁶¹ So while Davis and others argue that innovation emerges from the junior or middle level of an organization, that theory does not necessarily conflict with other theories such as those of bureaucratic politics.

Summing It Up

For each case of innovation, or set of cases, that one theory argues proves its case, another theory has a set of cases that prove why its variable is the real explanation for innovation.⁶² Thus, despite the large literature reviewed above, there is not true consensus on what the "right" theory is. So rather than spend time exploring the gaps in each theory, it is enough to say that each theory while having explanatory power for its own cases, isn't truly generalizable. As a response, some scholars have proposed that simple monocausal answers are not sufficient to explain military innovation. Additionally, these theories generally seek to explain the entire phenomenon of military innovation, without differentiating between the levels of analysis. It is possible, as some recent works have begun to ask, that there can be different reasons as to why a military organization was motivated to change, and how that change took plan. Such an approach may help resolve

⁶⁰ Davis, 36–37.

⁶¹ Davis, 41.

⁶² Rosen, Winning the next War: Innovation and the Modern Military, 3.

the contradictory findings of most of the literature, although there are relatively few examples of this approach, discussed more below.

In a government study, Hayes and Smith ask the question why military services are resistant to innovation by looking at cases of the Tomahawk cruise missile and Aegis air defense system development. They explicitly test Rosen, Posen, and Davis's theories of innovation in their three cases studies. They found that programs that have potential to change traditional roles and missiles are subject to inter and intra-service rivalry. Thus the Tomahawk program, giving land-attack capability to submarines and surface ships, was under attack immediately by the Air Force and the Naval aviation community which felt it threatened the role of air platforms. Only the support of the submarine community and civilian advocacy kept both Tomahawk and Aegis alive in the face of interservice and intraservice threats.⁶³ In the end, their analysis failed to confirm any of the theories, and they conclude that a combination of theories is best suited to answer the question. Rosen's theory of intraservice politics was found to be the strongest, but they argue he missed the important role of organizational mavericks, or at least of strong advocates for new systems, that they identified as critical to their success.⁶⁴

More recently, Andrew Gallo developed a structured approach to integrate and synthesize these competing theories in the case of doctrinal changes in the US Army.⁶⁵

⁶³ Bradd C Hayes and Douglas V Smith, "The Politics of Naval Innovation," ed. NAVAL WAR COLL NEWPORT RI CENTER FOR NAVAL WARFARE STUDIES, 1994, 73–75.

⁶⁴ Hayes and Smith, 69–83.

⁶⁵ Interestingly, Gallo is studying innovation in the US Army after WWII at the same time as Jensen, but comes to very different conclusions, with almost no discussion of Jensen's incubators and advocacy networks, although he does acknowledge their different conclusions, mainly arguing that Jensen is analyzing the how innovation occurs, but not the why.

Rather than viewing these theories as exclusionary, he argues that they need to be considered at different levels of analysis and that "the effect of one independent variable on doctrinal change often depends on the value of another variable."⁶⁶ By asking not just why an innovation occurred, but how it occurred, he judges that one can have different explanations. Ultimately, he finds that the balance of power approach, that military organizations change because of shifts in the international balance of power, is generally the best explanation for why innovation occurs, with organization and interservice approaches explaining the how innovation occurs.⁶⁷

It seems that this approach, looking for multiple causes to different aspects of innovation may make the most sense. For example, while a learning organization or cultural preferences can possibly create a bottom-up desire for a change, it seems more likely that these factors act as constraints on possible innovative choices, or as the mechanisms by which an innovation occurs, but do not create the initial impetus for change. There is much that this approach can do to avoid the ongoing indecisiveness in the field, and to allow a more nuanced approach to understanding the causal factors. Both the questions of why, as in what the impetus is to change, and how, what mechanisms resulted in the specific change selected, are interesting questions and help tell a fuller story of military change.

⁶⁶ Andrew Gallo, "Understanding Military Doctrinal Change During Peacetime" (Columbia University, 2018), 16.

⁶⁷ Gallo, "Understanding Military Doctrinal Change During Peacetime."

The State of Naval Change Literature

While Naval change is not entirely neglected in the military change literature, there are a number of gaps in its treatment. Rosen in particular based much of his theory of military innovation on the naval innovations of the interwar period, including submarine, amphibious and carrier warfare, innovations with important doctrinal and technological aspects.⁶⁸ However, a similar treatment is lacking for more recent naval history, and when naval change are included in the literature, they tend to focus on the new technologies, and less on the doctrinal aspects of innovation.

Military historians have studied the changes of the US Navy to a greater extent than political scientists. The chief study of military innovation in the interwar period by Murray and Millet clearly identifies the innovations within the US Navy that occurred before the Second World War, and ultimately enabled its success.⁶⁹ Mobley lays out the important role of incubators, such as the Naval War College in fostering the intellectual case to reinvent the US Navy in the 1880s⁷⁰ while Trent Hone identifies the structure of the early Navy as a learning organization, largely enabled by its small size (something that he concludes was lost as it transitioned into a post-WWII force structure).⁷¹ Lastly, John Kuehn identifies the organizational role of the General Board in designing the force

⁶⁸ Rosen, Winning the next War: Innovation and the Modern Military.

⁶⁹ Allan Reed. Millett and Williamson. Murray, *Military Innovation in the Interwar Period* (Cambridge ; Cambridge University Press, 1996).

⁷⁰ Scott Mobley, *Progressives in Navy Blue: Maritime Strategy, American Empire, and the Transformation of U.S. Naval Identity, 1873-1898*, Studies in Naval History and Sea Power (Annapolis, Maryland: Naval Institute Press, 2018).

⁷¹ Trent Hone, *Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945*, Studies in Naval History and Sea Power (Annapolis, Maryland: Naval Institute Press, 2018).

that won the Pacific War.⁷² These historical studies, although not strictly theoretical in a scientific sense, do still align with the scientific theories discussed above, including the importance of incubators and organizational learning institutions.

In the Cold War era, Michael Palmer studied the development of the Balanced Fleet strategy, arguing for continuity between the immediate post-WWII strategy and the Maritime Strategy⁷³, while Steve Wills conducted a comprehensive study of the changes in Naval strategy following the end of the Cold War.⁷⁴ On a more technical front, Muir documented the struggles of the surface Navy to find an independent role, and more specifically a guided missile capability, to compete in the Cold War environment⁷⁵ and Trimble uncovered the fascinating development of nuclear-capable, long-range sea planes that the US Navy quite unsuccessfully attempted in the immediate post-Revolt of the Admirals era.⁷⁶

The 1980s and post-1980s period has been relatively extensively studied from an historical perspective. As the Cold War closed, there was an intentional effort to preserve some of the knowledge gained in that era, and it was subsequently documented in several works. Chief among these is the work of John Hattendorf, publishing manuscripts as part

⁷² John T. Kuehn, *Agents of Innovation : The General Board and the Design of the Fleet That Defeated the Japanese Navy* (Annapolis, Md: Naval Institute Press, 2008).

⁷³ Michael A Palmer, *Origins of the Maritime Strategy : American Naval Strategy in the First Postwar Decade*, Contributions to Naval History ; No. 1 (Washington, D.C: Naval Historical Center, Dept. of the Navy, 1988).

⁷⁴ Steven Wills, "Replacing the Maritime Strategy: The Change in Naval Strategy from 1989-1994" (College of Arts and Sciences of Ohio University, 2017).

 ⁷⁵ Malcolm Muir, *Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945-1975*,
 Contributions to Naval History ; No. 6 (Washington, D.C: Naval Historical Center, Dept. of the Navy, 1996).
 ⁷⁶ William F. Trimble, *Attack from the Sea : A History of the U.S. Navy's Seaplane Striking Force* (Annapolis, Md: Naval Institute Press, 2005).

of the Naval War College's Newport Papers containing primary documents from the decades in question, along with an individual volume discussing the evolution of Naval strategy from 1977-1986.⁷⁷ Peter Swartz similarly published a number of reviews of Naval capstone documents while at the Center for Naval Analyses.⁷⁸ More recently, Sebastian Bruns and Steve Wills have written on the transformation of Naval strategy in this era, with Wills in particular emphasizing the Navy lost its ability to create strategy due to the jointness of Goldwater Nichols.⁷⁹

While historians have analyzed naval change in this era, even if not within the construct of military change per se, political science has not been entirely absent. In addition to the leading role that naval innovation, specifically the SSBN force, has played in establishing the bureaucratic politics field (e.g., Cote and Sapolsky), others have similarly addressed this issue. Davis, in a relatively early study, studied the cases of submarine and SSBN development, highlighting the role of mid-level officers.⁸⁰ Somewhat more recently, Hayes et al studied the innovations of the Tomahawk land attack cruise missile and the Aegis air defense system.⁸¹ However, these more recent studies have all studied technological innovations, associated with new capabilities. Only one study by Angevine addressed doctrinal change, and that was focused on the

⁷⁷ John B Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986*, Newport Papers 19 (Newport: Naval War College Press, 2004).

⁷⁸ Peter M. Swartz and Karin Duggan, "U.S. Navy Capstone Strategies and Concepts: Introduction, Background and Analyses:" (Fort Belvoir, VA: Defense Technical Information Center, December 1, 2011), https://doi.org/10.21236/ADA563232.

⁷⁹ Sebastian Bruns, US Naval Strategy and National Security: The Evolution of American Maritime Power / Sebastian Bruns., 2019; Wills, "Replacing the Maritime Strategy: The Change in Naval Strategy from 1989-1994."

⁸⁰ Davis, The Politics of Innovation: Patterns in Navy Cases.

⁸¹ Hayes and Smith, "The Politics of Naval Innovation."

operational-tactical evolutions in Anti-Submarine Warfare associated with the UPTIDE series of experiments.⁸²

Thus, while it is not fair to say that Naval change is entirely unexamined, naval doctrinal change is relatively understudied, particularly for more recent cases. Older (as in pre-WWII) cases of naval change have been well studied, in particular the interwar period. Those recent studies of naval change that have been conducted focus on the more technical aspects of a technological innovation, but that is largely the extent of recent research. Comparatively little has been written about the doctrinal changes of the post-WWII period in the US Navy, except for the historical studies of naval strategy, which present few conclusions about the causes of these innovations. There is little in the literature to answer the specific question of how and why naval doctrine has changed over the past seventy odd years, or even clearly what Navy doctrine was during that time.

⁸² Robert G Angevine, "Innovation and Experimentation in the US Navy: The UPTIDE Antisubmarine Warfare Experiments, 1969-721," *Journal of Strategic Studies* 28, no. 1 (2005): 77–105, https://doi.org/10.1080/01402390500032070.

CHAPTER THREE: NAVAL DOCTRINE PRIOR TO 1947

Although the Navy was historically resistant to doctrine, likely a legacy of the British Fighting Instructions that overly constrained individual ship maneuverability and left a cultural imprint on the US Navy, there are some clear doctrinal moments as the Navy evolved over time. These doctrines, both explicit and implicit, can be found in manuals and published materials, but also specific mind-set and contextual understanding. The two elements, explicit published material and implicit contextual interpretations come together to form Naval service-level doctrine. Trent Hone notes that the US Navy used doctrine in two different ways, first as specific task force instructions and lower-level guidance, but also as Navy-wide guidance addressing how the Navy approached combat and developed plans for battle. Although the second was not as routinely used historically, that Navy-wide guidance is the service doctrine in question.⁸³ Reviewing the pre-Cold War Naval history, 4 general doctrinal periods appear, discussed further below:

• Continental Era - Early American Navy (1798-1886): This was a US Navy that in peacetime conducted global naval diplomacy and protected overseas commercial interests, while in wartime focused on coastal defense and commerce raiding. It was a home-based force with global stations, but no strong fleet maneuver structures, and largely an era where the US could free ride on the other great powers.

⁸³ Hone, *Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945*, 11–13.

- Oceanic Era Mahanian Revolution (1886-1919): This was the era of the Mahanian revolution with changes in the Strategic, Deployment and Employment concepts of Naval doctrine, focused on concentrated fleet of battle ships that would achieve command of the seas by defeating the enemy fleet. It featured a largely homebased fleet that would conduct intermittent global cruise in peacetime and surge forward in wartime.
- Oceanic Era Interwar Period (1920-1940): While the interwar period maintained the Strategic Concept (defeat the enemy fleet) and the Deployment Concept (homebased, surging forward in war) of the Mahanian revolution, the Employment Concept reflected a more complex, multi-platform Navy. The battle line, still the primary line of effort, was supported by independent carrier task forces and forward submarine forces and enabled by amphibious assaults to secure trans-Pacific operating bases.
- Oceanic Era World War II (1941-1945): World War II saw the successful application of the interwar period's doctrine, with some significant changes as the Navy grew, both in size and experience, during the war. Battleships faded as the primary line of effort, quickly replaced by carrier task forces. The independent carrier task forces themselves were replaced by multicarrier task forces and numbered fleets. At the same time, unrestricted submarine warfare and amphibious warfare evolved far beyond the initial interwar plans.

The table below briefly summarizes the four historical periods explored more fully in the following chapter.

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Table 1: Doctrinal Development through WWII

	Early American	Mahanian	Interwar Period	World War II
	Navy	Revolution		
Strategic Concept	Commerce raiding, coastal defense and protection of maritime interests	Offensive fleet battle	Offensive fleet battle across the Pacific, with eventual blockade	Power projection via island hopping
Deployment Concept	Forward Stations	Cruising Navy	Homeported Surge Navy, with small forward based fleet	"Surged" Navy
Employment Concept	Individual ships maneuvering independently, no standing formations	Concentrated Battle Fleet	Concentrated battle fleet, but independently maneuver carrier and submarine forces	Independently maneuvering multicarrier task forces, with independent amphibious, submarine and supporting mobile logistics
Feet Architecture	Frigates and other small	Battleship Centric	Battleship	Carrier centric, but
Concept	sailing vessels, no capital ships	Centre	carriers and submarine	submarines, amphibs, surface ships and auxiliary

The Early American Navy

The early days of the US Navy, despite being filled with legendary figures that left a lasting cultural impact on the young organization, had an almost entirely different doctrinal flavor than the periods of naval history that follow. The relatively small US Navy⁸⁴ was not large enough to think about challenging the much larger and more established European navies in a direct fight. Thus, throughout this period, the US Navy doctrine was a mix of coastal defense and guerre de course (commerce raiding) with some guerre de razzia (irregular warfare), reflecting the lesser goals of sea denial and protecting US commercial interests. This wasn't to say there were not doctrinal debates over the role of the Navy, the role of privateers and the relative utility of small gunboats versus seagoing warships, just that they lacked the scale and options of later doctrinal moments. Although the Navy did change over this time period, it generally adopted innovations from the predominant European navies, having little strategic need outside of conflicts (e.g., the American Civil War) to develop new capabilities, its doctrine only evolved slowly during the 1800s reflecting the subordinate role the US Navy played on the world stage.⁸⁵

Throughout this era, the Navy mainly carried out naval diplomacy and protected US commerce interests with independent ship deployments. Occasional squadrons were

⁸⁴ In fact, there were periods in the early American Navy where there the Navy had no ships, or they were laid up "in ordinary" and effectively not ready for operations.

⁸⁵ Mobley, *Progressives in Navy Blue: Maritime Strategy, American Empire, and the Transformation of U.S. Naval Identity, 1873-1898*; Rhodes, "Constructing Peace and War: An Analysis of the Power of Ideas to Shape American Military Power." Benjamin Armstrong, *Small Boats and Daring Men: Maritime Raiding, Irregular Warfare, and the Early American Navy*, Campaigns and Commanders ; Volume 66 (Norman, OK: University of Oklahoma Press, 2019).

organized as needed but lacked a standing leadership and staff organization, largely using the senior officer afloat to command the squadron or station. Although this Navy globally deployed for most of the early American period, it was only a minimal presence with a very light footprint given the missions of the Navy at the time. These missions ranged from fighting along the Barbary Coast, intervening in Sumatra, and "opening" Japan and Korea to US merchants. This was a very active Navy with a motivated officer corps, but it also was not seeking to challenge the great powers. Therefore, the US Navy of this era had no need to wrestle with the issues of deploying and employing fleets of ships and its concept of victory largely revolved around resisting foreign invasion and harassing enemy shipping until the conflict had ended.⁸⁶

There are some obvious exceptions during wars as battles against great powers saw isolated frigate-on-frigate open sea battles, commerce raiding, and generally effective coastal defense. In other wars, particularly the Mexican-American and Civil War, the US effectively used naval power in relatively innovative ways to carry out amphibious assaults and enforce blockades. The Civil War saw the US field a massive naval force, with both blue and brown water capabilities, conduct multiple amphibious operations, and develop new technologies, namely the Monitor ships and early naval mines. But in all cases, the US disestablished its wartime Navy and returned to its traditional peacetime roles once the conflict had ended.⁸⁷

⁸⁶ Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002."

⁸⁷ Rhodes, "Constructing Peace and War: An Analysis of the Power of Ideas to Shape American Military Power."

Thus, by the 1880s, the US Navy remained little different than the Navy of the early 1800s, of Decatur and Trumbull, despite obvious technological differences.⁸⁸ After the massive Naval growth during the Civil War, the Navy had shrunk considerably and was now smaller than many Western hemispheric rivals with only 38 ships in commission in 1886, including gunboats and training vessels. Its ships were old, largely relics of the Civil War, and the reduction in billets associated with the post-Civil War drawdown meant its officers were just as old. In fact, in 1882 Argentina possessed modern armored cruisers with breech loading weapons and steam propulsion, outmatching the sail and wood US Navy.⁸⁹ The state of the US Navy in the 1880s makes what comes next even more amazing.⁹⁰

The Oceanic Era and the Mahanian Revolution

From its unimpressive state in 1886, the US Navy underwent an amazing transformation in the 1880s and 1890s, most closely associated with the writings of Alfred Thayer Mahan, even though he didn't publish his seminal work until the 1890. Over this time, the Navy transformed from traditional institution focused on single-ship patrols of foreign stations to a professional organization of power-projecting squadrons and fleets, triggered by new concepts of American naval power. While there were some preliminary steps to build coastal battleships and generally modernize the Navy, Mahan's ideas were instrumental in the development of a true blue-water Navy. This was an

⁸⁸ The Navy even actively resisted technological change, mandating that all ships, even steamers, be equipped with a full sailing rig.

⁸⁹ Mobley, Progressives in Navy Blue: Maritime Strategy, American Empire, and the Transformation of U.S. Naval Identity, 1873-1898, 49.

⁹⁰ "US Ship Force Levels," accessed June 11, 2020, http://public2.nhhcaws.local/research/histories/ship-histories/us-ship-force-levels.html.

ideological revolution enabled by advocacy networks such as the Naval War College and the United States Naval Institute and supported by new approaches and organizational structures that encouraged experimentation, feedback, and continuous improvement. By the end of this period of transformation, the US Navy had a new doctrine with entirely new Strategic Concept, Deployment Concept, Employment Concept, and Fleet Architecture Concept.⁹¹

Strategic Concept

The Navy's new Strategic Concept is the one most closely associated with Mahan, that the goal of a Navy was to obtain command of the sea by defeating the enemy fleet in open battle. Mahan helped Navy conceptualize that command of the sea was a prerequisite for national greatness, and most effective way to achieve this was via a battle fleet that could wrest control of the seas away from an enemy fleet. Mahan encouraged development of a battleship-centric fleet and the concentration of that battleship fleet into one body as the means to best achieve the decisive battle.⁹² Command of the Sea became the Navy's strategic goal, at least through the World War II.⁹³

⁹¹ Mobley, *Progressives in Navy Blue: Maritime Strategy, American Empire, and the Transformation of U.S. Naval Identity, 1873-1898,* 27–55; Edward Rhodes, "Sea Change: Interest-based vs. Cultural-cognitive Account of Strategic Choice in the 1890s," *Security Studies* 5, no. 4 (June 1, 1996): 73–124, https://doi.org/10.1080/09636419608429289; Hone, *Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945*.

⁹² A common criticism is that Mahan was single mindedly advocating defeat of the enemy fleet as the ultimate goal, and while admittedly some of the operations in the Pacific War seemed to fall into that trap, it's important to note that he was pushing fleet battle as the most effective way to achieve command of the sea. Sea control was his ultimate goal and the key enabler of national victory.
⁹³ Hone, Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945, 95.

Deployment Concept

This period saw similarly dramatic change to the Deployment Concept. 1889 was the beginning of a transition in the fleet's deployment patterns, largely driven by the ideas of Mahan arguing for a concentrated battle fleet at home. The Navy slowly began moving away from its dispersed homeports and global fleet stations towards the direction of a homeported fleet, until it had established a primary Atlantic home-based squadron by 1902. This doesn't mean that the fleet remained home constantly. Much to the contrary, surge deployments were the norm, far beyond the global cruise of the "Great White Fleet", as the Fleet operated forward almost every year in the Roosevelt and Taft eras. And at the same time, the Navy and Marines continued support low level operations in China and the Caribbean. But these were not planned rotational deployments to maintain constant presence, instead they were surges based on national interest, thereby preserving the ability of the fleet to maintain its vital concentration.⁹⁴

Employment Concept

The Employment Concept was consistent with the above. The Fleet planned to maintain concentration of its forces, particularly its battle line, as a primary imperative. While the Navy consisted of more than just battleships, the battle line was clearly the supported element, and all other aspects of the fleet were designed to support it. This employment concept was validated by the success of the US Navy during the Spanish-American War, and further reinforced by the integration of a US Battleship Division into the British Grand Fleet during World War I.

⁹⁴ Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002," 28–30.

Fleet Architecture Concept

Even prior to Mahan's entry onto the stage, the increasing obsolescence of the US Navy was becoming worrisome to most and the US Navy largely lacked any capital ships. In 1883 and 1885, the US authorized the ABCD⁹⁵ ships, beginning the shift from the wooden "Old Navy" to the "Steel Navy" and in 1886, the first seagoing coastline Battleship, USS Texas, was authorized.⁹⁶ By 1897, on the eve of the Spanish American War the US had 49 modern "Steel Navy" vessels and only 23 "Old Navy" wood vessels. By 1906, no "Old Navy" vessels were still in commission while 16 torpedo boats destroyers and 8 submarines had been added to the fleet. More significantly, the US Fleet began shifting from seagoing escort-sized ships to large battleships and cruisers, even as new torpedo destroyers and submarines were also fielded. The change in force structure is shown in more detail below, as wooden ships were replaced by steel ships, themselves quickly supplanted by the emergence of the Dreadnaught vessels in 1906.⁹⁷

	Table 2: Ma				
	1886	1897	1906	1913	1916
BATTLESHIP		6	18	32	36
CRUISER	1	16	27	27	30
MONITOR		6	4	3	3
DESTROYERS			16	46	61
TORPEDO		6	32	25	18
BOATS					
SUBMARINES			8	26	44
GUNBOATS	6	24	44	28	28

⁹⁵ The cruisers USS Atlanta, Boston, Chicago, and Dolphin

⁹⁶ Texas did not enter service until 1895.

^{97 &}quot;US Ship Force Levels."

^{98 &}quot;US Ship Force Levels."

AUXILIARIES		1	29	27	25
SCREW	13	7	2	-	-
STEAMER					
SLOOPS	18	6	-	-	-
TOTAL ACTIVE	38	72	180	214	245

Sources of Change

How did the Navy manage to reinvent itself over this period of rapid technological change, new ship types, advanced fire control and propulsion, and overall increasing complexity of naval warfare? The preaching of Alfred Thayer Mahan certainly contributed heavily to this reinvention, as it found a willing audience in the rising nationalism at the turn of the century. He likely was at the right moment, as the US had finished its continental expansion and was starting to look outward, at the same time the European nations were grabbing every colony they could, but his ability to articulate the right message that resonated with leadership can't be understated. Certainly, it is fair to claim that the change in the strategic concept of the Navy is almost entirely Mahan's doing. But by itself, Mahan's theories can be seen as largely aspirational. It took institutional learning mechanisms for the US Navy to determine how to best employ a fleet, a problem the Early American Navy had not had to wrestle with.

A pair of institutions founded during this period help develop and spread the lessons of fleet experimentation. First the United States Naval Institute, founded in 1873, served as an important advocacy network, providing a venue to discussing new ideas and building advocacy networks to communicate them more broadly. A decade later, the Naval War College was founded in 1884 by RADM Stephen Luce, serving as the

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incubator of new ideas during this era. Later, the tabletop ideas developed in wargames were able to be tested at sea, most notably by the Squadron of Experimentation. Thus, the war games at Naval War College and subsequent at sea exercises enabled the Navy to develop and test basic framework for fleet operations enabling the Navy to reinvent itself over two decades and be ready for the conflict in Europe of World War I, which tested many of the ideas it had developed over the past years.⁹⁹

Although the inconclusive nature of Jutland didn't exactly substantiate the Naval theory of victory, from the perspective of US Navy World War I did not invalidate its theories. Certainly, unrestricted submarine warfare and the corresponding growth of antisubmarine warfare tactics caught the Navy by surprise, but it appears that this was largely viewed as a side show to the battleship showdown. Similarly, naval aviation emerged around this time (albeit not in the US for some time), but did not seriously threaten the battleship and the theory of concentration. It would take the interwar period's Naval Treaties to seriously shift the balance of forces away from the battleship concept and towards a more integrated employment concept.

Oceanic Era Continued – the Interwar Period

The Interwar Period saw a rapid series of innovations, as the Navy transformed itself from the WWI battleship fleet to a force capable of complex carrier and amphibious operations. The Navy's Strategic Concept was consistent with the Mahanian ideal, to

⁹⁹ Rhodes, "Constructing Peace and War: An Analysis of the Power of Ideas to Shape American Military Power"; Mobley, *Progressives in Navy Blue: Maritime Strategy, American Empire, and the Transformation of U.S. Naval Identity, 1873-1898*; Hone, *Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945*, 93.

obtain sea control by concentrated fleet action to defeat the enemy fleet and use naval power to force an adversary to surrender, but the strategy matured beyond just defeating a simple fleet battle, to a complex campaign across the Pacific. Inherent in this was the concept that the Fleet remain a largely homeported fleet, with surge deployments, to ensure it was ready to conduct the trans-Pacific campaign.

The biggest changes were seen in the Navy's Employment concept, which changed radically as the Navy integrated carrier warfare, amphibious warfare, submarine warfare and mobile logistics into its existing Battleship fleet architecture. The main line of effort remained a concentrated fleet of battleships that would defeat the enemy fleet, but it was supported by independently maneuvering carrier and submarine forces. These carrier and submarine forces had tactical independence but remained subordinate to the overall operational goals of the battle fleet. Similarly, the amphibious warfare doctrine developed during this period was not to achieve a strategic effect itself, but to create fleet based to enable operations of the fleet in the Pacific.¹⁰⁰

Strategic Concept

The Navy's Strategic Concept remained focused on achieving command of the sea by defeating the Japanese fleet in battle. With the Germans defeated, England an ally, and the US suddenly a major power, Japan became the pacing threat for the US, a relationship codified in a series of post-war treaties, although the US did maintain the War Plans against all potential adversaries through this period, not just Japan. Although that concept was effectively unchanged from earlier, the plans to implement that evolved

¹⁰⁰ Rosen, Winning the next War: Innovation and the Modern Military, 58.

considerably reflected in the repeated revisions to War Plan Orange. Initially the plan was to rush across the Pacific and relieve the Philippines, meeting the enemy fleet on the way. The logistics and time required to prepare the Interwar Fleet for a trans-Pacific crossing quickly proved this was not operationally executable, and although interest in it never truly died, naval plans shifted to a concept of holding the line while the fleet was readied and then embarking on an island-hopping campaign to eventually regain the Philippines. Most planners appeared to assume the Japanese fleet would challenge the US along the way, and the penultimate battle would occur somewhere in the Central Pacific on the way to the Philippines, and the different plans shifted based on which island to seize as a fleet base and which route the fleet should take. Notwithstanding the frequent operational plan changes, this overall Strategic Concept remained consistent for most of this period and drove much of the doctrine the fleet developed throughout this period.¹⁰¹

Deployment Concept and Organization

Following WWI, the Navy returned home from its European wartime deployments and in 1919 was briefly split into the Atlantic and Pacific Fleets. But in 1922, the Fleet was consolidated as the Battle Fleet in the Pacific, leaving only a small presence in the Atlantic thereby achieving the Mahanian ideal of a concentrated fleet, while maintaining surge deployments and period interventions in East Asia, the Caribbean and other locations. While a homeported Deployment Concept doesn't mean not at sea, the fleet surge deployed far less than it did in the pre-WWI era, likely due to a

¹⁰¹ Edward Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945* (Annapolis, Maryland: Naval Institute Press, 1991).
combination of budgetary constraints combined with fears of alarming Japan. With minor changes, the fleet remained a homeported organization concentrated in the Pacific until the lead up to World War II.¹⁰²

The consolidation of the fleet in the Pacific was the result of General Order 94 of 6 December 1922. This General Order created an organization known as the United States Fleet, composed of the Battle Fleet, the Scouting Fleet, the Control Force, and the Fleet Base Force. Additional naval forces not assigned to the United States Fleet included the separate Asiatic Fleet, or smaller squadrons (Europe, Naval Districts, etc.), and Submarine Divisions in the Atlantic and Pacific. Rarely do we see employment concepts so well reflected in organizations. The United States Fleet was structured with a force to enable forward basing, a force to patrol and maintain sea control, a force to find the enemy fleet, and a force to defeat that enemy force in battle.¹⁰³

This evolved slightly eight years later with the Promulgation of General Order 211 of 10 December 1930. It reorganized some auxiliaries into the Naval Transportation Service and defined the United States Fleet of consisting of the Battle Force, Scouting Force, a Submarine Force, and a Base Force. Lastly, General Order 56 of 13 May 1935 established the Fleet Marine Force, as a subordinate organization of the United States fleet. This organization reflects moderate changes in the employment concept, as the Control Force disappears, but Submarine Force is elevated to a higher profile in its place,

 ¹⁰² Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002," 36–38.
¹⁰³ Julius Augustus Furer, Administration of the Navy Department in World War II (Washington: [U. S. Govt. Print. Off.], 1959), 174–75; "General Orders 1921-1935," accessed May 23, 2020, http://public2.nhhcaws.local/research/library/online-reading-room/title-list-alphabetically/g/general-orders-1921-1935.html.

while the combined Naval Transportation Service and Fleet Marine Force signal an increased emphasis on forward basing and seizing those bases.¹⁰⁴

Employment Concept

As it had traditionally been, the Navy remained interested in encouraging individual initiative and avoid fighting instructions like the British Grand Fleet Battle Orders that were seen by the US Navy as overly prescriptive, leading to relatively weak centralized doctrine. Instead of a centrally driven doctrine, the Navy instead developed heuristics for action including: Aggressive Action; Quick and Effective Gunfire; and Decentralized Command and Control.¹⁰⁵ But the Navy did experiment with new Employment Concepts including mobile basing, carrier warfare and submarine warfare that would come to define the impending conflict.

The Mobile Base innovation, although not nearly as exciting as innovations in carrier or submarine warfare, was arguably just as important, if not more, as it was the critical enabler for naval operations across the vast distances of the Pacific. The need for advance bases was not an entirely new idea, as it had been discussed as early as Dewey. The strategic imperatives of Pacific distance and treaty limitations on fortifications, particularly after the USN observed the outcome of the Russian fleet steaming all the way from Europe to its defeat in 1905, created the need for mobile basing options. This need

 ¹⁰⁴ Furer, Administration of the Navy Department in World War II, 174–75; "General Orders 1921-1935."
¹⁰⁵ Kuehn, Agents of Innovation : The General Board and the Design of the Fleet That Defeated the Japanese Navy.

to seize fleet bases on the way to the Philippines to enable its relief quickly began to dominate thinking in the 1920s and 1930s.¹⁰⁶

The Mobile Base project got its start in the 1920's with the development of the mobile floating drydocks, and plans quickly relied on intermediate Fleet bases, with substantial repair facilities not present in the region, to support the movement towards the Philippines and Japan. This commitment to the mobility of naval assets was an innovative solution to the challenges of trans-Pacific warfare, and closely tied to the Marine Corps' development of amphibious warfare to seize these bases. The importance of this concept is apparent from the organization of a Base Force as one of the four primary elements of the United States Fleet.¹⁰⁷

Amphibious warfare, something that came to dominate the coming Pacific war, was uniquely applied in US doctrine. No other military developed the capability to conduct an opposed landing, even if the initial US concepts required much refinement during the war. In the US "amphibious operations stemmed from a complex interaction of strategic guidance, service roles and missions, interservice and civil-military politics and military-industrial collaboration."¹⁰⁸ Commandant Lejeune famously tasked Major Earl H. Ellis to develop the first amphibious plans, producing Operations Plan 712 in 1921, while the Marine school at Quantico drafted the Tentative Landing Manual. His efforts were enabled by the post-war ban on defense fortifications and need for advance bases as

¹⁰⁶ Rosen, Winning the next War: Innovation and the Modern Military, 65–66; Miller, War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945.

¹⁰⁷ Kuehn, Agents of Innovation : The General Board and the Design of the Fleet That Defeated the Japanese Navy, 125–28.

¹⁰⁸ Millett and Murray, *Military Innovation in the Interwar Period*, 71.

part of War Plan Orange. The understanding that it may take months for the US fleet to begin its advance led planners to consider the fact that Japan may seize and reinforce islands along the way, necessitating the need not just for an amphibious force, but one capable of opposed landings.¹⁰⁹

Throughout the 1920s and 30s, wargames and amphibious exercises helped test doctrine and revealed need for amphibious assault vehicles. The eventual return of Marines from overseas missions and designation of the "Fleet Marine Force" precipitated a series of Fleet Landing Exercises (FLEXs) in the mid-to-late 1930s. These FLEXs allowed for extensive experimentation in amphibious techniques and procedures. While doctrine for amphibious warfare evolved during this period, force structure admittedly lagged. The US focused on building warships vice transports in the pre-war period and initially assumed it could just convert merchant vessels in event of war, but quickly began producing specialized amphibious assault ships in the 1940s as the impending war lifted resource constraints. At the same time, landing craft, notably the Higgins Boat began entering production, along with eventual amphibian tractors. These forces were not a priority in the immediate interwar period, with only two amphibious transports in service in 1939, but the initial investments in amphibious warfare doctrine enabled the Fleet Marine Forces to seize the required fleet anchorages and execute the long-planned War Plan Orange.¹¹⁰

¹⁰⁹ Millett and Murray, 71–72.

¹¹⁰ Millett and Murray, 75–83; "Naval Amphibious Landmarks," U.S. Naval Institute, August 1, 1966, https://www.usni.org/magazines/proceedings/1966/august/naval-amphibious-landmarks.

Much has been written about the development of carrier doctrine during the interwar period that does need not be repeated here, but carrier doctrine continued to develop and the foundations of the prominent World War II operations were laid in the 1920's and 30's. Looking ahead, the US would wage carrier warfare in the Pacific on a scale unimagined at this time as fleets composed of multicarrier task forces combatted the Japanese fleet, raided islands and struck the Japanese homeland itself. The foundations for this were laid during the interwar period as independent carrier task force operations were trialed and many of the successful operational tactics developed. Although the battleship remained the focus of the Navy's doctrine, carriers, and naval air power, despite Mitchell's best efforts to demonstrate the superiority of land-based air, played an increasingly prominent role in fleet operations. Initially early fleet plans envisioned carriers as scouting for the battle fleet and remaining as part of the core formation. For a variety of reasons, not least of which were the physics of aircraft launch requiring maneuvering contrary to the consolidated battle line's direction, aircraft carriers began to conduct independent operations and during Fleet Problems famously demonstrated their ability to conduct offensive operations, not just scout for the fleet. Following Fleet Problem VII, the carrier admirals recommended that carriers be given freedom of maneuver to allow for optimal operations.¹¹¹

Throughout the interwar period, there was a notable evolution towards independent carrier operations supporting but not replacing the battle line, thus by the

¹¹¹ Clark G. Reynolds, *The Fast Carriers: The Forging of an Air Navy* (Annapolis, Md: Naval Institute Press, 1992), 17–20.

entry into World War II, carrier doctrine was "flexible but still subordinated to and part of the battle line."¹¹² At the same time, carrier doctrine did remain subordinate to the larger battle line. Among other things, this meant that carrier task forces, as a secondary mission, were not provided sufficient escorts, leaving them vulnerable to attack. Similarly, the small number of carriers contributed to the Navy being slow to develop permanent carrier task forces and fully develop the concept of a multiple carrier task force. The debate over multicarrier battlegroups and their escort requirements would not be settled until the carriers proved themselves in WWII and sufficient platforms were fielded to allow for multicarrier task force operations.¹¹³

In parallel with carriers, over this period, submarine doctrine continued to evolve. Looking ahead, US subs waged and won war against Japanese commerce, while the US simultaneously waged an ASW war against German submarines. This was not the employment concept prior to Pearl Harbor. As far back as in 1911 General Board defined coast protection and fleet operations as two primary roles for submarines. This rejection of commerce raiding was reinforced following allied victory in World War I since commerce raiding submarines had failed Germany in WWI. Throughout the interwar period, there were three major factors constraining submarine doctrine during this period. First, a Mahanian culture of battle encouraged a focus on meeting the enemy fleet in battle, not commerce raiding. Second, a lack of suitable long-range fleet submarines for most of the interwar period limited their operational utility. And third general legal and

¹¹² Reynolds, 20.

¹¹³ Rosen, Winning the next War: Innovation and the Modern Military, 80.

moral concerns coming out of the First World War, where German unrestricted submarine warfare was one of the notional cause belli, caused Navy leadership to avoid the commerce raiding role.¹¹⁴

There were aspirational goals for submarine operations, beyond just supporting the battle fleet and defending the coastline. War games in the 1930's explored the use of submarines on long-range patrols, and even if not accepted as part of doctrine at the time, laid the intellectual framework for what was to come. For in the 1940's following Pearl Harbor, the US used the argument that Japanese merchants would be armed and under military command, therefore they were suitable targets for war – even if official unrestricted submarine warfare was not declared. But prior to Pearl Harbor, the employment concept for US Submarines was clearly in support of the battle fleet and not as an independent naval instrument.¹¹⁵

Force Posture Concept and Fleet Organization

The internal management of the Fleet evolved considerably during this era. One important organizational aspect that began during World War I was the emergence of what would eventually become known as the "Type Commander." General Order No 218 of 5 June 1916 clarified the difference between a "Fleet" and a "Force." Whereas a Fleet was an operational organization, a force was defined as the organization of all vessels of the same type or class (e.g., Battleship Force, Cruiser Force). This was made more explicit by General Order No. 30 of 5 January 1921 stating that "in the peace

¹¹⁴ Millett and Murray, *Military Innovation in the Interwar Period*, 252–55.

¹¹⁵ Millett and Murray, 255–56.

organization of the fleets, vessels of the same type with the additional flagships and tenders assigned thereto, in each fleet, constitute the force; the specific task of such force being the training of similar type units for war." This organizational distinction and separate chain of command for different types of ships seems logical, ensuring efficiency of training across different ships of the same type. At the same time, it could be argued this helps contribute to the power of the submarine, air, and surface tribes in the US Navy.¹¹⁶

The US fleet evolved, but only moderately through this period. The dramatic change came at the end of World War I, when demobilization combined with the series of naval treaties resulted in the reduction of 50% of the fleet, as older ships were retired and new construction was halted. In particular, the treaties restricted Battleships, with a full half of them retiring. Escorts were less impacted, as the fleet was able to maintain higher percentages of these platforms, while the aged coastal monitors and scores of auxiliary ships were retired. Additionally, as previously discussed the terms of the treaty allowed the first fleet carriers to be fielded, initially by converting battlecruisers now banned under the treaty. Overall, the table below shows some change, but except for the fielding of carriers, no other dramatic changes over the interwar period but rather slow evolution.¹¹⁷

 ¹¹⁶ Furer, Administration of the Navy Department in World War II, 174–75.
¹¹⁷ "US Ship Force Levels."

Table 5: Interwar Force Structure											
	1919	1924	1929	1934	1939						
BATTLESHIP	36	18	16	14	15						
MONITORS, COASTAL	5										
CARRIERS, FLEET	-	1	3	4	5						
CRUISERS	28	16	16	24	36						
DESTROYERS	161	103	103	102	127						
SUBMARINES	91	77	80	54	58						
MINE WARFARE	62	39	37	26	29						
PATROL	65	37	32	24	20						
AUXILIARY	304	84	68	71	104						
TOTAL ACTIVE	752	376	356	320	394						

Table 3: Interwar Force Structure¹¹⁸

Sources of change

The Interwar period saw an astounding change in US naval warfare that then was superbly implemented in the Pacific War. As such, it has been extensively studied so this summary synthesizes the main theories, rather than presenting any uniquely new analysis. Many of the independent variables developed earlier are found as drivers of the interwar period change, including geostrategic politics, bureaucratic politics, and learning organizations, while cultural aspects at the same time appear to have prevented some change.

The geostrategic situation clearly was responsible for much of the change in this period. The fact that the US main competitor was Japan significantly changed the strategic situation, given the likely naval character of any conflict with Japan and the distances involved, as one would expect. Just as important though was the series of arms control treaties signed following WWI. The Washington and London Naval Treaties

¹¹⁸ "US Ship Force Levels."

imposed constraints on options for naval force employment, encouraging innovation in areas where there were less constraints. Thus, constrained in capital ship tonnage, unfinished battle cruisers were converted into aircraft carriers. More significantly, the ban on fortifications in the Pacific totally changed the possible employment concepts for the US Navy. Since the US had limited bases to begin with and could not prepare defenses on its limited bases in the Pacific, it had to assume they would fall to the Japanese early in the war. Enabling a trans-Pacific crossing in good order thus required the developed of mobile basing and amphibious warfare to obtain the necessary bases.¹¹⁹

Innovation during this period was helped by certain institutional arrangements and both inter- and intra-service politics, as well as a clear focus on a maritime adversary to provide some to plan and exercise against. The General Board functioned as a central coordination organization to keep certain ideas, particularly mobile basing, and carrier warfare alive despite possible intraservice threats and lack of interest by leadership. As an example, American carrier developments were aided by these institutional arrangements, particularly a strong naval air organization, leadership by Admiral Moffett, and a Bureau of Aeronautics that was almost entirely independent of central naval control (foreshadowing Rickover's creation of an independent nuclear organization in the future). In the 1920s, the Morrow Board conducted a detailed study of US aviation and among other things determined that Naval Aviation forces, including carriers and air stations should only be commanded by Naval Aviators. This provided an independent career path

¹¹⁹ Kuehn, Agents of Innovation : The General Board and the Design of the Fleet That Defeated the Japanese Navy; Millett and Murray, Military Innovation in the Interwar Period, 221.

for Aviators (as well as general Naval officers accepted into the Aviation ranks as "Observers") and enabled them to balance against the interests of the "Gun Club." Naval Aviation was also aided by the fact that there was no national Air Force (as in the UK), despite the best effort of General Billy Mitchell. Inter-service politics actually aided the Navy here, as both the Army and Navy saw a national Air Force as a threat to their individual interests and were able to prevent its emergence and avoiding diverting aviation investments away from the specific problems of the Navy's desired Pacific campaign.¹²⁰

The Navy provides great evidence for the effectiveness of a learning organization during the interwar period, utilize aggressive experimentation to learn in a peacetime environment. It had institutionalized framework consisting of at-sea exercises, including the well-known Fleet Problems, Naval War College wargames and analysis, and individual command doctrinal development. In particular, the Naval War College remained prominent and many of the carrier operations successful in the 1940s were first wargamed and simulated at the Naval War College. Among the elements developed in these processes were the concentric ring cruising pattern (developed by then CDR Chester Nimitz), universally used the Navy in WWII and to the present. Additionally, possibly aided by the fleet concentration at home, nearly the entire US Fleet took part in the annual Fleet Problems, providing a real-world testing platform for doctrinal ideas.

¹²⁰ Millett and Murray, *Military Innovation in the Interwar Period*, 210; Jan Van Tol, "Military Innovation and Carrier Aviation," *Joint Forces Quarterly*, no. 16 (Summer 1997): 77–87.

Lastly, lack of strong central control mean that individual leaders were able to experiment with tactics such as independent carrier operations.¹²¹

While we see these significant innovations in the interwar period, which proved to be critical to eventual fleet operations of the Pacific War, they were adopted in ways that supplemented the battleline, vice unseating it from its primacy. The relatively small officer corps of less than 3,500 line officers enabled some of the interpersonal relationships that made decentralized control and learning possible, but also helped create a strong unified culture. The "Gun Club" remained in charge and the mission of the carrier, submarine and amphibious forces was to enable US battleships to close with the Japanese fleet for the great battle to end the war, vice directly creating a theory of victory themselves. In general, cultural aspects within the Navy and the commitment to battleships seemed to block innovation and full adoption of carriers, submarine, and amphibious warfare. It wasn't until the demands of the war combined with the emergence of key enabling technical solutions, such as the Higgins boat and more capable aircraft, and lifting of resource constraints forced consideration of alternatives such as truly carrier operations and submarine operations to independently achieve strategic ends.¹²²

World War II

The Second World War, while validating many of the important ideas of the Interwar Period, also moved away from a fleet-centric battle to obtain command of the

¹²¹ Hone, Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945, 123; Rosen, Winning the next War: Innovation and the Modern Military, 70.

¹²² Millett and Murray, *Military Innovation in the Interwar Period*; Millett and Murray, 262; Hone, *Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945*, 137–38.

sea the idea of continuous pressure by a modular, dispersed force across the entire theater to wear down the adversary. The battleship, which despite the initial losses at Pearl Harbor, still initially survived as the central line of effort in many plans, but as the war wore on multicarrier task force raids, amphibious assaults and unrestricted submarine operations came to dominate the theater. As part of this, the fleet abandoned its Mahanian focus on physical concentration, realizing that air power could concentrate on the target from multiple axes and sufficient forces existed for multiple, mutually supporting efforts. Once the Japanese fleet was neutralized, the fleet embraced power projection ashore as a primary mission, developing more advanced carrier raid and amphibious assault techniques. More importantly, it developed employment concepts enabling the effective utilization and control of a US Fleet consisting of thousands of ships organized into modular fleets, task forces, and squadrons.

Strategic Concept

World War II in the Pacific played out largely per the prewar plans, War Plan Orange, and its variants, with the major difference being the idea of bypassing island strongholds. At the start of the war, the Navy's Strategic Concept was a campaign of "great naval battles, amphibious assaults on enemy outposts, and naval blockade."¹²³ During this campaign, the Navy would regain key islands in Central and South Pacific as prelude to air and sea blockade of the Japanese homeland. Eventually this Strategic Concept shifted and began to emphasize power projection onto land, rather than just obtaining sea control to enable the blockade to bring an end to the war. Once the enemy

¹²³ Reynolds, *The Fast Carriers*, 63.

fleet was largely neutralized and sea control was obtained, the Fleet's goal shifted to carrier raids and amphibious assaults, not just to gain a forward fleet base but to recover territory, obtain forward bases for bombers, and eventually invade Japan itself. How much this Strategic Concept was accepted throughout the leadership remains unclear, as Halsey famously abandoned the amphibious forces at Leyte Gulf to chase the (empty) Japanese fleet, prioritizing fleet battle and sea control over power projection. But overall, the Navy's campaign in the Pacific moved from a Mahanian concept of fleet battle to a campaign of amphibious assaults, made famous for flag raisings on far away islands.

At the same time a separate naval campaign was waged in the Atlantic, one that was not included in most pre-war plans. Rather than the carrier battles of the Pacific, the Atlantic conflict was primarily an Anti-Submarine Warfare campaign against German U-Boats to keep the sea lines of communication open, along with shorter ranged, but massive amphibious assaults on the European, and African, continent. The Navy played a lesser role here, as it was primarily to ensure safe transit of men and supplies to the theater, rather than deliver the knockout blow itself. While this campaign was significant, the Pacific War took pride of place in the Navy's ethos and self-image after the war.

Deployment Concept

As WWII approached, the US Fleet began a slow process to split into a two-ocean navy, even if the force structure was biased towards the Pacific Fleet. This reorganization took time as first the Atlantic Squadron was created in January 1939, consisting of older battleships and smaller craft. This Squadron was then designated the Fleet Patrol Force in November 1940 and finally on 3 February 1941, General Order no.143 established the

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Atlantic Fleet to deal with the growing threat from Germany. Other than this shift from one theater to two, the deployment concept remained consistent with that of the interwar period, as the fleet executed the combat deployments planned in both the Pacific and Atlantic. Although many Navy ships were eventually forward based in both theaters, this wasn't a break with the previous concept as these forward bases were not envisioned as permanent, but rather temporary combat deployments.¹²⁴

Employment Concept

Submarine warfare evolved in a manner unanticipated by most during the interwar period, which primarily envisioned submarines as fleet scouts. Following the attack on Pearl Harbor, with limited options to retaliate, Pacific Fleet commander Admiral Stark approved what was essentially unrestricted submarine warfare. His successor Admiral Nimitz, following Stark's initial order, quickly relied on submarines to take the battle to the enemy. In doing so they were aided by technological developments, as engine technology had improved the range and speed of fleet submarines, enabling the long-range patrols they were ordered to undertake.¹²⁵

This wasn't to say that the transition to independent submarine operations was easy, as two primary problems remained. First, too many commanders were risk averse, based on supposed lessons learned in interwar fleet exercises, and unsuited to the dynamics of the Pacific campaign. Over the opening phase of the war, these initial submarine captains proved themselves unready and were replaced a new generation of

¹²⁴ Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002," 40; Furer, *Administration of the Navy Department in World War II*, 177.

¹²⁵ Millett and Murray, *Military Innovation in the Interwar Period*, 257.

more aggressive submariners capable of carrying out the envisioned operations. More famously, torpedo performance was the major technical issue, as the US torpedoes ran too deep or failed to detonate. This was the problem that got the most attention in submarine operations during the early years of the war. As both were resolved, the US Pacific submarines were able to carry out an effective undersea campaign, against both the Japanese fleet and the merchant shipping keeping the island nation supplied, in addition to serving important fleet roles including recovering downed aviators. In the end, US Submarines, some 2% of the fleet, claimed 30% of Japanese shipping and 8 aircraft carriers, albeit at the cost of 25% losses in deployed US submarines. While common perceptions of the Pacific War revolve around the exciting carrier battles, this employment of submarines contributed just as much and in a totally different way than planned for in the interwar period.¹²⁶

With the battleline decimated early in war, fleet operations were centered on the aircraft carriers. Operations were conducted by task forces of single carriers with their own defensive screen, not multicarrier task forces of several carriers with a single integrated defensive screen. However, this initial prewar doctrine with detached carrier task forces was quickly combined with lessons from the wartime experience by frontline commanders. Their experimentation was eventually formalized in doctrine, resulting in fleet-wide implementation. The result was a new approach of "interchangeable ships, module task forces, and mobile carrier groups. The Pacific Fleet would not advance as a

¹²⁶ Millett and Murray, 257–59; "Submarine in World War II," accessed June 15, 2020, https://americanhistory.si.edu/subs/history/subsbeforenuc/ww2/.

monolith, it would attack as a distributed network." This allowed fast advances as individual ships and command teams could rest, while the Pacific Fleet continued sustained operations over years. It would take several years until the debate over how carrier forces were organized and how carrier forces were employed would be resolved.¹²⁷

Initially, Nimitz was worried about the vulnerability of the carrier, particularly given his very limited numbers, and thus relied on employing single carrier task forces early in the war. Even when the fleet was concentrated for an operation, such as at Midway, the carriers remained tactically separated each with their own escort screen. Chief of Naval Operations Admiral King was also not a fan of multicarrier task forces, particularly with the small number of carriers post-Midway, and ordered them to operate as single carrier task forces. This debate over single vs multi carrier task forces continued over the opening years of the war, Admirals Ted Sherman and Ramsey publicly carrying on the debate.¹²⁸

Aviators also felt that carriers were poorly used early in the war, as fleet commanders had them remaining in constrained waters thereby limiting their maneuverability and making them vulnerable, particularly around Guadalcanal. This debate played out over the opening campaigns, as a doctrinal debate between close air support and offensive action. Admiral Kelly Turner argued that the carrier was required

¹²⁷ Hone, *Learning War* : *The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945*, 294; Reynolds, *The Fast Carriers*, 26–29.

¹²⁸ Hone, *Learning War* : *The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945*, 165; Reynolds, *The Fast Carriers*, 29–35.

for air support and thus tied to amphibious operations, while Sherman instead argued that carriers should rely on their mobility and conduct wide ranging strikes to defeat enemy air power at its source. This debate was never truly resolved, but the eventual emergence of large numbers of carriers neatly avoided the problem.¹²⁹

The Pacific war exercised the same problems the Navy had been wrestling with for years. These debates were finally put to bed in 1943 with the issuance of PAC 10, conveniently timed with the fielding of numerous naval vessels to allow for larger task forces. PAC 10 emphasized doctrinal flexibility and only required the concentrations of carriers and supporting defensive screen. Thus, Ted Sherman had won the doctrinal battle over multicarrier task forces and the Navy would fight the remainder of the Pacific War with fleets composed of several independently maneuvering multicarrier task forces. The issue of carrier support to fixed amphibious operations was resolved not by a doctrinal ruling, but rather by the fielding of more platforms. In particularly, the small, inexpensive escort carriers (CVEs) relieved the fast carriers of this need and allowed them to operate more independently, neatly sidestepping the issue.¹³⁰

While these changes were innovative, the most impressive innovation in the Employment Concept came not from the multicarrier task forces but abandoning the Mahanian precept of physical concentration and adopting a policy of continuous pressure. Instead of the pre-war advance by a concentrated fleet, this new doctrine used aircraft carriers in a distributed style of warfare. Embracing truly dispersed ops, with fast

¹²⁹ Reynolds, *The Fast Carriers*, 89.

¹³⁰ Reynolds, 26–29.

battleships were now attached to carrier task forces to provide defense and task forces were able to mass firepower at the point of attack due to the range and speed of airpower. This doctrine of rapid, almost continuous operations required innovative logistics but more importantly a modular approach to fleet organization. This modular approach of swapping ships out of individual task forces enhanced the resilience of the overall fleet, with task forces able to reconfigure and replace worn out ships individually while the fleet while continued to fight. The fleet-wide doctrine promulgated by PAC 10 in June 1943 made this interchangeability possible, as it limited the time to incorporate new ships since the entire fleet now followed the same playbook. The extent of this interchangeability was made apparent when not only individual ships, but entire command staffs were able to (relatively) seamlessly swap out, as shown by the novel Third Fleet and Fifth Fleet rotating command concept.¹³¹

Fleet Organization

The dramatic changes in Fleet organization as the Navy wrestled with instituting command and control structures for a large, global Navy make it worthy independent consideration as a supporting element of the Employment Concept. As noted above, the US Fleet was broken up in the lead up to World War II, with Atlantic and Pacific Fleets being created to deal with the emerging worldwide conflict. Relatively quickly, the position of US Fleet Commander and CNO were combined into one position, streamlining the chain of command. While Navy service leadership was consolidated, personality conflicts and interservice rivalry prevented such an efficient command

¹³¹ Hone, Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945, 251–56.

structure in the Pacific. Admiral Nimitz commanded the Pacific Ocean Area, dual hatted the US Pacific Fleet Commander, while General MacArthur commanded the Southwest Pacific Area, including the naval forces present there. While these competing command structures did not always smoothly cooperate and especially in the opening days of the war competing for limited resources, their geographic separation at least provided some rational separation of efforts.

More directly for naval doctrine, in March 1943 Nimitz instituted several organizational changes, most notably the process of numbered fleets with subordinate numbered task forces. The Pacific Fleet was reorganized into the Third, Fifth and Seventh Fleets. The Seventh Fleet consisted of those forces assigned to General MacArthur in the Southwest Pacific Area, while the Third and Fifth fleets initially consisted of the Central and South Pacific Areas, subdivisions of Nimitz's Theater. Eventually the Third Fleet and Fifth Fleet were recast as alternating command teams of Halsey and Spruance respectively, allowing one command team to operate while the other rested and planned the next set of operations. These numbered fleets included a structure that still exists until today, of subordinate numbered task forces derived from the fleet numbering system. Thus, Fifth Fleet was divided forces ranging from Task Force 51, the Amphibious Force, to Task Force 58, the Fast Carrier Force, which was itself subdivided into independence carrier task groups ranging from TF58.1 to TF58.4.¹³²

Just as significant as the operational command structure and its nested, interchangeable task forces, was the shore establishment. Operational control and

¹³² Furer, Administration of the Navy Department in World War II, 186–87; Reynolds, The Fast Carriers, 69.

administration from shore headquarters was an innovation, given the Navy's tradition of seagoing command, and entirely necessary for the scale of the conflict. In parallel with his operational reorganization, Nimitz created process of the ashore Type Commander (TYCOM) and reorganized the fleet from Battle Force system into workable system under Pacific Fleet, splitting operational control by regional commands, subsequently numbered fleets, and the administrative readiness served by TYCOMs. These TYCOMs such as Pacific Air Forces and Pacific Submarine Forces generally did not have operational control over their forces, although the submarine forces on independent patrol did operate outside normal numbered Fleet control. Instead, the TYCOMs were responsible for the training, equipping, and maintaining of their specific forces. This role was likely vital to the modular task force concept, as TYCOMs provided certified and ready forces trained to a common standard to the operational task force.¹³³

Moreover, the evolving TYCOM structure emphasized the importance and growth of certain communities. Within the Pacific Fleet, the air type commander grew in importance, eventually including subordinate type commanders for carriers, land-based air, and seaplanes, and was led by VADM Jack Towers for the majority of the war. Similarly, the submarine type commander grew to a three-star position under VADM Lockwood. And while both air and submarine TYCOMS existed under in the prewar structure in various capacities, entirely new organizations were formed reflecting the changing nature of the Pacific War. Although the FMF was established as a Navy Type Command in 1933, amphibious assault ships were included as part of the fleet train at

¹³³ Furer, Administration of the Navy Department in World War II, 187; Reynolds, The Fast Carriers, 29.

that time. It wasn't until 1942 that Amphibious Ships emerged as independent type command, with Amphibious Forces designated to consolidate all amphibious capabilities, including assault ships, Seabees and UDT.¹³⁴

Force Posture Concept

This conflict saw an explosive growth in the US Navy Force structure, both in type and numbers of ships, on a scale that is scarcely imaginable. From less than 400 ships in 1938, the Navy would include peak at 6,768 ships in 1945. While this growth included mainstays of the fleet such as Fleet Carriers, Cruisers, Submarines and Battleships, it also included new ship types that didn't exist prior to the war. Among these were escorts such as the small Destroyer Escort (DE) and the ubiquitous Escort Carrier that took on the unglamorous escort and support missions, freeing the Fleet Carriers to fight the mobile strike campaigns they dreamed of. Almost two thousand amphibious ships, ranging from LSTs to smaller LCTs and LCIs, were built to support the massive amphibious lift required in both the Atlantic and Pacific. All this was enabled by a similarly massive growth in mobile support ships including floating drydocks, store ships, tenders, and repair ships, fully executing the mobile base concept that was unaffordable in the interwar years. The full extent of the growth of the fleet is shown in the table below.¹³⁵

 ¹³⁴ Furer, Administration of the Navy Department in World War II, 186–94; Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002"; "Naval Amphibious Landmarks."
¹³⁵ Furer, Administration of the Navy Department in World War II, 192–293; "US Ship Force Levels."

Table 4: WWII Force Structure ¹³⁶												
	1940	1941	1942	1943	1944	1945	1946	1947				
BATTLESHIP	15	17	19	21	23	23	10	4				
CARRIERS,	6	7	4	19	25	28	15	14				
FLEET												
CARRIERS,	-	1	12	35	65	71	10	8				
ESCORT												
CRUISERS	37	37	39	48	61	72	36	32				
DESTROYERS	185	171	224	332	367	377	145	138				
FRIGATES	-	-	-	234	376	361	35	24				
SUBMARINES	64	112	133	172	230	232	85	80				
MINE	36	135	323	551	614	586	112	55				
WARFARE												
PATROL	19	100	515	1050	1183	1204	119	74				
AUXILIARY	116	210	392	564	993	1267	406	306				
AMPHIBIOUS	-	-	121	673	2147	2547	275	107				
TOTAL	478	790	1782	3699	6084	6768	1248	842				
ACTIVE												

Source of Change

How did the Navy change so much, moving from a concentrated fleet of Battleships seeking to obtain sea control vice one decisive campaign, to a complex, modular organization supporting multiple campaigns? To some extent, the foundation of this was laid in the interwar period, and once the funding and technological constraints were lifted by the war, draft concepts were able to be fully implemented. For example, as much as naval aviators may have advocated for multi-carrier task forces, it wasn't until sufficient carriers were fielded that such a thing was realistically possible, and even then it required some technical solutions such as improved communications and radar to enable the required coordination of such a large organization.

¹³⁶ "US Ship Force Levels."

Many of the variables for military change are less relevant in this wartime scenario than they are in peacetime, as even though bureaucratic politics and culture were still present, the immediate consequences of failure tended to eliminate poor choices caused by those factors in a Darwinian manner. What did help was that the interwar Navy had established a learning organization, where most of the leadership knew each other, had attended the Naval War College together, and had inherited a relatively decentralized command structure enabling experimentation. Strong leadership didn't hurt either, as individuals whose career was cultivated and protected by their respective leadership proved influential in implementing many of the key policies that helped transform the Navy from the Interwar Navy to the victors of World War II. Overall, it was the Navy's ability to adapt that kept it going through the dark days of the Pacific War.

The Aftermath

The end of World War II, saw the massive Navy that had been so successful in both Atlantic and Pacific theaters begin a dramatic and immediate demobilization. From a force structure of 6,768 ships on 14 August 1945, V-J Day, the fleet shrunk to 842 ships by the middle of 1947, just 12% of its peak wartime size. Many of the more capable ships were placed in a reserve status, and would return to the Fleet shortly, but this remained a difficult problem for the Navy as the Fleet continued to shrink beyond its initial post-War plans. The relative cuts in force structure reflect this employment doctrine, as Fleet Carriers fell by only half, while all other force types were a quarter or less of their peak war strength by the end of the 1940s and the Fleet had only one active Battleship at that time. Employment Doctrine reflected the lessons of World War II, particularly in the

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Pacific theater, and post-War doctrine remained largely based on PAC 10. The only tactical problems not fully resolved at wars end were task group composition and close air support techniques, and successful models had existed at the war's end but were not uniformly reflected in doctrine.¹³⁷

This smaller fleet initially returned to familiar operating patterns, as those ships that did not demobilize returned home to maintain a surge-capable combat force, with relatively small formations of non-capital ships forward deployed. On 1 January 1947, all numbered fleets were disestablished, leaving only the Pacific and Atlantic Fleets. Some small forces did remain forward based, but lacked the pride of place associated with a "fleet" and were instead named after the region (e.g. Naval Forces Japan). Thus, entering the yet-unrecognized Cold War, the Navy's Deployment Doctrine remained about the as during the interwar period.¹³⁸

More significantly from the perspective of organizational learning, the variability of experience in the doctrine coming from interwar period and early WWII was gone. The massive growth in the fleet and resulting formalization of doctrine created constraints on individual innovation. This was noticeable at the end of WWII, as innovation slowed as the fleet growth in the latter years of the war disrupted the navy's effective learning system, and the Navy would not return to the small, decentralized Navy of the interwar period. Thus, the proven model that enabled the Navy to adjust to the

¹³⁷ Reynolds, The Fast Carriers, 383; "US Ship Force Levels."

¹³⁸ Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002," 46; Reynolds, *The Fast Carriers*, 392.

challenges of naval warfare in the 1940s and new modes of change would have to help the Navy deal with the challenges of the new era.¹³⁹

¹³⁹ Hone, Learning War : The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945, 315.

CHAPTER FOUR: ROUGH SEAS, 1946-1956

"The existence of this crisis was dramatically symbolized by the paradoxical situation in which the Navy found itself in 1945: It possessed the largest fleet in its history and superficially it had less reason to maintain such a fleet than ever before. The fifteen battleships, one hundred aircraft carriers, seventy cruisers, three hundred and fifty destroyers, and two hundred submarines of the United States Navy floated in virtually solitary splendor upon the waters of the earth. It appeared impossible, if not ridiculous, for the Navy still to claim the title of the Nation's 'first line of defense' when there was nothing for the Navy to defend the nation against."¹⁴⁰

Introduction

Emerging victorious from the Second World War, the US Navy found itself without a peer maritime competitor, and with it lost the compelling justification for the future existence of a large battle fleet. This postwar period was very challenging for the Navy, as pressures to demobilize and reduce expenditures forced the US to reconsider the size and role of the Navy. With the need to adjust to the new nuclear environment and deal with a new rival service, the US Air Force, the Navy sought to recast its role as one of power projection, utilizing its hard won near-global sea control to influence events ashore. This shift emerged slowly, as the Navy battled on multiple bureaucratic fronts to get its footing, but by the early 1950s a new doctrinal concept had begun to emerge, and the Korean War provided the impetus to test many of the foundational conventional aspects of this doctrine at the same time relieved much of the budgetary pressure of the immediate postwar period.

¹⁴⁰ Huntington, "National Policy And The Transoceanic Navy," 484.

The emergence of this new doctrine was primarily driven by the intense budgetary and interservice pressures that threatened the very existence of the Navy, as well as the natural reaction to changes in the geopolitical situation. Contemporary strategists quickly concluded that the Soviet Union did not appear to pose a serious naval threat and did not appear as vulnerable to economic blockades and naval pressure as Japan had, minimizing the utility of the Navy's interwar and wartime doctrine. The reduced budgets of the postwar period led to an interservice battle for primacy as each service sought to justify its budget share, and the importance of nuclear weapons made achieving a nuclear role the centerpiece of many of these internal battles, while the rise of the Department of Defense diverted most of the Navy's attention into bureaucratic battles. Interestingly, with a few exceptions there is little evidence of traditional learning organization activities and instead the doctrinal change appears to be driven by senior Navy leadership. In some ways, this lack of advocacy networks and broad-based "buy in" may help explain why this doctrine was largely forgotten for most of the Cold War. Ultimately, it does not appear to have been civilian intervention or a learning organization that explain how and why this doctrinal change occurred. Instead, the combination of interservice rivalry, domestic budget pressure, and the geopolitical situation created this shift in postwar Naval doctrine.

The Navy in the Post War Period

The total victory of the US and its allies in World War II, following years of wartime sacrifice and the total mobilization of society, led to a rapid call for demobilization, despite some warning of an emerging Soviet threat. At the same time,

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technology, organization, and the geopolitical situation were changing rapidly. The emergence of nuclear weapons, so critical to the conclusion of the war, were only able to be delivered by the Army Air Forces. This combined with the use of strategic bombing by conventional forces in the war, reinvigorated the Army Air Forces' push for independence and with it the idea of service unification. Geopolitically, the US and the Soviet Union quickly emerged as the superpowers in the new Cold War, and US strategy began to shift to reflect its global responsibilities.

While the Navy had begun thinking about what the post-War Navy would look like, the initial musings during the war assumed that the Navy would look very similar to its current state with numbers just scaled down from the wartime highs. Unfortunately, facing no maritime competitor and a hostile Air Force that argued its long-range bombers were more effective, the Navy would have to reinvent its role in the immediate post-War period, developing a new doctrine for the use of sea power in this era.

Even before World War II had concluded it was becoming apparent to Navy leadership that the Navy's role would have to change in the emerging new world. The previous strategic concept, focused on defeating an enemy fleet to gain sea control and power projection via island hopping, was no longer a compelling story. The Navy now possessed all the island and overseas bases that the previous concept was based around capturing, and even if that wasn't the case, there was no other naval power that could match the triumphant US Navy. Without a significant maritime competitor, the Navy instead pivoted to a power projection doctrine, one that, foreshadowing the more well-

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known Maritime Strategy of the 1980s called for eliminating adversary sea denial forces at the source and exerting naval power along the periphery of the Soviet Union.

The Aftermath of Victory

It took some time for this concept to emerge, as Navy leadership wrestled with the immediate postwar aftermath. At the tail end of World War II, retired Admiral Yarnell chaired a committee analyzing the future role and force structure of the Navy. While at this early date his force structure goals proved to be far larger than what the post-War reality would be and he did not articulate the power projection role that became the Navy's primary mission, he did identify the global presence that would characterize the postwar Navy. Similarly, Secretary of the Navy (and future Secretary of Defense) Forrestal immediately identified a need for the Navy to backstop the new United Nations – and argued for a global role for the Navy.¹⁴¹

While the Navy had begun planning for this eventuality, its initial plan for modest demobilization, known as "Basic Demobilization Plan One," was overcome by a tidal wave of demobilization that appeared to lead to the dismantling of the victorious Navy. Congress prodded the Navy incessantly to "bring the boys home," with little consideration for preserving much naval experience and warfighting capability, and the Navy's more aggressive "Basic Demobilization Plan Two" that led to a smaller fleet, but still one far larger than the Navy of the interwar period, was itself quickly overcome by the pace of demobilization. The postwar return was executed with almost unseemly haste

¹⁴¹ Michael T. Isenberg, *Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace*, 1st ed. (New York: St. Martin's Press, 1993), 65.

and facilitated by the victorious warships of the Navy under Operation Magic Carpet where returning warships were turned into troop transports and made up 55% of the sealift. Many of these ships were themselves demobilized upon return to the US and those that were not saw so many of their crew released from active service that they could only go to sea by borrowing sailors from other ships in their homeport.¹⁴²

Immediate post war demobilization plans called for a large fleet built around twelve fleet carriers and ten escort carriers. However, as noted above, this was not to be, and the fleet rapidly contracted The 1949 budget called for 11 fleet carriers, dropping to 8 in 1950 and only six (with a temporary 7th for the Western Pacific) in the 1951 budget. During these times, the Air Force and Army both put forward proposals to cut (or in one case eliminate) the fleet carriers in order to avoid their own force reductions from the same budgetary pressure. The only bright spot for the Navy was that many of these retired ships, still in their prime fighting years, were mothballed using techniques learned from the WWII mobilization effort to ensure that they could be relatively quickly returned to service, something that would be successfully validated only five years later. In this environment charting a new course took many years particularly as the Navy, and country, were in the midst of both the wartime demobilization effort and the fight over service unification.

¹⁴² Isenberg, 80–86; Norman Friedman, *The Postwar Naval Revolution* (Annapolis, Md: Naval Institute Press, 1986), 11.

The Peace Dividend

Writing in 1947, Forrestal indicated he was aware of military budget gaps versus the military needs, and he had a "vivid appreciation of the Soviet menace and of the imperative necessity that the United States should make itself strong throughout the world."¹⁴³ Despite this, he acknowledged unease in the services, as the "government faces a Herculean task in the effort to bring its budget into balance"¹⁴⁴ in an attempt by the Truman administration to avoid another depression. Throughout this time, there remained continued pressure on the defense budget to keep military expenditures at a minimum. Again quoting Forrestal, the US leaders effectively concluded that "as long as we can out produce the world, can control the sea, and can strike inland with the atomic bomb, we can assume certain risks otherwise unacceptable in an effort to restore world trade."¹⁴⁵ The US Navy, except for its limited nuclear strike and ASW capabilities, was largely as one of the acceptable risks that could be taken in this environment. The chart below shows the Navy budget, in Constant Year 21¹⁴⁶ dollars, illustrating this dynamic.

¹⁴³ Walter Mills, ed., *The Forrestal Diaries* (New York: Viking Press, 1951), 239.

¹⁴⁴ Mills, 239.

¹⁴⁵ Mills, 350.

¹⁴⁶ To be specific, this means that actual budgetary numbers were "inflated" from their yearly appropriated values to be equivalent to FY21 using the DoD Green Book escalation indices. Constant Year 21 corrects for significantly smaller amount of early dollars required for the same purchasing power as more recent dollars.



Figure 1: Navy Budget 1945-1955¹⁴⁷

Throughout the postwar period, leaders constantly estimated significant higher budget needs than was available. Forrestal had estimated a naval budget in contemporary terms (in Then Year \$ as opposed to corrected to CY21) of \$5.1B in 1947, but he only got only \$4.1B despite his best efforts. The Navy budget remained around \$4B for the next several years, again only climbing thanks to the impetus of the Korean War. And this was not just a Navy problem but driven by defense wide dynamics. Forrestal, as the Secretary of Defense, has chartered an independent review known as the McNarney Board to assess US defense needs. The McNarney Board came up with a \$23.6B defense budget, which compared to the \$14.4B budget OMB provided for FY1949 was a major pressure point. Throughout this time, Forrestal was pushing JCS to develop an

¹⁴⁷ "FY21 Green Book.Pdf," accessed June 6, 2021,

https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2021/FY21_Green_Book.pdf.

intermediate budget of \$18.5B which he believed would allow for holding the vital theater of the Mediterranean, but even that was not possible until the buildup that started with the 1951 budget.

Adjusting to the New Reality

Admiral Nimitz, serving as CNO following his successful tour as the wartime Pacific Fleet commander, advocated both in testimony and in written report for the continuing role of the aircraft carrier as a mobile air platform, with its mobility allowing carrier air wings to strike targets deep in the adversary homeland as the Pacific Fleet did once sea control had been established. At the same time, the General Board was tasked with studying this problem and was in the midst of an attempt to revitalize itself by including younger members. Captain Arleigh Burke, a future CNO, was one of these new young members and served as the lead author for the 1948 study *National Security and Naval Contributions for the Next Ten Years*. This study found that the Navy, and its aircraft carriers, could serve important roles in ensuring sea control and projecting power ashore, and if equipped with nuclear weapons could strike hardened submarine facilities and some targets in the Soviet Union that bombers could not reach.¹⁴⁸

Early Cold War plans such as OFFTACKLE relied primarily on nuclear weapons from Air Force bombers on the USSR itself. However, Navy leadership wasn't convinced by idea of nuclear attacks on the Soviet homeland would be effective, given the small nuclear inventory, and saw need to hold Europe against a conventional Soviet attack,

¹⁴⁸ Trimble, Attack from the Sea : A History of the U.S. Navy's Seaplane Striking Force, 29; E. B. Potter, Admiral Arleigh Burke, 1st ed (New York: Random House, 1990), 301.

which required maintaining sea lines of communication. Instead of just the nuclear option, the Navy envisioned using carrier task forces to project power ashore. However, this Navy vision was not welcomed by the new Department of Defense, for a number of strategic, tactical and political reasons. Most importantly, the Navy itself couldn't generate a compelling story, and from the outside seemed to just be resisting a change that limited its role. It was not until the Revolt of the Admirals, and a generational change in leadership that the Navy was able to fully develop a new doctrine and define a unique role for the Navy.¹⁴⁹

A Forward Navy

Even as the Navy was working out its ultimate role, it was beginning a post-war transformation in the deployment of US naval forces as after the initial return to a USbased fleet. The Navy quickly moved towards a new concept of constantly forward deployed forces. Following World War II, most of the fleet's energy was focused on the fleet demobilization and the return of US service members via Operation Magic Carpet, so the fleet initially began returning to its interwar, homebased posture. Although the fleet periodically deployed capital assets to the Mediterranean and Western Pacific in the post-WWII period, it was still intermittent. However, this was relatively quickly reversed, and the fleet shifted to a peacetime deployment strategy as rotationally deployed fleet. In 1947, the fleet began permanent rotational deployment of carriers to the newly established Sixth Fleet, soon followed by amphibious and submarine deployments to the

¹⁴⁹ Jeffrey G Barlow, *Revolt of the Admirals: The Fight for Naval Aviation, 1945-1950* (Washington: Naval Historical Center, Dept. of the Navy : For sale by the U.S. G.P.O., Supt. of Docs., 1994), 94–106, http://catalog.hathitrust.org/api/volumes/oclc/29754455.html.

same theater. Similarly, in the Western Pacific the fleet began rotational deployments, with capital deployments starting in earnest shortly after the Sixth Fleet (albeit residual wartime forces remained forward deployed in Japan through this entire period). This deployment strategy, not of individual ships but of combat ready formations of capital warships, was a transformation in US naval doctrine.¹⁵⁰

In both theaters, the US had significant presence at the end of the war with major fleet assets present, but particularly in the Western Pacific. Fifth Fleet was initially deployed to occupied Japan, and found that Yokosuka and related naval bases were too valuable, with ideal harbors and low operating costs in post war Japan (the low cost being particularly valuable in the post-war austerity era). Seventh Fleet, which had been stationed in China at the war's end, eventually became the standing US naval force in the Western Pacific (where it remains today). As early as 1946, Secretary Forrestal noted that Admiral Cooke (Seventh Fleet Commander) felt we should keep 7th Fleet as "a fleet in being in the Western Pacific" and should include a "competent amphibious force" notionally a Marine division based out of Guam. So, the forward deployed fleet in the Western Pacific stayed in place, rotating units from the homebased fleets through its naval hubs of Yokosuka, Japan, and Subic Bay in the Philippines. This shift seemed relatively natural and non-controversial, given the occupied status of Japan and existing US territories in the region.¹⁵¹

¹⁵⁰ Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002," 50–52.

¹⁵¹ Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 125; Mills, The Forrestal Diaries, 175.
The US shift into European waters, particularly the Mediterranean, was less natural and took some time to develop. While major US fleet units had obviously deployed to Europe in support of the Allied amphibious and ASW efforts, the US lacked any permanent territory in the region and more importantly the Royal Navy had, for obvious reasons, regarded these waters as their home waters. However, in early 1947, the British were signaling to the US that Britain could no longer provide financial-military support to Greece and Turkey. At a February cabinet meeting, Secretary Marshall called this "tantamount to British abdication of the Middle East with obvious implications as to their successor."¹⁵² With the subsequent withdrawal of British forces from the eastern Mediterranean and subsequent British withdrawal from Southern Europe Marshall asked the Navy to "explore the possibility of stepping up gradually our naval forces in the Mediterranean and also of increasing the frequency of [naval] visits to Greek ports. He said he was most anxious to avoid anything in the nature of bluff."¹⁵³

However, even before the British were communicating their withdrawal from the Mediterranean, the US Navy was moving in. Early American forays into the Med started in 1946, including the battleship *USS Missouri* returning the (deceased) Turkish ambassador to Istanbul, which was warmly received by the Turks but not the Russians. Secretary of State Byrnes agreed with the idea of forward naval presence and told Forrestal that the visit of the *Missouri* "had been most effective and had produced most satisfactory results."¹⁵⁴ Later in 1946, the *USS Franklin Roosevelt* (FDR) carrier battle

¹⁵² Mills, *The Forrestal Diaries*, 245.

¹⁵³ Mills, 302.

¹⁵⁴ Mills, 171.

group visited the Mediterranean to train, but also visit Greece amid a civil war. Naval leaders believed that the visit of the FDR was a stabilizing visit and that "the appearance of American war vessels in the Mediterranean was followed by the first amiable utterances of Premier Stalin in late September."¹⁵⁵ Both of these visits occurring in 1946, predated the withdrawal of the Royal Navy, and for that matter the Marshall Plan and Truman Doctrine, and were the initial signs of a new peacetime deployment concept.¹⁵⁶

For the Mediterranean, this concept was reflected in a public statement on 30 September 1946 where he laid out his vision that "units of the American Fleet have been in the Mediterranean and will continue to be there in the future to (1) support American forces in Europe, (2) carry out American policy and diplomacy, and (3) for purposes of experience, morale and education of personnel of the Fleet."¹⁵⁷ Forrestal mused that he would like to release a similar statement about the US forces in the Western Pacific. More globally, he confided to Admiral Biere, commander of forces in the Mediterranean, that "it is my hope that the American policy will be to have units of the American Navy sail in waters in any part of the globe. I am anxious to get this established as a common practice so that the movements of our ships anywhere will not be a matter for excitement or speculation."¹⁵⁸ This shift to forward presence does not seem to be a budgetary attempt to justify funding, but instead a strategic vision of assuring allies and deterring conventional attacks.

¹⁵⁵ Mills, 258.

¹⁵⁶ Isenberg, *Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace*, 134–35; Mills, *The Forrestal Diaries*, 196.

¹⁵⁷ Mills, *The Forrestal Diaries*, 211.

¹⁵⁸ Mills, 184–85.

Forrestal's vision quickly became the permanent posture of the Navy, as it embraced the continual rotation of not just individual ships but combat ready formations of capital ships. This was the balanced fleet concept of the Forrest Sherman era, where a forward Navy was prepared for contingencies ranging from routine presence, crisis stability and deterrence, and global nuclear war. In the Mediterranean, this change in operating posture and deployment concept was formalized by the creation of the Sixth Task Fleet (soon shortened to Sixth Fleet) on June 1, 1948.¹⁵⁹

Navy Under Attack: Service Unification and Roles

Service unification was not a new debate, as it dated back to the early days of the Army Air Corps, but the Army Air Force's performance during the Second World War led to an almost immediate renewal, culminating in the National Security Act of 1947, which elevated the Air Force to an independent service and created what would become the Department of Defense. This reorganization was a major adjustment for the Navy, and while the Navy resisted some of its more problematic elements (such as true service unification), the Navy was not at all supportive of the result.¹⁶⁰

The early elements of interservice rivalry began immediately in the unification debate, on the Navy's side led by the Secretary's Committee of Research on Reorganization (SCOROR). SCOROR lasted from 1945-1948 and included many of the best of the Navy, including future CNO Forrest Sherman, trying to publicly advocate for

¹⁵⁹ Huntington, "National Policy And The Transoceanic Navy," 493; Palmer, Origins of the Maritime Strategy : American Naval Strategy in the First Postwar Decade, 93.

¹⁶⁰ Initially what we know as the DoD was actually the National Military Establishment (NME or unfortunately phonetically "enemy"), but the NME was a short-lived establishment so I'll refer to it as the DoD for narrative consistency.

the Navy's position in the face of glitzy Air Force PR and resist the subordination of the Navy to a "General Staff." The Navy was effective in preserving some of its autonomy and initial proposals for a true service unification were abridged somewhat into an overarching civilian organization (the Office of the Secretary of Defense) and a Joint Staff (a small staff ostensibly to serve the Joint Chiefs of Staff, and decidedly not a General Staff). This small initial step, doggedly resisted by the Navy, was not the final word as the National Security Act of 1947 would be revised several times and in the near term did not resolve the service roles that would dominate the rest of the decade.¹⁶¹

The key elements of the debate resolved around the responsibility for airpower and nuclear weapons. The Air Force had a monopoly on nuclear weapons, at least initially in the post war period, and viewed itself as responsible for all air platforms, as its name might be assumed to imply. As these debates continue to roil the young Defense Department, Secretary of Defense Forrestal called the Joint Chiefs together on 11 March 1948 for what is known as the Key West Conference to define the roles and missions of the post-WWII military. Forrestal summarizes the agreement that emerged as:

Air Force recognizes the right of Navy to proceed with development of weapons the Navy considers essential to its function but with the proviso that the Navy will not develop a separate strategic air force, this function being reserved for the Air Force. However, the Navy in carrying out its functions is to have the right to attack inland targets – for example, to reduce and neutralize airfields from which enemy aircraft may be sortying (sp) to attack the Fleet.¹⁶²

¹⁶¹ Barlow, *Revolt of the Admirals*, 50; Isenberg, *Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace*, 103.

¹⁶² Mills, *The Forrestal Diaries*, 390.

While this agreement ended the near term debate, and more clearly resolved the ownership and coordination of air assets, with the Navy preserving control of its land based patrol aircraft, the nuclear issue continued to be a sticking point. Only months later Secretary Forrestal, during conversations with General Vandenberg of the Air Force, noted that the Air Force wanted to be made executive agent of the Joint Chiefs for all nuclear matters while the Navy psychosis remained a fear that the Air Force was trying to gain control over all aviation, perhaps with good reason.¹⁶³

The service unification and roles debate had largely come to an end with the Key West Conference but the interservice rivalry had not. Forrestal recorded a comment by Air Force Chief of Staff General Gruenther about the "determination of the Army and the Air Force sharply to reduce the appropriations for the Navy."¹⁶⁴ The continuation of this debate would set the stage for one of the more pivotal moments in the interservice rivalry.

Navy Under Attack Part Two: The Revolt of the Admirals

As early as 1946, the Navy had recommended moving ahead with large flush deck carrier that would be capable of carrying a 100,000-pound long range bomber, significantly larger than anything in the contemporary inventory so that it could handle the large nuclear weapons of the era – despite the CNO's aide noting that it would "risk a brush with the Air Force in any such project."¹⁶⁵ CVB-X was explicitly designed to conduct nuclear strikes again periphery of Soviet states and impact their ability to project power. While this was scope in such a way as to not interfere with the Air Force strategic

¹⁶³ Mills, 466.

¹⁶⁴ Mills, 434.

¹⁶⁵ Barlow, *Revolt of the Admirals*, 137.

air offensive, it was an effort to claim an autonomous strategic role of their own for naval aviation. In support of the coming fight, in December 1948 then-CAPT Arleigh Burke was recalled to DC to lead the newly established OP23, the CNO's Organizational Research and Policy Section. Demonstrating the importance associated with this effort, he was somewhat dramatically recalled from the command of the cruiser *Huntington*, in port at Philadelphia Navy Yard, on Christmas Eve 1948, turning over command of the cruiser 4 days later on 28 December 1948 and reporting directly to the Pentagon.¹⁶⁶

Months later, on 5 March 1949 the Air Force presented memorandum to the Secretary of Defense formally advocating for eliminating the CVA (the former CVB-X and now named the *USS United States*), despite it being approved by Truman and funds authorized and appropriated by Congress. New Secretary of Defense Johnson (following Forrestal's untimely retirement and death) asked the Joint Chiefs for their positions. While the Navy strongly advocated for the carrier, both the Army and Air Force argued against the carrier as unnecessary for the Navy's missions (the Air Force explicitly arguing that Air Forces bombers were a more efficient option). Unfortunately for the Navy, the outcome was predetermined and as a reporter recorded at the time, "Johnson told me himself that the Navy was promoting the new [carrier] design as a means of competing with the Air Force, that *while he was SecDef the Navy would have no part in long range or strategic bombing*."¹⁶⁷ Subsequently, on 23 April 1949, Johnson cancelled the *USS United States* supercarrier.¹⁶⁸

¹⁶⁶ Barlow, 137; Potter, Admiral Arleigh Burke, 313.

¹⁶⁷ Barlow, *Revolt of the Admirals*, 188.

¹⁶⁸ Barlow, 183–87.

This cancellation of an already approved platform and the centerpiece of the Navy's future strategy of nuclear strike, kicked off a series of counter-reactions. Future CNO Burke was at the center of this activity, as OP23 took a leading role in coordinating the response across the Navy and in drafting a paper, that when leaked subsequently lead to a series of Congressional hearings. The full story of this period is complex and fully covered in Barlow's excellent *Revolt of the Admirals*, but the result of these machinations was hearings convened by the House Armed Services Committee on and off starting in May 1949.¹⁶⁹

The culminating moment came in what is commonly known as the Revolt of the Admirals, which was testimony by senior Navy leadership in October 1949 against the wishes of their civilian leadership. Admiral Radford, commander of the Pacific Fleet argued that the Air Force strategy was wrong and nuclear weapons should be used only against military targets, not the urban-industrial targets the Air Force preferred. Follow on witnesses further testified against the Air Force's strategy, noting issues ranging from the vulnerability and bombing capacity of the B-36 to the moral implications of nuclear bombing. CNO Admiral Denfield went last testifying against the DoD procurement and strategy plans, stating that "Fleets never in history met opposing fleets for any other purposes than to gain control of the sea-not as an end in itself, *but so that national power could be exerted against the enemy*."¹⁷⁰ This statement, used in congressional testimony

¹⁶⁹ Potter, Admiral Arleigh Burke, 231; Barlow, Revolt of the Admirals, 217.

¹⁷⁰ Barlow, *Revolt of the Admirals*, 253.

in furtherance of interservice debate, is a clear declaration of the Navy's organizing strategic concept.¹⁷¹

The reprisals for this revolt did not take long and the day after he testified, the Secretary began figuring out how to remove Denfield, while not making it look like a reprisal. On 27 Oct 1949, Truman announced that Denfield was being replaced as CNO, without even informing Denfield. Admiral Forrest Sherman, architect of the Navy's postwar strategy, was promoted to CNO from the Sixth Fleet in the Mediterranean, as he thankfully had avoided testifying and was thus not implicated in the Revolt. The Secretary of the Navy also had the Navy Inspector General "raid" the OP23 offices, effectively hold Burke and his staff under house arrest while searching for evidence of wrongdoing. Finding none, OP23 was disbanded, and Burke left on a month of leave thinking his career had ended, although Sherman confided that he would find a new role for him once things had calmed down. The Secretary of the Navy subsequently attempted to strike Burke's name from the Admiral promotion list and only timely intervention by Truman's aide, who pointed out that only the President has the legal authority to remove a name from a promotion list, led to Burke's name being restored to the list and promoted to Rear Admiral.¹⁷²

A New Navy Vision Emerges

Vice Admiral Forrest Sherman, serving as the Sixth Fleet Commander in the Mediterranean at a comfortable distance from the Revolt in DC, emerged relatively

¹⁷¹ Barlow, 231–49.

¹⁷² Barlow, 270–78; Potter, *Admiral Arleigh Burke*, 326–28.

unscathed and was promoted to CNO (recommended by retired Admiral Nimitz among others) upon the sacking of Admiral Denfield. Thinking about a conflict with the Russians, Forrest Sherman believed "these missions necessitated forward, offensive, conventional operations"¹⁷³ and set about building that strategic concept into the Navy's DNA. He was successful in incorporating the Navy's role into national strategy, calling for an early offensive against Soviet shipping, naval forces, and bases, using air strikes, blockading and mining to neutralize the Soviet sea denial threat "at the source" and air strike and amphibious operations to exert pressure on the soviet periphery. Leveraging the earlier Naval Strategic Planning Study 3 that then-Vice Admiral Forrest Sherman had prepared as the OP-30 (effectively the Navy chief strategist), these plans called for carrier operations against Russian coastal areas, something that incidentally the Air Force did not appreciate. Subsequent national plans such as DROPSHOT incorporated these ideas, calling for an early offensive against Soviet submarines and aircraft by nuclear armed forces.¹⁷⁴

Sherman's Strategic Concept was to use seapower to get at land power, a position that has remained remarkably consistent since 1949. Facing no opposite number on enemy side and out of range of land based air power, the carrier became source of mobile air power to be primarily used against adversary land targets. As evidence of this concept, the three Midway-class carriers, the most modern and capable the US possessed, continuously deployed to the Mediterranean during the ongoing Korean War, operating in

 ¹⁷³ Palmer, Origins of the Maritime Strategy : American Naval Strategy in the First Postwar Decade, 31.
 ¹⁷⁴ Palmer, 72; Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 131.

what was now envisioned as the critical theater with no fixed bases, but maintaining a continuous presence and port visits by rotational deployments supported by the impressive US logistics system.¹⁷⁵

This Strategic Concept, although it emerges in practice and in written plans thanks for Forrest Sherman's leadership, was not publicly communicated by the Navy outside senior ranks reflecting the still insular nature of the Navy and Cold War security. Instead, it was not until 1954 that a compelling description of the Navy's role emerged with Samuel Huntington's "National Policy and the Transoceanic Navy." Arguing that US defense policy has evolved from its early Continental Era and more recently from the Oceanic Era, he proposes the US is in the Transoceanic Era. In this Transoceanic Era, the Navy's purpose "is not to acquire command of the sea but rather to utilize its command of the sea to achieve supremacy on the land. More specifically, it is to apply naval power to that decisive strip of littoral encircling the Eurasian continent."¹⁷⁶ He further argues this been the historical outlook of navies which have secured uncontested control of the seas, and quoting Admiral Nimitz, points out that during the period of British domination the Royal Navy fought as many engagements against shore as it did on the open ocean. In this Transoceanic Era, the Navy can support the US military strategy with "three primary forms:

(1) carrier based naval air power, which will in the near future be capable of striking a thousand miles inland with atomic weapons;

¹⁷⁵ Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 246– 52.

¹⁷⁶ Huntington, "National Policy And The Transoceanic Navy," 490.

- (2) fleet-based amphibious power, which can attack and seize shore targets, and which may, with the development of carrier-based air lifts, make it possible to land ground combat troops far inland; and
- (3) naval artillery, which with the development of guided missiles will be able to bombard land objectives far removed from the coast.¹⁷⁷

Similarly, a few years later Captain Wylie wrote in defense of the Navy as a

"versatile and multi-purpose instrument of power."¹⁷⁸ As he advocates, the US Navy's

reason for existence is that:

The Navy will defend the United States from attack across the seas.

The Navy will seek out and destroy enemy naval forces, shipping, bases, and supporting activities.

The Navy will deny to the enemy his use of the seas.

The Navy will control the vital sea areas, the narrow seas, the ocean approaches, the Mediterranean, the China seas, and our own adjacent waters.

And the Navy will exploit our general sea supremacy to project, protect, and sustain the combined military and civilian powers of the United States across the seas.¹⁷⁹

Wylie's conception of the Navy's role appears entirely consistent with Huntington. He

argues for the importance of a Navy that can achieve sea control, "which, of course,

includes the depths of its waters and the air above it,"¹⁸⁰ but also for "exploitation of that

control of the sea toward the extension of control from the sea on to the land."¹⁸¹ In his

hypothetical war, once the war has stabilized, the Navy can use forces against more

sensitive areas. By this attack from the sea, combined with political, economic, and social

¹⁷⁷ Huntington, 491.

¹⁷⁸ Wylie, J.C., "Why A Sailor Thinks Like A Sailor," U.S. Naval Institute, August 1, 1957, 817, https://www.usni.org/magazines/proceedings/1957/august/why-sailor-thinks-sailor.

¹⁷⁹ Wylie, J.C., 814.

¹⁸⁰ Wylie, J.C., 813.

¹⁸¹ Wylie, J.C., 814.

pressure, the Navy can serve an important role in ending a conflict on land, even when the adversary lacks a fleet of its own.¹⁸²

Ever so painfully after the traumatic aftermath of World War II, the Navy began developing a new vision, embracing a power projection role, and making its initial overseas deployment permanent. With no true maritime competitor, it came to see its primary missions as defeating the feared interdiction of sea lines of communication and using mobile carrier strike forces to influence activities ashore. Rather than fall back on its previous experience with convoy operations in both World Wars, instead the Navy would guarantee control of the sea by forward offensive operations against Soviet sea denial forces, particularly their submarines, in their fixed home bases, thereby avoiding the protracted ASW campaigns of the previous wars and enabling the Navy to focus its attention on the campaign on the Eurasian landmass.

An Offensive Navy: Attack at the source

These forward offensive operations, or "attack at source," were not a new concept, as "cutting out" attacks date back to the early days of sailing vessels, but the ability of aircraft to penetrate protected harbors gave it new efficiency. This attack at the source concept quickly became embodied by the Strike Fleet Atlantic. At same time, this offensive ASW strategy was attractive because it theoretically required less resources than an escort strategy and offensive mining and bombing of Soviet submarine bases began to be seen as the most effective form of ASW. The emergence of ASW-capable submarines, a key component of the Undersea Revolution, and better maritime patrol

¹⁸² Wylie, J.C., "Why A Sailor Thinks Like A Sailor."

aircraft, soon gave birth to a barrier strategy, where transiting submarines could be pounced on before entering open ocean.¹⁸³

Technology also informed the change in the Navy's Employment Concept, even though in some cases it took many years for some of the technological goals to be realized. As early as 1947, Admiral Nimitz saw power projection by land attack cruise missiles as one of the Navy's key roles going forward. Initial attempts to develop a cruise missile failed, but by the 1950s the Regulus missile was fielded as an interim solution, deployed on a small number of submarines and surface ships. Regulus was very limited in range, payload and accuracy, but it still was a revolutionary capability giving submarines and surface ships the ability to strike land at range. As it turns out, this interim solution would remain the Navy's only LACM until the 1980s when the far more capable Tomahawk Cruise Missile was developed, as the development of strategic missile submarines and strike jets outpaced early cruise missile efforts. Similarly, the Navy embarked on the development of the "three Ts": the ship-launched air defense missiles Talos, Tartar and Terrier. Although troubled by typical new system developmental issues, these three systems were still fielded on new platforms and backfit onto legacy surface ships to provide some defense capability against modern Soviet threats. However, facing new adversary jet bombers and guided missiles and the shortened reaction time associated with these threats, the burden of fleet air defense fell on carrier fighters, since guns lacked the range and speed to have much effect and surface-to-air missiles were not yes numerous or reliable enough. While some of these

¹⁸³ Friedman, *The Postwar Naval Revolution*, 24–25; Barlow, *Revolt of the Admirals*, 115.

new systems promised potential for future dramatic innovations, the Task Force organization remained relatively similar to that of the wartime US Fleet, while the major changes occurred as a result of the Undersea Revolution and the Nuclear Revolution.¹⁸⁴

Task Force Organization

Actual fleet organization changed dramatically to reflect the shrinking Navy of the post war era. While the exact number of ships and task forces was constantly revised in the immediate post war period, generally in the downward direction, a 1947 General Board proposal for the post war striking force is an example of how the Navy thought it should be organized. It called for four carrier task forces, each composed of four carriers, 7 heavy escorts and 24 destroyers. The carrier task forces would be supported by three fast logistics groups, with escort carriers, oilers, and other supply ships. The striking fleet would also provide lift for two marine divisions. While this exact force structure proved unfeasible given the budgetary realities of the post-war era, this concept remained consistent, and the size was simply scaled down.¹⁸⁵

Throughout the post war period, the Navy was organized into multiple carrier task forces, each composed of a number of carriers with one ready at all times on each coast. In practice, individual carriers operated independently during peacetime missions but the overall concept remained the multi-carrier task force that had proved so successful in the last war. This concept also avoided the problem associated with the old principle of

¹⁸⁴ Muir, Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945-1975, 32; Friedman, The Postwar Naval Revolution, 93.

¹⁸⁵ Friedman, *The Postwar Naval Revolution*, 26; Muir, *Black Shoes and Blue Water: Surface Warfare in the United States Navy*, *1945-1975*, 52.

concentration, which previously limited the central fleet to only one mission or theater, resolving the classic naval problem of multiple theaters that the US now encountered. Additionally, Navy doctrinally abandoned the battle line (the previous organization centered around the battleship),¹⁸⁶ in favor of the more flexible, and supporting, Surface Action Group (SAG). In general the surface community was now primarily a supporting element – doctrinally replaced by carriers - as doctrinal publications such as NWP20 (Striking Force Operations) assigned surface ships in support of ASW or carrier forces and not as independent formations.¹⁸⁷

In addition to the striking fleet organization, ASW was envisioned as a combination of hunter-killer groups (HUK), escort and submarine operations. Open ocean HUK forces, supplemented by land or sea based fixed defenses would seek to destroy the enemy submarine threat, while small escort forces would protect vital convoys. The hunter killer groups remained as fixture of the US fleet after WWII, consisting of escort carriers (CVE), converted wartime *Essex*-class carriers, and destroyers to conduct area search, screening, and convoy escort. Starting in 1954, they were augmented by helicopters whose speed and ability to deploy dipping sonar while hovering made them key ASW assets. Specialized ASW squadrons on the escort carriers would conduct responsive search and localization, while destroyers would prosecute confirmed contacts or form active sonar screens around task forces or convoys. These

¹⁸⁶ While the battleship had been replaced by the carrier during WWII, the battle line remained an organizing construct

¹⁸⁷ Friedman, *The Postwar Naval Revolution*, 26; Muir, *Black Shoes and Blue Water: Surface Warfare in the United States Navy*, 1945-1975, 52.

practices, along with signals intercepts, were those the US Navy was familiar with and had proved successful in World War II. At the same time, this was paired new innovative approaches as part of the Undersea Revolution, particularly with new ASW submarines (SSKs) that would operate far forward to eliminate the submarine threat.¹⁸⁸

The Undersea Revolution

The Undersea Revolution was a confluence of events in the undersea domain, where postwar Naval forces moved significantly away from their wartime experience. US and allied submarines principally targeted surface warship and merchants during the war, with occasional duties such as transporting resistance forces, scouting for the fleet (their original mission), recovering downed pilots, and on a few occasions bombarding the enemy coast. But they were constrained by the available technology, and their slow submerged speed and need to surface both limited their offensive missions and shaped the ASW responses of the day. Near the end of the war the German Type XXI submarine, with its snorkel enabling it to recharge batteries while remaining submerged, threatened to undermine coalition ASW which relied on radar detections of surfaced submarines and evasive speed to exhaust submarine's limited battery power. These platforms, unable to be produced in numbers by the Germans in time to have an impact on the war, were captured by US, British and Soviets, and subsequently informed their submarine programs. The postwar period saw the incorporation of this technical development, coupled with the future development of nuclear power, leading to new missions for the

¹⁸⁸ Friedman, *The Postwar Naval Revolution*, 49; Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 33; Muir, *Black Shoes and Blue Water: Surface Warfare in the United States Navy*, 1945-1975, 42.

submarine force, an entirely new type of diesel submarine and eventually nuclear submarine, and new ASW techniques to combat them.¹⁸⁹

As the Soviet Union lacked maritime forces for submarines to target, the Navy submarine force found itself searching for a mission in the postwar period even more than the rest of the Navy. In the immediate postwar period, prototype missions were proposed for submarines to serve as troop carriers, radar pickets and missile submarines. The submarine was paired with the Regulus land attack missile and briefly carried out early strategic deterrent patrols with this limited missile, until the fielding of ballistic missiles replaced this capability. Eventually, ASW became the predominant mission, made possible by improvements in sonar and self-quieting (removing the ship-generated noise that traditionally made detecting other subs difficult).¹⁹⁰

The Navy established Project Kayo in 1949 to study the future of undersea warfare. A key element was the establishment of Submarine Development Group Two with the responsibility of submarine ASW. The centerpiece of the submarine force's new ASW mission was the fielding in 1952 of SSK (ASW) submarines built around a big passive sonar array, the BQR-4. This sonar system allowed US submarines to detect submarines at ranges of 20-30 miles, using a phenomenon known as a convergence zone. At these ranges, a string of SSK submarines could cover an extended line sufficient to detect and subsequently attack any adversary submarine attempting to cross the line. While the size of the open ocean makes this string of submarines look small and

 ¹⁸⁹ Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 13.
 ¹⁹⁰ Friedman, *The Postwar Naval Revolution*, 198; Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 26.

unimpressive, if employed in a constrained body of water that the adversary has to transit through, it quickly becomes a viable technique. This led to the doctrinal development of SSK barriers at choke points, paired with maritime patrol aircraft, which largely replaced the wartime convoy plans.¹⁹¹

The Navy also embraced revolutionary improvement in passive acoustics – passive acoustics being sonar techniques involving listening for transmitted noise, as opposed to the active systems which send out sonar transmissions and listen for reflected noise. For the submarines, this was reflected in the BQR-4 on the new SSKs and the less capable BQR-2 that were backfit onto WWII era submarines. Even more revolutionary than this was the development of an ocean surveillance system of passive arrays. The first test array was operational in 1951 in the Bahamas, and the Navy decided in 1952 to install along the entire east coast and by 1954 to do the same in Pacific. This became the famous SOSUS network, and functionally replaced the WWII HF/DF intercepts in providing cueing to the ASW forces.¹⁹²

Even as initial steps were being taken to field the first SSKs, the platform that would eventually replace them as the centerpiece of submarine force entered the force. Beginning in 1948, the Navy began attempting to develop naval nuclear propulsion, and effort that would lead to the USS Nautilus, which deployed in 1955 as the Navy's first "true" submarine. The Nautilus was not very effective as an ASW asset, as it was too loud (the self-noise of the nuclear plant effectively blinded its passive acoustics, even

 ¹⁹¹ Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 17.
 ¹⁹² Cote, 25.

though it remained quiet enough to still be undetectable by existing technology). It would take years to eventually merge multiple prototypes into a true SSN that was quiet enough to be an ASW asset in the *Thresher/Permit* class, but the *Nautilus* quickly demonstrated the value of nuclear power as even this first submarine was effectively invulnerable against US ASW techniques. This revealed major US vulnerabilities to notional Soviet nuclear submarines and led to a revised ASW posture, doubling down on passive acoustics, ocean surveillance, and forward ASW barrier lines.¹⁹³

At the same time the Navy was moving down the path of developing nuclear submarines, it also implemented the Great Underwater Propulsive Power (GUPPY) program, to convert legacy WWII submarines by adding larger batteries, a snorkel and streamlining hull appendages, integrating the captured German Type XXI technology and the new passive sonar arrays. Thus, between its new SSKs, converted GUPPYs, emerging nuclear submarines and technological advancements in passive sonar systems, the US Navy developed a series of revolutionary ASW techniques.¹⁹⁴

The Nuclear Revolution

The emergence of nuclear weapons resulted in some of the more significant changes in the postwar employment concepts. Defensively, there were initially major concerns over the survivability of naval forces in a nuclear world. Even Huntington argued that given nuclear weapons and modern technology "dispersion, flexibility, and

 ¹⁹³ Cote, 21; Richard G. Hewlett, *Nuclear Navy, 1946-1962* (Chicago: University of Chicago Press, 1974).
 ¹⁹⁴ Norman. Polmar, *The Ships and Aircraft of the U.S. Fleet*, 18th ed. (Annapolis, Md: Naval Institute Press, 2005); Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 2008; Hewlett, *Nuclear Navy, 1946-1962*, 156.

mobility—not concentration—are the basic tactical doctrines of the new Navy."¹⁹⁵ However, in hindsight that was not much of a different doctrine than the Navy had always embraced, and the Bikini atoll nuclear weapon tests conducted against retired Navy warships proved that Naval forces were relatively resilient against all but a direct hit in any case. The major change in the Employment Concept was instead driven by the offensive use of nuclear weapons by naval forces.

Naval planners immediately identified a need to get the Navy involved in the nuclear game and carved out a niche, as noted in the Strategic Concept, for the use of nuclear weapons against tactical targets such as hardened submarine bases. Eventually this role was expanded and carriers became part of the US strategic alert forces, deployed to the Mediterranean and the Western Pacific, but first the Navy had to wrestle with how to functionally employ nuclear weapons. The problem was that existing aircraft were not capable of carrying what was then a relatively large payload. The interim solution involved converting existing P2V Neptune aircraft into nuclear capable carrier strike aircraft by literally strapping rockets onto them for takeoff. The need for a nuclear capability was so pressing, that the Navy relied on Jet Assisted Take Off (JATO) to get the large Neptunes off existing carriers, for what was essentially a one-way mission. The JATO Neptunes were large enough to deliver existing nuclear weapons but could not return to the aircraft carriers that launched them, and thus would have to recover at

¹⁹⁵ Huntington, "National Policy And The Transoceanic Navy," 493.

friendly airfields or the pilots would have to ditch the aircraft. Clearly this was not the final answer, but on paper it provided an employment option.¹⁹⁶

The Navy subsequently developed the A2 Savage, providing a more reliable (particularly for the air crew) carrier-launched nuclear aircraft capability, and in 1952 began the first deployment to the Mediterranean with nuclear weapons capability. Initially the challenge was that the A2 was only supported by the 3 *Midway*-class carriers, and thus at best the Navy would be able to support one deployed nuclear platform with this small number of nuclear-capable carriers. Eventually legacy *Essex*-class carriers were converted to be able to support the A2 and other modern aircraft, and the subsequent *Forrestal*-class supercarriers provided additional launch options. However, until these platforms entered the fleet in numbers, and not really until the follow-on and more capable A3 Sky Warrior were fielded, did the Navy have the reliable and flexible nuclear capability its plans called for.¹⁹⁷

At the same time, in parallel the Navy embarked on what in retrospect is a truly bizarre program. In June 1949, OPNAV developed idea for the Seaplane Striking Force (SSF), as a more economical option to supercarriers and nuclear delivery via that means (or land-based bombers). This was intended to be a long-range, modern jet seaplane, capable of operating out of small harbors and supported by a series of tenders, giving it the flexibility to operate around the entire periphery of the Soviet Union without tying down valuable and limited aircraft carriers. Noted aircraft manufacturer Martin was

¹⁹⁶ Friedman, *The Postwar Naval Revolution*, 20; Trimble, *Attack from the Sea : A History of the U.S. Navy's Seaplane Striking Force*, 34.

¹⁹⁷ Muir, Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945-1975, 39.

awarded a contract for the P6M SeaMaster in October 1952, intended by the Navy to be the centerpiece of the SSF.¹⁹⁸

The Navy would not resolve its nuclear employment concept for many years, ultimately by creating an entirely new force, rather than trying to give existing forces a strategic mission. Thankfully the Neptune was never launched on its one-way mission other than in tests, and while the nuclear carrier strike mission never went away, A2 and A3 bombers went on to carry out conventional missions in the Korean and Vietnam wars. Sadly, the SSF did not end nearly as well, and the technology proved unready for field operation. It would not be until the SSBN force was fielded in the latter half of the 1950s that the Navy had a viable nuclear system.

Post War Shipbuilding

Overall, the fleet contracted down to a low of 634 ships in 1950, before the Korean War changed the calculus, as is shown in Table 5 below.¹⁹⁹

 ¹⁹⁸ Trimble, Attack from the Sea : A History of the U.S. Navy's Seaplane Striking Force, 62–80.
 ¹⁹⁹ Friedman, The Postwar Naval Revolution, 17; Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 89.

Table 5: US Fleet Size, 1946-1954²⁰⁰

	1946		1950		1954	
Carriers	25	2%	15	2%	24	2%
Large Surface Combatant	191	15%	151	24%	269	24%
Small Surface Combatant	154	12%	43	7%	79	7%
Tactical Submarine	85	7%	72	11%	108	10%
Amphibious	275	22%	79	12%	175	20%
Auxiliary	406	33%	218	34%	262	26%
Mine Warfare	112	9%	56	9%	112	11%
Total	1248		63	4	103	0

As the fleet size changed, its composition was modified but not markedly so. Although every type of combatants saw its absolute numbers shrink in the post war period, the main shifted in relative numbers were an increase of large surface combatants, at the expense of smaller surface combatants and amphibious ships. CNO Admiral Forrest Sherman was particularly significant in this shift, as his goal was a "balanced fleet" not just of aircraft carriers but ASW vessels, missile ships and submarines. Importantly, he largely achieved this goal not by building new ships, but by adding capabilities to older ones.²⁰¹

Conversions and reactivations were required because new shipbuilding effectively cratered after World War II. It appears that no major vessels were authorized for construction in 1946, and only 13 in the four years from 1947-1950. If those 13, over half (8) were submarines and only one was a major combatant, the ASW Cruiser USS Norfolk,

²⁰⁰ "US Ship Force Levels."

²⁰¹ Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 247.

itself a one-of-a-kind vessel as it proved far too expensive for its role. It was at this same time that the supercarrier *USS United States* was authorized and then cancelled, leading to the interservice debacle of "Revolt of the Admirals."

Given the limited shipbuilding of the post-war period, the Navy had to figure out how to make its relatively new wartime ships useful in the new era of missiles and jet aircraft. Older surface ships were backfit with the Terrier, Tartar and Talos missile systems as quickly as technology and budgets allowed. Some *Essex*-class fleet carriers were extensively upgraded to handle modern aircraft, including specialized launch and recovery equipment to handle jet aircraft and an "angled" flight deck to improve sortie efficiency. In the undersea forces, as the submariners tried to shift to their ASW strategy which required significantly different submarines than those of World War II, they similarly found they could only procure a handful of modern SSKs in the decade after World War II and thus would convert many via the GUPPY program. Through these means, the Navy was able to reconfigure its forces to reflect the needs of the emerging post-war doctrine.²⁰²

The Navy's Post-War Doctrine Validated

The Navy struggled to find a role for itself in the immediate post-war period. However, it quickly developed concepts for the use of seapower in the emerging Cold War order, a doctrine that was quickly validated in an unexpected region. In 1950, the Korean War kicked off, catching the nation and the Navy by surprise. US forces had

²⁰² Polmar, *The Ships and Aircraft of the U.S. Fleet*; Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 2008; Hewlett, *Nuclear Navy, 1946-1962*, 156.

shrunk considerably from their dominating levels during the second World War. In Korea, US and allied forces were quickly overrun, along with many of the available airfields, and this more limited war demonstrated the value of both sea control and power projection. For the US Navy, the war in Korea was shore bombardment by surface ships, carrier strikes into North Korean, and amphibious landings (and withdrawals) – especially the well-known assault into Inchon on 15 September 1950.²⁰³

With the short-range Air Force fighters pushed back to bases in Japan, naval air support proved instrumental in the Korean War. At the outset of the war, the *USS Valley Forge* was the only aircraft carrier in western pacific. Along with British carrier Triumph, for many days the only air power over Korea for opening days of war was carrier-based and was vital to the defense of the Pusan perimeter. Even as Pusan was pressed, Task Force 77 (*Valley Forge* and Triumph) demonstrated their firepower on 3 July 1950, pushing up into the Yellow Sea and hitting the North Korean capital of Pyongyang.²⁰⁴

Following the Chinese entrance into the Korean War, and the Marines epic "advance to the rear," naval aviation and amphibious operations proved themselves invaluable again. Task Force 77's carriers conducted record numbers of air sorties, as the only air forces in range of the now overrun Marines. The amphibious units of Task Force 90 evacuated these US ground forces from the port city of Hungham, under the cover of the battleship *USS Missouri* and a host of cruisers and destroyers that collectively fired 22,000 shells covering the withdrawal. In the end Task Force 90 rescued some 105,000

 ²⁰³ Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 184.
 ²⁰⁴ Isenberg, 180–83.

troops, 17,500 vehicles, and 98,000 refugees from Hungham, possibly a more impressive demonstration of sealift than the initial assault into Inchon.²⁰⁵

Shipbuilding in War

After the onset of the Korean War, shipbuilding picked up dramatically, and for four consecutive years the Navy procured *Forrestal-class* supercarriers, a somewhat surprising turn of events after the just-concluded "Revolt." In addition to many other ships procured during this period, 84 minesweepers were authorized, over half of the total ships in the four-year period – demonstrating the balanced nature of the post-war shipbuilding strategy.²⁰⁶

	1947-1950		1951-1955	
SSK/SSN	8	62%	11	7%
Carrier	0*	0%	4	3%
Cruiser	1	8%	0	0%
Destroyer	2	14%	12	7%
Escort	0	0%	12	7%
Amphib	0	0%	11	7%
Patrol	0	0%	0	0%
Minesweeper	1	8%	84	53%
Auxiliary	1	8%	26	16%
	13		163	

Table 6: Ship Procurement,	1947-1955 ²⁰⁷
1947-1950	1951-195

²⁰⁵ Isenberg, 217–18.

²⁰⁶ Polmar, The Ships and Aircraft of the U.S. Fleet; Muir, Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945-1975, 18.

²⁰⁷ Polmar, *The Ships and Aircraft of the U.S. Fleet*.

While these new ship authorizations help increase the fleet's size, it would take time for them to enter service and by themselves they were insufficient for the demands of the Korean War and the doctrine of forward presence. Instead, the Navy turned to reactivating its relatively new ships that were put into semi-retirement as part of the post-war demobilization. By April 1951, 381 mothballed ships were reactivated, including 13 carriers, 2 battleships, 2 cruisers, 77 destroyers, 236 amphibious and auxiliary ships, and perhaps most importantly 31 minesweepers.²⁰⁸

Doctrinal Concepts of the Post War Period

The postwar period moved decisively away from successful doctrine of the interwar and war-time Navy, although the overall organization and forces remained relatively similar. The Strategic Concept clearly was a change, as the previous concept was based around gaining sea control via fleet battle and island hopping to enable exertion of naval power against the Japanese homeland – this new concept was able to skip those enabling steps and go straight to the power projection mission. The Deployment Concept was the most innovative, as the forward rotational deployment of not just individual ships but entire capital formations was relatively unprecedented, while the Employment and Fleet Architecture Concepts changed but not dramatically from their interwar predecessors. Taken together, these elements make up the new doctrine of the postwar Navy.

²⁰⁸ Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 223.

Table 7: 1940s Doctrinal Change Summary				
World War II		Post-WWII		
Strategic	Fleet battle to enable power	Power projection against flanks		
Concept	projection via island hopping	of adversary landmass		
		 Sea control as an enabler of land operations 		
Employment	Independently maneuvering	Continued multicarrier task force		
Concept	multicarrier task forces, with	fleet organization, but new		
	independent:	elements including:		
	 Amphibious elements 	 ASW Barrier strategy, 		
	 submarine elements 	particularly with ASW		
	 mobile logistics 	submarines		
		 Nuclear capabilities to 		
		augment Air Force bombers		
Deployment	"Surged" Navy	Combat credible forward		
Concept		presence, rotating through two		
		deployment hubs		
Fleet	Carrier-centric, but balanced	Shrinking, but balanced fleet		
Architecture	with	 Centered around supercarriers 		
Concept	 Submarines 	 ASW and nuclear submarines 		
	 Amphibs 	 Modernization and 		
	 Surface ships 	remobilization of legacy ships		
	Auxiliary			

Strategic Concept

Even before World War II had concluded it was becoming apparent to Navy leadership that the Navy's role would have to change in the emerging new world. The previous strategic concept, focused on defeating an enemy fleet to gain sea control and power projection via island hopping, was no longer a compelling story. The Navy now possessed all the island and overseas bases that the previous concept was based around capturing, and even if that wasn't the case, there was no other naval power that could match the triumphant US Navy. Without a significant maritime competitor, the Navy instead pivoted to a power projection doctrine, one that, foreshadowing the more wellknown Maritime Strategy of the 1980s, called for eliminating adversary sea denial forces at the source and exerting naval power along the periphery of the Soviet Union.

Ever so painfully after the traumatic aftermath of World War II, the Navy began developing a new Strategic Concept, embracing a power projection role. With no true maritime competitor, it came to see its primary missions as defeating the feared interdiction of sea lines of communication and using mobile carrier strike forces to influence activities ashore. Rather than fall back on its previous experience with convoy operations in both World Wars, instead the Navy would guarantee control of the sea by forward offensive operations against Soviet sea denial forces, particularly their submarines, in their fixed home bases, thereby avoiding the protracted ASW campaigns of the previous wars and enabling the Navy to focus its attention on the campaign on the Eurasian landmass.

Employment Concept

The Navy's Employment Concept evolved over this time, although in many ways the main fleet structure remained relatively similar to those that had proved successful in World War II. Postwar navies were primarily influenced by the more capable submarine, the jet airplane, and emerging guided missiles.²⁰⁹ Due to vulnerability posed by these new systems, the Navy shifted its posture to attack at the source and area attack (for ASW) concepts but planned to execute this new strategic concept largely with existing employment concepts. The two biggest elements that changed in the Navy's post-war

²⁰⁹ Friedman, *The Postwar Naval Revolution*, 9.

employment concept were driven by the Undersea Revolution and the Nuclear Revolution.

While the two "named" Atlantic and Pacific Fleets were maintained, the "numbered" fleets shrunk from the dozen-odd fleets of the wartime navy to a temporary low of only three fleets before stabilizing at four. This temporarily was the 7th Fleet in the Western Pacific, the 3rd Fleet in the Pacific, and the 2nd Fleet in the Atlantic²¹⁰, but the 6th Fleet was quickly added as a new force stationed in the Mediterranean. As with the wartime construct, these numbered fleets were operational commands with individual task forces and ships rotating between them as required. These fleets were made up of Carrier task forces, amphibious forces, Hunter-Killer Groups, and independently maneuvering submarines.²¹¹

Deployment Concept

Following World War Two, the fleet temporarily returned to its homeports in the US and appeared ready to settle into the interwar deployment patterns. There even were (temporary) striking fleets created on both coasts, such as the short-lived Atlantic-based Eighth Fleet. While most of the Navy was busy demobilizing, these striking fleets provided a surge capability to relieve the residual forces still overseas. However, this traditional pattern did not last, and the Navy quickly moved in a different direction, embracing a posture of combat credible forward deployments.

²¹⁰ For a short time, the 5th Fleet was the Western Pacific force, the 7th Fleet was the Pacific force and the 8th Fleet was the Atlantic force. However, these forces were relatively quickly renumbered to the reference layout (with no changes in assigned forces) and since that remains the Navy fleet structure today, for our purposes I use their post-1949 nomenclature.

²¹¹ Friedman, *The Postwar Naval Revolution*, 47.

By 1948, two new "deployment hubs" were established in the Mediterranean and Western Pacific, led by the Sixth and Seventh Task Fleets respectively. This was the pattern and organizational structure for almost the entire cold war, although there were changes. The "Task" was dropped from "Task Fleet" resulting in the organizational structure we know now. Naval forces obviously surged for crises, including Korea, Vietnam, and the Suez, but at the same time they maintained their deployment patterns. The homebased fleets, Second and Third,²¹² maintained most of the naval forces, but deployed combat formations forward to the Sixth and Seventh Fleets, respectively, to maintain the continuous, heel-to-toe deployment of combat ready forces.²¹³

Fleet Architecture Concept

The change in fleet architecture, specifically fleet size, in the post war period was catastrophic, and the Navy was forced to constantly reassess its plans. In 1945 the Navy had 6768 warships on its books, not even counting the innumerable small vessel such as landing craft and support vessels. The post war demobilization, proceeding with almost unseemly haste, halved the number of fleet carriers and reduced the fleet to one fifth of its wartime size in just one year. This demobilization and general post war austerity measures made fleet size a constant battle in the post war period, as the US could not or would not fund the fleet size the Navy thought it needed. Instead, the Navy had to fight for limited resources, focusing on improved submarines and larger aircraft carriers, and deferring many of its other priorities. While this trend eventually reversed itself, the fleet

²¹² Third Fleet was initially the First Task Fleet and then the First Fleet, but for simplicity sake, I refer to it here per the current nomenclature for consistency.

²¹³ Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002," 48.

primarily grew due to conversion and remobilization of retired ships. The overall fleet design did not change appreciably, except for the previously noted shift towards new types of submarines, both ASW and nuclear, and the hotly contested move towards a supercarrier.

Drivers of Change

Given the change in doctrine described above that shifted the Navy from its prewar island hopping and fleet battle doctrine, into the power projection and forward deployed posture, the key question is why and how this change occurred. The section below tests the six hypotheses against the available evidence. In all cases, there is at least some evidence for each of the hypotheses. However, there is stronger evidence for some of these hypotheses over the others and in some cases a hypothesis may explain why a change occurred, but not how the eventual final product emerged.

Adversary Strategy

The post-World War II environment was clearly driven by the emergence of the Cold War and the Soviet Union as the pacing threat. This was problematic for the Navy, as the Soviets did not pose the same existential maritime threat that first the UK and then Japan for the first half of the 20th Century, appearing to remove the need for a large US Navy. As a result, the US Navy embraced a policy of power projection against Soviet forces on land, but also emphasized the importance of preserving sea lines of communication to reinforce the land campaign.

As early as 1946, the Joint Chiefs identified the Soviets as a military threat and the Navy began to plan operations in the Mediterranean, where naval power could exert

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itself against the periphery of the Soviet Union, ironically echoing Churchill's soft underbelly strategy the US had resisted throughout the war. Additionally, the Office of Naval Intelligence initially predicated no Soviet capital ship procurements, as they believed the Soviets were entirely building submarines, although as it happens ONI missed that some new Soviet ships were being built. As a result, Navy leaders, such as Admiral Burke, spent a lot of time combatting the view that the maintenance of a large US fleet was a waste of resources given the lack of a serious maritime threat.²¹⁴

At the same time, the postwar Soviet Union appeared to build up a sizeable sea denial navy, appearing well suited for the type of shipping war the allies just experienced in WWII. The Soviet capture of the German Type XXI submarines and associated technology appeared to pose an immediate threat. This eventually created a new primary mission for major portions of the Navy. As an example, the US Navy's submarine forces were incredibly effective as a commerce raiding organization in World War II, but the Soviet Union relied less of maritime trade and thus the Navy submarine force found itself searching for a mission post WWII. In the immediate postwar period, the submarine force trialed new concepts but eventually the submarine forces reoriented themselves to an ASW mission (as discussed in earlier sections) using new SSKs with improved sonar to put barriers at choke points in response to the perceived threat to the transatlantic SLOCs.²¹⁵

²¹⁴ Potter, Admiral Arleigh Burke, 314; Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 120; Muir, Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945-1975, 19.

²¹⁵ Cote, "The Politics of Innovative Military Doctrine: The U.S. Navy and the Fleet Ballistic Missiles," 26; Friedman, *The Postwar Naval Revolution*, 12.

The US policy that evolved in response to the recognition of a new adversary also drove US strategy. NSC-68 famously called for a buildup of conventional forces to deter aggression, essentially the policy known as containment, and the Korean War showed that limited war was still a concern.

The Korean War in particular effectively rescued the Navy, as surface ships provided vital sea control and gunfire support and the Navy more generally proved itself still relevant in modern and limited warfare. At the same time, an emerging US strategy embracing nuclear weapons also drove US Navy doctrinal change. NSC 162/2, which became known as New Look, emphasized nuclear weapons as the primary deterrent and that US superiority in these weapons would allow for budget reductions. This led to shifts in the US Navy posture, particularly moving away from the balanced fleet and further emphasizing nuclear forces. The SSF and the SeaMaster seemed perfect for this New Look, and as such this doomed program was fast-tracked with unfortunate results.²¹⁶

Domestic Politics and Budget

Domestic budgetary concerns drove much of the post war period, as the pre-1950 defense budget effectively fell off a cliff. Following the total mobilization of the Second World War, the rush to demobilize and realize the peace dividend created a crisis for Navy leaders, and the military generally. Even after the immediate postwar demobilization, President Truman remained determined to cut military costs, which were \$10.9B in 1948, in order to bring the US budget back into balance. With the military's

²¹⁶ Muir, Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945-1975, 35–37; Trimble, Attack from the Sea : A History of the U.S. Navy's Seaplane Striking Force, 93.

share of pie apparently shrinking, competition for the shrinking slices of the pie almost certainly contributed to the interservice rivalry of the postwar period. It was not until the advent of the Korean War, that the budget pressure lifted. In this environment, there was clearly significant pressure for the Navy to prove its value.²¹⁷

Under constant budgetary pressure, the initial concepts the Navy had planned for were not feasible and the fiscal stresses exacerbated interservice conflict. This undoubtedly contributed to a need by each service to prove their unique value, and thereby justify a larger portion of the shrinking defense budget.²¹⁸

Bureaucratic Politics

Bureaucratic politics, namely of the interservice rivalry type, was clearly a major factor in this era as it is home to both the post-war service unification and the subsequent "Revolt of the Admirals." Much of this was a continuation of animosities dating back to interwar Air Corps and Navy fights over unification of air forces, embodied by Billy Mitchell. Even during the war, Admiral Yarnell who was charged with preparing the Navy's post war plans was concerned that unification would clearly lead to an independent air force taking control of naval aviation. This interservice rivalry dominated the postwar decade, as the Navy sought to find a doctrinal role that would preserve its independence.²¹⁹

²¹⁷ Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 96.

²¹⁸ Isenberg, 96; Mills, *The Forrestal Diaries*, 498–503.

²¹⁹ Barlow, *Revolt of the Admirals*, 23–24.

Interservice Strife

Underlying the interservice conflict was the budgetary pressure of the post war period. In this fiscal environment, the Defense budget continued to lower the number of fleet carriers and at times, the Air Force and Army both put forward proposals to cut (or in one case eliminate) the Navy's fleet carriers in order to avoid reductions to their own force from the same budgetary pressure. At the Key West Conference, Forrestal, unable to break stalemate over budget, decided on an even three-way split of defense budget between the three services. The Air Force was incensed as this prevented the budget growth needed to grow their number of air groups, responding that there was no longer a need for a large Navy given the Air Force's strategic bombing role. The Air Force also strongly opposed Navy attempts to assert even a limited nuclear strike role, and the supercarrier, the embodiment of this Navy mission, became the Air Force's chief target. In this environment, intraservice rivalry was largely suspended and the Navy strove to both obtain a nuclear mission for itself and remove the Air Force's nuclear monopoly, but also to define a unique mission for the Navy.²²⁰

In the end, this period of intense interservice rivalry, from the end of the Second World War, to at least the start of the Korean War, clearly was a driver for doctrinal change. Facing an existential threat to its autonomous role, the Navy fought to get a nuclear mission, just as the Air Force advocated for B-36 bomber procurement over the Navy's prized carriers. While the Navy may have been motivated to procure large fleet

²²⁰ Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 146; Trimble, Attack from the Sea : A History of the U.S. Navy's Seaplane Striking Force, 30; Friedman, The Postwar Naval Revolution, 17.
carriers for other reasons, the ability to compete with the Air Force was clearly a major contributor to this desire. Interestingly, the Navy's flush deck supercarrier was resurrected only a short time later. The outbreak of Korean war and Truman's firing of the Secretary of the Navy led to reauthorization of a large carrier, now known as CVB59, the *USS Forrestal*, in March 1951, a little under two years after the *USS United States* was cancelled. As another historical footnote, the interservice rivalry and its collateral damage cleared the way for Forrest Sherman to implement his desired strategic concept as CNO and then in 1955 in an unprecedented move Arleigh Burke, another starring player of this interchange, was selected as the next CNO over 91 other flag officers senior to himself.²²¹

Inside the Navy

Within the Navy itself, there was relatively little intraservice squabbling between the main air, surface, and submarine communities as they united against the common external enemy. This wasn't to say there weren't tensions, as the Navy was in the midst of a generational change. Secretary Forrestal noted that "'the actual fact is that the Navy is becoming an air Navy...The leading commands of the Navy will in time be occupied by men who deal with air in one form or another'"²²² and the actual change in leadership of the Navy reflects this prediction. In 1941 12% of flag officers were aviators, but by 1945 that percentage had grown to 27% - largely at the expense of the surface community. In this same year, of the 22 Vice Admirals in the Navy ten were aviators, the

²²¹ Barlow, *Revolt of the Admirals*, 288; Potter, *Admiral Arleigh Burke*, 384.

²²² Isenberg, Shield of the Republic : The United States Navy in an Era of Cold War and Violent Peace, 148.

first aviator became CNO with Admiral Forrest Sherman, and both Atlantic and Pacific fleets were commanded by aviators. Additionally, organization alignment gave the Bureau of Aeronautics (BUAIR) an independent empire, including control of naval aviation training facilities.²²³

This shift in leadership wasn't just at the senior levels, as there was clearly a rising proportion of aviators. In 1949, some 40% of line officers were aviators. Looking at the Naval Academy, the traditional source of new naval officers, increasingly the top half of academy chose aviation or submarines. As Rickover's nuclear program was stood up in this period, submarines began sucking best of Navy away from the surface community, compounding the draw of aviation. As a result, surface warfare officers increasingly did not get to fleet command and other key positions.²²⁴

Despite this changing dynamic within the service, there is little evidence significant internal divisions, even as in later years the submariners' Polaris Fleet Ballistic Missile Program diverted funding from other communities' programs. Certainly there were ideas that were clearly driven by nothing but community bureaucratic interests, among them the submariners' early attempts to field radar picket submarines to support the carrier battle groups or even more bizarrely a post war concept by OPNAV surface community staff officers proposing the development of US Navy surface commerce raiders.²²⁵ But these internal debates did not drive Navy doctrinal change and appear to have been largely muted by the more significant threat of interservice

 ²²³ Muir, Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945-1975, 9.
 ²²⁴ Muir, 11–71.

²²⁵ Muir, 51.

annihilation. Thus, while there is little evidence that intraservice politics shaped the emergence of the new Navy doctrine, this doctrinal change was driven by a need to compete with the Air Force and carve out an independent mission to justify the Navy's existence.

Civilian Intervention

On the surface, civilian intervention in what were perceived as internal service affairs is clearly present during this era. After all, the "Revolt of the Admirals" was clearly about the Navy pushing back, publicly, against intervention from senior civilians. However, the difference in this case is that the civilian intervention was not clearly about trying to force an unwilling Navy to adopt a new, innovative approach to Naval warfare. Instead, this intervention was about reducing the relative importance of the Navy, largely to the benefit of the Air Force, and forcing the Navy to divest of expensive Aircraft Carriers. Thus, the civilian intervention that occurred was less about changing the Navy and more related to the bureaucratic roles and missions debate still challenging the new Defense Department.

Johnson said so as much, as a contemporary quoted him that saying that the Navy was promoting the new [carrier] design as a means of competing with the Air Force, that *while he was SecDef the Navy would have no part in long range or strategic bombing.* ^{"226} Rather than Johnson supporting a maverick within the Navy who had a new concept for the utilization of Naval forces that a hide-bound bureaucracy was resisting, as

the civilian intervention theory would predict, instead we see a bureaucratic effort to

²²⁶ Barlow, *Revolt of the Admirals*, 188.

simply reduce the Navy, with no apparent intent to create some resisted intervention. Even the early Rickover experiments with nuclear power and the early nuclear submarines were not resisted much by the Navy bureaucracy, and although he was an accomplished bureaucratic operator, the era of Rickover relying on external civilian intervention to defend and enhance his new program was in the future.²²⁷ So, despite the chaos engendered by civilian leaders throughout this era, there is no evidence to support the claim that civilians intervened to create the new doctrine of the postwar Navy.

Learning Organization

The post-war Navy does not exhibit many of the characteristics of a learning organization, with a few notable exceptions. In general, the Navy, having just achieved victory in World War II, did not create many incubators to develop new concepts and appears to have few advocacy networks, outside the existing relationships of flag officers. This isn't to say that the Navy didn't learn or adapt, as it embraced missile and jet technology and many admirals famously revolted in defense of a new, unproven flush-deck supercarrier. The Able Test in Bikini Atoll on 1 July 1946 also provides some evidence of a learning organization. This test, a nuclear detonation in the atoll on top of a fleet of just-decommissioned warships demonstrated relatively minimal effects on ships from nuclear blasts.²²⁸ But this was as much the natural evolution of technology, as opposed to a learning organization that was assessing and implementing new ideas.

²²⁷ Hewlett, *Nuclear Navy*, 1946-1962.

²²⁸ Barlow, *Revolt of the Admirals*, 68.

Particularly as an advocacy network, the postwar Navy shows relatively few aspects of a learning organization. During the Service Unification and Revolution of the Admirals crises, the Navy appeared relatively disinterested in advocating for itself, particularly in a public manner. Similarly, Admiral Forrest Sherman's innovative maritime strategy was not disseminated and kept classified, leading to limited circulation even within the Navy and a more general lack of public support. Wylie writing in the established US Naval Institute Proceeding in 1953, and again in 1957, was the best enunciation of the maritime strategy until Huntington's more well-known 1954 article. This lack of an advocacy network is likely at least part of the reason Forrest Sherman's strategy and its parallels with the more well-known Maritime Strategy of the 1980s remained largely unknown for most of the Cold War.²²⁹

The clearest example of an effective learning organization is that of the incubators developed in undersea warfare, both in the shift to an ASW-centric force and the emergence of nuclear-powered submarines. Project Kayo's establishment to deal with the future challenges of undersea ASW given the German Type XXI technology, and the subsequent creation of Submarine Development Group Two with the responsibility for submarine ASW. This incubator was responsible for the fielding of the first SSK (ASW submarines). Similarly SOSUS began as a crash program in 1950 under this broad initiative, and proving its worth was quickly fielded on both coasts.²³⁰

 ²²⁹ Palmer, Origins of the Maritime Strategy : American Naval Strategy in the First Postwar Decade, 88.
 ²³⁰ Owen Cote, The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines, Newport Papers 16 (Newport: Naval War College Press, 2003), 17.

The eventual emergence of nuclear attack submarines also displays elements of a learning organization. Beyond the technological innovations, effectively by an incubator headed by Rickover, the *USS Nautilis* was fielded in 1955 as the Navy's first true submarine. However, it was not as effective as an ASW asset, as it was too loud to be effective (and would take years to eventually merge multiple prototypes into a true SSN that was quiet enough to be an ASW asset – this was the Thresher/Permit class), but it quickly demonstrated the value of nuclear power as even this first submarine was effectively invulnerable against US ASW techniques. These lessons learned in trials against US SSNs and growing concern over subsequent Soviet nuclear submarines led to a revised US ASW posture that actually outpaced the Soviet threat and as a result of this learning, when Soviet SSNs finally appeared, the US Navy was prepared to counter them.²³¹

Culture, Norms, and Ideas

Of culture and ideas, there is less evidence of their role. Certainly, the Navy was culturally predisposed to value large capital ships, the bigger the better, and to see the Navy as a forward-deployed, indispensable aspect of American power. Both elements we can see play out in the Navy's pursuit of a large supercarrier, that eventually led to very public fights with their civilian leadership, and in the Navy's early moves to maintain forces in the Pacific and the Mediterranean.²³²

²³¹ Cote, 21.

²³² Donnithorne, Four Guardians: A Principled Agent View of American Civil-Military Relations.

Of the broader role of ideas, there is little evidence of public ideas driving the Navy debate one way or the other, but there is evidence that the Air Force captured the public imagination. As Huntington noted in his 1954 article "it is hardly surprising that as a result a 1949 Gallup Poll revealed that 76% of the American people thought that the Air Force would play the most important role in winning any future war whereas only 4% assigned this role to the Navy."²³³ The public support engendered by these ideas, and lack of corresponding valuation of the Navy, explain a lot about why the Navy struggled in the post-war period.

Conclusion

There clearly was a shift in Naval doctrine in this era, as the previous doctrine appeared ill-suited for the postwar landscape. While both were offensive, and the ultimate goal of the wartime strategy was admittedly to exert naval power against the Japanese homeland, this shift to assuming sea control from the outset and adopting a primary role of power projection was a dramatic change in the role of the Navy. The main causes of this doctrinal shift are summarized in Table 8 below.

²³³ Huntington, "National Policy And The Transoceanic Navy," 485.

	significance	
H ₀ : Adversary Strategy	Major	Wartime strategy not required
		versus Soviet Union (continental,
		no Navy)
H_1 : Domestic Politics	Major	Domestic budget pressure created
		intense competition for resources
H ₂ : Civilian Intervention	None	Civilian intervention was not to
		create/enable new doctrine, but
		more tied to bureaucratic
		competition
<i>H₃: Bureaucratic</i>	Most Significant	Navy saw itself in fight for
Competition		survival and primacy against the
		Air Force
H ₄ : Learning Organization	Minor	Lack of advocacy networks may
		explain why this doctrine is
		largely unknown
<i>H</i> ₅ : Service Culture and	Minor	Minimal evidence, although
Ideas		emerging doctrine aligned with
		service culture
	1	

Table 8: 1940s Naval Doctrine Hypotheses

Relative Impact

Significance

Why did this doctrinal change happen in the first place? The combination of domestic budgetary pressure and balance of power considerations help explain the need for this change. The drawdown in military spending created competition for scarce resources, while the elimination of all maritime competitors undermined the Navy's case for a continued large battle fleet. At the same time, interservice rivalry made this search for a new doctrine more pressing, as the Air Force was using the changed geopolitical situation and its sole possession of nuclear weapons to threaten the very existence of the Navy. This nuclear one-ups-man-ship helps explain the Navy's drive during the postwar period to gain a nuclear role, as that was seen as a significant discrepancy between the services. As a result of these pressures, we see the Navy seek to define a power projection role for itself and carve out a unique nuclear role where it could add value, and thus create a basis to preserve its forces.

Surprisingly, we don't see much evidence of learning organizations, civilian intervention, or culture in the doctrinal change. There were undoubtedly cultural ideas present, and they may explain some of the roads not taken, as the idea of seapower kept the Navy focused on preserving its large battle fleet and its independence, but that also can be attributed to bureaucratic incentives. Civilian intervention happened throughout this period, but relatively little direction was provided in how the Navy should change – instead intervention was in the form of budget cuts and cancellations of warships. Lastly, while the undersea community showed good use of incubators, in Project Kayo and development of SSKs, SOSUS, and the later nuclear submarines, there is little other evidence of incubators or other learning behavior outside the submarine force. This lack of a broad base of support undoubtedly contributes to the general lack of awareness of this doctrinal shift, and the little recognition it receives.

The crisis of the late 1940s forced Navy leadership to confront the new strategic and fiscal reality, and sharpen their thinking. However, they were never truly effective in gaining full acceptance of and support for their proposed concepts by the new Defense

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Department until outside factors provided an impetus. While the new ASW capabilities appear to have broad acceptance, as the threat of Soviet submarines was a real concern and the combination of barrier strategy, SSK/SSN, SOSUS, and HUKs was a uniquely Navy mission and not overly expensive in the grand scheme. But the carrier in particular remained under constant pressure, as it was the large symbol of a fleet centric approach, and for the Navy its top priority. It was only the outbreak of Korean War that ultimately resolved this in favor of the Navy. This limited war made the idea of nuclear capabilities less relevant as the force design shaping construct, as conventional forces were valued again. Carriers showed their value, as no land-based aircraft were available to support the ground war in many cases, particularly once the airbases on the peninsula were overrun. By Fall 1950, the FY52 carrier numbers had grown to an authorized level of twelve, and the shortly thereafter the Navy, under the same administration that had just cancelled the *United States*, was given permission to move forward with a slightly smaller *Forrestal* supercarrier.²³⁴

Short Epilogue

The immediate postscript would see the Navy continue its forward posture but also finally gain a dedicated nuclear role, effectively ending their inferiority to the Air Force. The emergence of Air Force intercontinental ballistic missiles led to new fears that the Air Force would increasingly take larger portions of the limited defense budget and the Navy responded with the development of its Fleet Ballistic Missile Submarine (SSBN) force. The story of this is well documented, and one of the better cases of

²³⁴ Friedman, *The Postwar Naval Revolution*, 19.

military innovation in the modern Navy, apparently driven primarily by interservice rivalry and an effective learning organization.²³⁵

This ultimately successful effort got off to a rocky start. In 1956, CNO Admiral Burke emphasized the importance of the SSF and effectively directed that the Navy go all in on this new program to develop a dedicated nuclear strike capability. The Navy rushed into a contract for 24 production aircraft in 1956, while the SeaMaster platform itself was still under development. Sadly, this program was not to be the Navy's solution, as a longrange jet-propelled strategic bomber that could operate as a seaplane was too technically challenging. By early 1959 the writing was on the wall and a series of accidents, resulting in the loss of two SeaMasters during test flights with all personnel and rising costs led to the eventual cancellation of this once promising platform.²³⁶

In parallel with the unsuccessful SSF, and the more successful but limited carrier nuclear missions, the Navy under CNO Arleigh Burke moved decisively towards a ballistic missile program of their own. The Navy first tried to team with Air Force, but technical limitations prevented that deal, so instead the Navy and Army reached a deal to cooperate on the Jupiter missile program, the Army counting on the Navy to strengthen their claims for developing a new system. After utilizing this joint venture with the Army to bypass Air Force bureaucratic roadblocks, once the initial technical challenges had been overcome Navy quickly moved beyond the collaboration with Army. By 1956 was

 ²³⁵ Sapolsky, The Polaris System Development; Bureaucratic and Programmatic Success in Government, 7.
 ²³⁶ Trimble, Attack from the Sea : A History of the U.S. Navy's Seaplane Striking Force, 111–32.

proposing a Navy-only program known as Polaris, which focused on the specific technical requirements for a ballistic missile that could be launch from a submarine.²³⁷

As the Polaris grew to encompass 10% of Navy budget, other Navy priorities were cancelled or delayed and even the Air Force's budget was threatened by this growth. However, program officials were effective in downplaying the costs of the FBM program for the Navy, and instead arguing that it competed with Air Force for nuclear funding instead. The Polaris program was also careful in its relationships to cater to the other branches. An example can be seen in the manner in which the number of missile tubes onboard the future ballistic submarine was decided. Even though the Polaris program wanted more missile tubes per submarine, the large size of the submarine required for the desired number of tubes made the submariners immediately uncomfortable so the Polaris program acceded to that request in order to gain the submarine communities backing for the rest of the program.²³⁸

The Polaris program was structured as a special program, outside the normal bureau structure, and known as the Special Program Office (SPO). Even though SPO was officially sponsored by the undersea division with the Navy staff, it quickly was able to build strong relationships with the policy branch of the Office of the Secretary of Defense. These advocates gave SPO top cover and the ability to avoid the normal budget cuts associated with typical program management. SPO also took full advantage of the unique authority granted it to draft any officer in the Navy for this effort.²³⁹

 ²³⁷ Sapolsky, *The Polaris System Development; Bureaucratic and Programmatic Success in Government*, 22.
 ²³⁸ Sapolsky, 25–169.

²³⁹ Sapolsky, 62–75.

Implementing the SPO vision required major cultural shift in Navy. The new SSBNs were single mission ships, and thus unable to support the rest of traditional naval missions, a major move away from the view of the Navy as a multipurpose forward force of sailor-diplomats. The SSBN concept also abandoned the previously sacrosanct construct where a ship had single Captain and crew, and instead embrace a Blue/Gold rotating crew concept to maximize operational time of this expensive force. The importance of this mission to the Navy, and need to efficiently utilize these very expensive platforms, helped overcome these cultural roadblocks.²⁴⁰

The result of the Navy's Fleet Ballistic Missile program are amazing in retrospect. The Navy went from concept to first platform in only five years, and procured 41 of these platforms over a six year period – an almost unprecedented reorientation. Known as the "41-for-Freedom," these SSBNs served throughout the Cold War maintaining the nation's assured second strike capability as the cornerstone of deterrence. As a result, the Navy possessed a reliable nuclear capability, undercutting the Air Force claim to a unique role. This capability has remained a foundational element in US defense policy since fielded, and as nuclear forces have been reduced in the post-Cold War era, the Navy's share of nuclear forces has grown with the US shifting more of its deterrent emphasis to the reliable assured second strike provided by the Navy's SSBN force. This undoubtedly validates the investment of the 1950s in the FBM program and proves the bureaucratic value in fielding a system that could compete with the Air Force for this national mission.

²⁴⁰ Sapolsky, 35.

CHAPTER FIVE: EBB TIDE, 1970-1979

*"Korea and Vietnam had tilted the U.S. Navy dangerously away from sea control. Project SIXTY was an effort to begin to redress the balance."*²⁴¹

Introduction

The 1970s were an unsettled era for the US Navy, somewhat mirroring domestic trends. Confronting a rising Soviet Navy and reflecting the loss of confidence following the soon-to-be concluded Vietnam War, the Navy turned inward and focused more narrowly on a sea control mission. This inward turn wouldn't last, but for at least a decade, the US Navy was on the defensive, both strategically against the Soviets and domestically as reduced ambitions for US foreign policy resulted in the Navy shifting to a secondary or supporting role. It was in this environment Admiral Elmo Zumwalt proposed a strategic and cultural shift in Navy doctrine, some elements of which survived, and even after his time continued to influence the Navy's doctrine. However, the innovations championed by Zumwalt, and then later by civilian leaders, were largely resisted by the Navy and represent a case of failed innovation.

While perhaps this was merely a momentary loss of confidence by the Navy and the nation, one that would be reversed in the 1980s, the story of how innovative change fails to take hold is still of direct interest. The emergence of this new Navy doctrine, even if it ended up being relatively short lived, was driven primarily by domestic and balance of power considerations, as the Navy found it lacked the guaranteed control of the sea it

²⁴¹ Elmo R. Zumwalt, *On Watch: A Memoir* (New York: Quadrangle/New York Times Book Co, 1976), 84.

had always assumed and more importantly lacked the political support to fully resource the Navy's desired force structure to regain its control. The Navy as an organization operationally evolved in some relatively innovative ways, but strategically and with regards to its force structure, it largely resisted the initiatives forced on it first by Admiral Zumwalt and then by budget-conscious Administrations. The lack of an effective learning organization to implement directed changes, as well as cultural and bureaucratic resistance, largely explain why this doctrine was never fully accepted by the Navy.

Evolution of Naval Doctrine

Setting the Stage

The Navy had evolved considerably from the force that existed in 1956, although in many ways it had finally achieved the vision of the immediate post-war environment. This was a gradual change, and not fully formalized in the way the doctrinal changes of the 1945s and other eras would be. With the emphasis on nuclear deterrence, the Navy had been able to build its series of large aircraft carriers initially hoped for along with the nuclear ballistic missile submarines that gave the Navy a dedicated nuclear mission, a specific capability not envisioned post-World War II but the very function the Navy strived for in the nuclear era. At the same time, the Navy found itself involved in limited conflicts around the globe, starting with Korea, but continuing as the Cold War set in. In this environment, the Navy was primarily focused on the twin roles of power projection and nuclear deterrence.

The Navy's force structure had primarily emphasized submarines and carriers, in the minds of many surface sailors at the expense of the surface fleet. Admiral Arleigh

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Burke emphasized heavy fleet assets such as supercarriers along with starting the massive investment in nuclear submarines of the 1950s. The Forrestal-class of supercarriers entered service in 1955, with six ships of that class built before the nuclear-powered Enterprise entered the fleet in 1961, followed by additional Forrestal-class carriers in the 1960s. These large carriers were primarily focused on strike capacity, able to launch larger heavy-attack aircraft and with larger stores of weapons than their predecessors. As these larger carriers were fielded, most of the *Essex*-class carriers were converted to ASW carriers (the CVS program) or retired, although a small number remained in the fleet as strike carriers in 1970. The SSBN force followed, with the "41 for Freedom" procured over only a few years, including an amazing 10 SSBNs procured in both 1961 and 1962, while nuclear attack submarines were continually procured, with classes of increasing capability fielded. The surface fleet was largely unchanged and although some new ships were built, the majority remained World War II-era combatants modernized via the Fleet Rehabilitation and Modernization (FRAM) program. Entering the 1970s, the fleet had relatively modern carrier and submarine forces, with new variants in the Nimitz and Los Angeles being fielded, while the surface fleet was largely seen to have lagged.²⁴²

Operationally, the Navy had been busy throughout the past decades, although not in the ways envisioned. While Forrest Sherman envisioned the Navy as a forwarddeployed service with the primary mission to attack enemy forces at the source, the Cold War had emphasized the forward-deployed aspect as it found itself primarily supporting

²⁴² George W Baer and American Council of Learned Societies, *One Hundred Years of Sea Power: The U.S. Navy, 1890-1990* (Stanford, Calif.: Stanford University Press, 1998), 47; Polmar, *The Ships and Aircraft of the U.S. Fleet*.

limited conflicts across the global. Beyond just Korea, the Seventh Fleet found itself deployed to Taiwan during the Formosa Strait crisis of 1955 and the Atlantic Fleet in 1962 deployed to quarantine Cuba during the Cuban Missile Crisis. After years of coastal involvement in Vietnam, the Seventh Fleet landed marines at Danang in 1965 and the Navy established a riverine force inland. Even without the land-based presence in Vietnam, Navy aircraft carriers spent years supporting strike missions into Vietnam from Yankee Station. Overall, "Vietnam unbalanced the Navy by emphasizing strike warfare at the expense of an array of sea-control functions. It reinforced carrier-air doctrine instead of encouraging naval officers to think of carrier air strikes as only one of several Navy missions in an age of flexible response."²⁴³ This was the Navy that CNO Admiral Zumwalt, fresh from command of the Navy's forces in Vietnam, would take charge of in 1970.²⁴⁴

Strategic environment

Throughout the 1960s, likely spurred on by the Soviet Navy's embarrassment during the Cuban Missile Crisis, the Soviet Navy had grown in capacity and capability. This was emphasized during exercise Okean '70, in 1970, which showcased the forward deployment of many Soviet naval forces in multiple theaters, at the same time the US Navy was struggling with its readiness in the face of the ongoing conflict in Vietnam. As a result of the trends in the Soviet Navy, Admiral Zumwalt concluded that in the event of maritime conflict with Soviets, "we will have in, in my judgement, a 55% chance of

²⁴³ Baer and American Council of Learned Societies, *One Hundred Years of Sea Power*, 393.

²⁴⁴ Baer and American Council of Learned Societies, 345–82.

defeating them with our present force. The forces at the POM-72 level, even after optimization, reduce my confidence of success to about 30%."²⁴⁵ This was the result of Soviet investments in both in more platforms, but also new technologies and systems to challenge the US naval superiority.

The Soviets developed large number of modern ships and submarines, as well as cruise missiles deployed not just on maritime platforms but also on long-range aircraft. The growing quantity and quality of the Soviet fleet as well as improved acoustic advantages in its undersea forces led the US to conclude that Soviet naval strength might be sufficient to challenge the US flow of material and personnel to Europe. Possible anti-shipping losses from a Soviet campaign were sufficient to threaten the balance of the ground campaign. Moreover, Admiral Zumwalt noted in Project Sixty that "Soviet naval strength enables them to start a war restricted to the sea,"²⁴⁶ whereas previously their naval strength was so limited that their only coercive option was to restore to a land conflict.²⁴⁷

The US Navy was particularly concerned about Soviet cruise missiles and submarines. In 1970 the Soviet Alfa SSN was first deployed, and this submarine was deeper-diving and faster than anything the US had dealt with previously. At the same time, the Soviet Charlie SSGNs were deployed starting in 1969. Armed with SS-N-7/8 cruise missiles, which were hard for defenses to kill requiring effective defenses to target

 ²⁴⁵ Elmo R. Zumwalt, "Project SIXTY," in *U.S. Naval Strategy in the 1970s*, Newport Papers, no. 30 (Newport, R.I: Naval War College Press, 2007), 28.
 ²⁴⁶ Zumwalt, 13.

²⁴⁷ Zumwalt, 6–10; Zumwalt, On Watch, 61.

the shooter, the Charlie SSGN was supposed to be paired with Soviet ocean surveillance system for targeting and function as an aircraft carrier killer. As Zumwalt noted in his memoirs, this was particularly concerning because the US Navy's big carriers operated forward in Sixth and Seventh fleets, putting them in range of these new Soviet cruise missiles, whether from a Charlie SSGN or a Soviet long-range bomber.²⁴⁸

Budget and Domestic Environment

The domestic political environment was unsettled throughout this period, to say the least, and the overall defense budget declined as the US wrestled with post-war drawdown and financial crises. As a result, there appears to have been little appetite for an expansive foreign policy, a common theme across Administrations as different as Nixon and Carter. Additionally, cultural tensions with society at large were also present within the Navy, as racial tensions and the integration of women forced institutional change at the same time the services were struggling through the implementation of the All-Volunteer Force. All these factors meant the Navy was generally inward focused and dealing with plenty of internal challenges, and these issues drew management attention away from thinking externally while there was less pressure from domestic leaders to tackle external strategic issues.²⁴⁹

Speaking generally, the 1970s was an era where the US was distracted with internal problems and looking inward. Richard Nixon was elected in 1969 on a platform

²⁴⁸ Zumwalt, On Watch, 76; Cote, The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines, 60.

²⁴⁹ James Kitfield, *Prodigal Soldiers*, Brassey's paperback ed, An AUSA Institute of Land Warfare Book (Washington, [DC]: Brassey's, 1997); Edward J. Marolda and Robert John Schneller, *Shield and Sword: The United States Navy and the Persian Gulf War* (Annapolis, Md. : Washington, D.C: Naval Institute Press ; Naval Historical Center, 2001), 10.

of reducing US overseas commitments, a policy that was formalized in the 1970 "Nixon Doctrine." In addition to the painful withdrawal from Vietnam, the US also encountered economic shocks as the US became more dependent on the Gulf states for oil production and suffered an oil embargo by OPEC in 1973, triggering a recession. Following the Watergate scandal, further distracting US leadership and sowing internal doubt, and Ford's presidency, President Carter came into office additionally focused on reducing defense spending. His Administration produced the national security document PRM-10 in 1977, which looked at a range of options but primarily concluded that more limited ambitions could achieve US defense, with the Navy only needing to ensure transatlantic flow of supplies to Europe in the event of a conflict. Finally, the decade was bookended by the Iranian revolution in 1979. The revolution and subsequent hostage crises caused President Carter to revise his foreign policy and extend US defense umbrella over its allies in the Middle East. However, this came at the end of the Carter Administration, and its defense policy was more directly guided by PRM-10.²⁵⁰

The defense budget, and the Navy budget with it, declined significantly. Figure 1 below shows the trends in the Navy budget, which dropped through the first half of the decade and while it climbed back a little in the last half of the decade, never recovered to its 1970 levels.

²⁵⁰ Marolda and Schneller, *Shield and Sword*, 10–13.



Figure 2: Navy Budget 1970-1979²⁵¹

As discussed in the Project SIXTY, fully described in the next section, Admiral Zumwalt noted that "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 years ahead...I have expressed our deep concern that our options are already constricted beyond the point at which we can cope with the threat."²⁵² So it is clear that contemporary decision makers were intently aware of budgetary pressures, as they charted the future of the Navy.

Project Sixty

Coming into office as the Chief of Naval Operations, Admiral Zumwalt saw the need for a wholesale shift in how the US Navy envisioned modern naval warfare.

²⁵¹ "FY21 Green Book.Pdf."

²⁵² Zumwalt, "Project SIXTY," 15.

Zumwalt described a double mission of the US Navy to "keep the seas open for commercial and military traffic of all kinds, which we call 'sea control,' and to make it possible to apply military power overseas, which we call 'projection.'"²⁵³ Zumwalt believed that under budgetary pressure, sea control forces had been allowed to age and eventually retire without replacement and just as damaging, no work on future seacontrol platforms was conducted. He commissioned a small team to study the problem and report back in sixty days, leading to the project being known as Project Sixty. Project Sixty was primarily led by Stansfield Turner, a future leading navy strategist and academic, but the CNO was directly involved in the Project and it was known to have his full backing in laying out the future of the Navy.²⁵⁴

Project SIXTY set four new priorities for the Navy, as opposed to Zumwalt's perception of the Navy's overemphasis on power projection, listed in priority order below:²⁵⁵

- Assured Second Strike- "strategic deterrence must come first"
- Sea Control "by our dual-mission carriers"
- Power Projection
- Peacetime Presence

In case anyone missed the point, Project Sixty subsequently stated that "The Soviet Naval threat, our commitments abroad, and the credibility of our sea-based

²⁵³ Zumwalt, On Watch, 60.

²⁵⁴ Zumwalt, 63.

²⁵⁵ Zumwalt, "Project SIXTY," 4.

strategic deterrent demand that the sea control mission be assigned priority at the expense of power projection ashore."²⁵⁶

Sea control is a prominent theme, and Project Sixty links sea control to ensuring credibility of deterrence in the face of the increased maritime threat by Soviets. In various spots, Zumwalt specifically notes that his prioritization of sea control is influenced further by the Nixon Doctrine and by the emergence of a large, modern Soviet Navy. Moreover, with US withdrawal from many overseas bases, sea power is more important and sealift, enabled by sea control, becomes a vital part of overall US strategy. Zumwalt also introduced the idea of the swing strategy, where the Navy's inherent mobility gives it the ability to move Pacific fleet into Atlantic.²⁵⁷

While its emphasis on sea control is important, Project Sixty was probably most known for its changes in Navy force structure and platforms, and the innovative approach it proposed. Zumwalt didn't entirely turn again the program of record, and in Project Sixty he affirmed the need to continue high end platforms such as the SSN-688, F-14, DD-963, and Nimitz CVAN. He specifically noted that "though each program will be reviewed against the threat and budget environment, I believe we can and should complete most of these major projects that are now underway. Abrupt changes in procurement are costly and disruption, and the threat is rising so sharply that we cannot risk a hiatus in the introduction of new, more capable systems."²⁵⁸ But despite that

²⁵⁶ Zumwalt, 27.

²⁵⁷ Zumwalt, 5–11.

²⁵⁸ Zumwalt, 17.

commitment to not abruptly trade away traditional platforms, he also argued that the US needed new platforms, new weapons systems, and new ways of employing these systems.

Specifically, Project Sixty laid out a number of initiatives, many of which were significant shifts. Among them, the highlights are

- Move to dual-mission carriers, away from legacy construct of separate escort/ASW carriers and battle carriers
- Enhance surface ship capability via surface-to-air missiles and Harpoon missiles
- Deploying patrol gunboats (low end) before the year end to Med as a way of trailing Soviet crawlers, along with the future deployment of hydrofoil boats (PGH)
- Testing employment of SSNs as surface task group escorts, as well as looking into an SSN with missile capability.
- Developing the Captor mine program, more surface-to-surface missiles, and future CIWS for enhanced missile defense

Many of these elements were continually emphasized by Zumwalt and as Project Sixty further evolved in execution, some of these elements matured and became grouped into the idea known as the High Low Mix.²⁵⁹

High Low Mix

The crux of Zumwalt's High Low Mix was that the US needed to bring the Navy into balance by supplementing high-performance/cost ships with newer, inexpensive

²⁵⁹ Zumwalt, 18.

ships to allow it to provide for naval presence at a lower cost. Due to impending obsolescence of WWII-era and ongoing with Soviet modernization combined with the "Nixon administration's determination to reduce military budgets, the only way I could see for the Navy to free funds for developing up-to-date ships and weapons systems that could cope with the new Russian armaments was to retire immediately large numbers of old ships and aircraft."²⁶⁰ This early idea of a divest-to-invest concept, was to divest older platforms, replacing them with some modern High end platforms but also greater numbers of Low platforms to provide similar capability but at lower cost than a purely High one-for-one replacement.²⁶¹

In Zumwalt's opinion, the Navy already had a lot of High, but lacked the Low. His push to include Low to supplement, but not entirely replace, the High was the innovative part of Project Sixty and the subsequent High Low Mix. When Zumwalt became CNO, there were several High programs being produced or envisioned including Nimitz carriers, Spruance Destroyers, Tarawa LHAs, nuclear cruisers (DLGN) and SSN688 (LA-class). But there did not appear to be similar numbers of low-end platforms in the fleet or in development. As a result, Zumwalt proposed the four new platforms, not in production or design when Zumwalt became CNO. These were: first a high speed hydrofoil (PHM), and the interim solution of traditional patrol gunboats, for coastal areas and to interfere with Soviet trailers; second a small and cheap Patrol Frigate – the future Oliver Hazard Perry FFG-7, that Zumwalt claims was what the larger and expensive new

²⁶⁰ Zumwalt, *On Watch*, 59.

²⁶¹ Zumwalt, 60.

destroyer Spruance was originally supposed to be; third the Sea Control Ship, a small carrier capable of carrying 14 helicopters and 3 harrier jump jets, for 1/8 the cost of a nuclear carrier; and lastly the surface-effect ship, which was supposed to be a high speed (e.g. 100 kt) vessel capable of foiling traditional sea denial measures due to its speed.²⁶² *The Culture Wars*

More than his doctrinal or force structure changes, Zumwalt is probably best known for his personnel and cultural revolution. Even at his interview with the outgoing CNO and Secretary, it was clear that he was being brought in to drag the Navy's culture forward a decade or two. From previous experience he saw that recommendations for reform handled the traditional way would get lost in the bureaucracy. So, he set about to attack the problem directly. He stood up a series of "retention study groups," small ad hoc groups of no more than a dozen junior officers or enlisted who would spend a week studying a particular problem and provide recommendations directly to Zumwalt. These groups met periodically, and each covering issues specific to individual communities ranging from aviation officers to POW/MIA and minority women.²⁶³

Even as these retention study groups were meeting, Zumwalt's staff settled on the idea of sending special fleet wide messages with a unique "Zulu" marker. Quickly called Z-grams, the first several in July 1971 were indicators of a flood of Z-grams, which Zumwalt acknowledged were mostly the result of the retention study groups. These Z-grams were wide ranging, covering topics as mundane as allowing for storage of civilian

²⁶² Zumwalt, 72–74.

²⁶³ Zumwalt, 170.

attire on ships or extending commissary hours, but also the creation of a new drug rehabilitation program. As another example, at one point a Z-gram was entitled "Mickey Mouse, Elimination of" – "Mickey Mouse" being the term for a series of minor regulations that didn't appear to directly contribute to warfighting or mission success. Zumwalt is probably most well-known (and loved) in the fleet for Z-gram 57, that liberalized Navy regulations in a number of areas across uniform wear and personal attire. This famously allowed sailors to grow beards and drive motorcycles, although beards did not survive long in the Navy.²⁶⁴

In cultivating his image, Zumwalt utilized professional media clips ranging from awarding medals to sailors to simple clips of him as CNO engaged in daily routine. Zumwalt argued he was trying to change the public opinion that the navy was humorless, traditional organization populated by old white men. But this open communication to the ranks was unsettling and unbecoming to the rest of leadership, who didn't think it appropriate for the CNO to be sharing clips of himself working out, in what was effectively an early emergence of modern-day influencers. Moreover, because Zumwalt didn't trust the bureaucracy to implement his changes, he developed a small loyal "ministaff" of mid-level officers who set about bypassing the system. While this was effective in pushing his initiatives through, it also alienated the remainder of the Navy and meant that some of the initiatives were not well coordinated.²⁶⁵

²⁶⁴ Zumwalt, 172–82.

²⁶⁵ Edward J. Marolda, *Admirals under Fire: The US Navy and the Vietnam War*, Peace and Conflict (Lubbock, Texas: Texas Tech University Press, 2021), 278–92.

Zumwalt's reforms, while perhaps necessary, caused problems within the Navy's leadership, and at the same time did not mitigate racial tensions within the Navy that he was trying to resolve. The resistance came not just the senior leadership of the Navy but also from its lifers, the senior enlisted ranks that were required to effectively operate the Navy's advanced systems. Retention plummeted in their ranks, feeling that they were being bypassed by Zumwalt's direct communications to the rank-and file and the normal chain of command was not respected. This all came to a head in a series of racial disturbances onboard Navy ships, including some that sidelined carriers before deployments to Vietnam and threatened the effectiveness of the Navy, and greatly upset Nixon to the extent that follow-on CNO Admiral Holloway speculated he would have been fired if not for the distractions of Watergate.²⁶⁶

The Tribes

Zumwalt confronted no end of opposition, at least in his opinion, and did not hold back his opinion on their negative influence. In particular, he was frustrated by intraservice rivalry, interservice rivalry, and the overwhelming bureaucratic power of Rickover, who he devoted an entire chapter of his memoirs to. While these forces are present throughout the entire decade, Zumwalt has the most direct comments on their influence.

Looking inside the Navy, he was particularly troubled by the three main warfare communities and commented that "internal forces in the Navy had contributed to unbalancing it in the 1960s...for the last quarter-century or more there have been three

²⁶⁶ Marolda, 282–91.

powerful 'unions,' as we call them in the Navy-the aviators, the submariners, and the surface sailors-and their rivalry has played a large part in the way the Navy has been directed."²⁶⁷ In general, he believed that previous, non-surface, CNOs had unduly emphasized carrier warfare and Rickover had jealously guarded his submarine empire, leading to the neglect of surface warfare. More importantly, these three unions were unable to deal with important seam issues such as mines, electronic surveillance equipment and communications as they lacked an institutional champion within the Navy. Zumwalt would spend a consider amount of time trying to tame the three unions and develop mechanisms to look at naval forces holistically.²⁶⁸

Interservice dynamics similarly stalled change. Zumwalt recounts failed attempts to use army helicopters on Naval or merchant vessels and to expand use of air force for sea control. While there were some slow achievements, including Air Force mining missions in 1971 and movement towards Air Force-launched ASCMs, overall the Navy was unable to cooperate with the other service significantly. There were additional failed attempts to integrate the Air Force into carrier wings and to further utilize merchant ships to support naval warfare, including using civilian vessels for roles such as at-sea refueling and launching vertical fighters. In the end, the bureaucratic obstacles to these ideas ultimately meant that they were simply too hard to achieve.²⁶⁹

And then there was the Rickover complication. Admiral Hyman G. Rickover was the Director of Naval Reactors, as position he effectively created himself when

²⁶⁷ Zumwalt, *On Watch*, 63.

²⁶⁸ Zumwalt, 64.

²⁶⁹ Zumwalt, 70–71.

developing the Nautilus. He had held that positions for decades by this time, having developed a unique "dual-hatted" role as a senior leader within both the Navy and the then-Atomic Energy Commission as well as strong congressional advocates who continually waived his mandatory retirement. Overtime, he had consolidated power and, at least in Zumwalt's opinion, "his Division of Nuclear Propulsion was a totalitarian mini-state,"²⁷⁰ although it is worth noting that a junior Zumwalt had disastrously interviewed with Rickover for command of a nuclear ship early in his career. Given his unique power base, Zumwalt clearly recognized that he was someone who had to be dealt with.

Because the planned Low platforms of the High Low Mix would take years to make it through the design stage and thus were not feasible in the near term, Zumwalt attempted to make a deal with Rickover. He offered a near-term increase in SSN production, in return for Rickover's support for his desired Sea Control Ships, patrol frigates and hydrofoil craft. As Zumwalt had noted in his description of the High Low Mix, he wasn't against all High platforms, but felt that a more cost-effective balance was possible. Rickover agreed, although in the end all Zumwalt left with was a promise for future support.²⁷¹

The Navy subsequently tested SCS-concept with the USS Guam, a large deck amphibious assault ship (that resembled aircraft carriers of many smaller nations). These tests went well enough and DoD committed to delivery of one SCS in 1975; three in 1976

²⁷⁰ Zumwalt, 85.

²⁷¹ Zumwalt, 106.

and two-a-year after. However, Rickover, sensing danger from this small conventional carrier to his preferred path of large nuclear carriers, began working with his congressional advocates to undermine support and even intervened with his nuclear shipbuilders to bar them from bidding on the Sea Control Ship contract. In the end the Sea Control Ship was not built by the US Navy, although Zumwalt notes snidely that the Soviets had two at the time of his writing. Clearly still frustrated with Rickover's interference years later, Zumwalt speculated whether "a fourth-echelon corner of the Ship Systems Command should exert the enormous, if not preponderant, influence it did on the Navy's budget, the Navy's strategic posture and the careers of thousands of the Navy's men and women."²⁷² As it turns out, the Rickover problem would not go away for another decade. But although the Sea Control Ship was dead, the idea of a small (less expensive) carrier still held promise to many even after Zumwalt's tenure.²⁷³

Organization and Deployment

Organizationally and from a deployment perspective, the US Navy did not dramatically change over this time, but there were some notable adjustments in its posture. Organizationally, the ASW Forces Pacific and Atlantic were disestablished as standing organizations and their missions absorbed by the fleets themselves. In 1973, Third Fleet was established from First Fleet and the former ASWFOR Pacific. From a deployment strategy, in the 1970s, the fleet turned to some forward basing, vice the traditional forward deployment, with carrier groups based forward to reduce transit time

²⁷² Zumwalt, 107.

²⁷³ Zumwalt, 116–20.

and improve operational availability. A second shift was the establishment of a new deployment hub in the Middle East, including almost continuous carrier deployments and a base at Diego Garcia, starting down the path to the creation of Fifth Fleet (albeit not until 1990).²⁷⁴

The big shift from forward deployment to forward basing was because Zumwalt concluded that there was no way the Navy could maintain its deployed commitments without forward basing carriers. The Navy generally needed five carriers deployed, and traditionally needed a 3:1 force structure-to-deployed ratio – that meant the Navy needed 15 carriers to meet its requirements. With carrier force structure sinking to 12, a different approach was needed to deployment patterns. Forward basing carriers promised to get around the force structure-to-deployed ratio limits. The Navy effectively implemented this policy for the Pacific, but was less effective in the Mediterranean.²⁷⁵

The plan in the Mediterranean was to deploy an entire carrier task force forward. Although many locations were looked at, the Navy concluded that Athens offered the best combination of access to eastern Mediterranean, a large enough harbor, repair facilities and available housing. While there was domestic resistance on the cost to move ships forward, Zumwalt argued that the cost of homeporting in Athens was similar to the cost of a single F-14 plane and that it would improve retention. Despite some controversy, eventually Destroyer Squadron Twelve deployed to Athens, as the advance

²⁷⁴ Angevine, "Innovation and Experimentation in the US Navy: The UPTIDE Antisubmarine Warfare Experiments, 1969-721," 93; Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002," 50–53.

²⁷⁵ Zumwalt, "Project SIXTY," 24; Zumwalt, On Watch, 126.

element of a future carrier task force. Unfortunately for Zumwalt's plans, in November, Colonel Demetrios Ionnides, led a coup to overthrow the Greek government, and put in place a repressive regime. This change in Greek leadership and the US response, ended future plans for the carrier USS Independence to deploy to Athens, and Destroyer Squadron Twelve returned to the US when it's planned three-year deployment was complete. Thus, the Mediterranean forward basing was short-lived, and the US continued its forward rotational deployment strategy.²⁷⁶

On the other hand, Pacific forward basing went well, as the carrier USS Midway arrived in Yokosuka, Japan, joining Destroyer Squadron 15 in October 1973, with little drama either internationally or domestically. While the individual ships have changed, the US has continually maintained an aircraft carrier task force, and subsequently an amphibious ready group, forward based in Japan.²⁷⁷

Additionally, the emergence of rivals in the Middle East drove the US Navy to develop a third deployment hub near the end of the decade. As Afghanistan continued to simmer, Soviet naval forces began operating in the Indian Ocean and the Iranian Hostage Crisis spiraled at the end of the Carter Administration, the President unveiled the "Carter Doctrine" during his 1980 State of the Union. Given the general lack of forward bases in the region, the "Navy was effectively the guarantor of the President's commitments"²⁷⁸ and the Navy was tasked to maintain a continuous combat-credible presence in the

²⁷⁶ Zumwalt, On Watch, 128–35.

²⁷⁷ Zumwalt, 135.

²⁷⁸ Ryan Peeks, *Aircraft Carrier Requirements and Strategy, 1977-2001* (Washington, DC: Department of the Navy, 2020), 40.

region, with two carriers maintained forward deployed to the Indian Ocean for the rest of Carter's administration.

Innovation in ASW

Throughout the 1960s, the US moved decisively towards a functional barrier strategy, primarily using fixed systems such as SOSUS arrays, quiet ASW SSNs and land-based MPRA to bottle up the Soviet Navy in their home waters. SOSUS was expanded to cross the Greenland-Iceland-United Kingdom (GIUK) Gap in 1965 and an air base at Keflavik was established in 1966, providing the backbone of that ASW barrier. These systems also freed submarines from barrier duty, since they were no longer envisioned as a set of floating passive arrays tied to a patrol location. With SOSUS cueing land-based air, the submarines (who were difficult to communicate with anyway given the physics of underwater communications) were now free to press into far forward operations and create the initial ASW barrier in Soviet home waters.²⁷⁹

The submarine force also moved to enable routine peacetime tracking of Russian submarines. In the early days of the Cold War, this was seen as too dangerous but as US quieting (eliminating self-noise) and sonar technology (more accurate detection capability) improved, the US slowly learned how to implement covert tracking operations on a routine basis. This was largely driven by Submarine Development Squadron 12 (the successor to the Submarine Development Group Two discussed in Chapter 4 that helped drive the shift to an ASW submarine force) via its Tactical Analysis Group (TAG). The

²⁷⁹ Cote, The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines,
42.

TAG was "set up to develop analytical techniques for examine exercise results and to use them to predict operational performance." Coordinating a series of annual exercises, the TAG was able to provide quantitative evidence (all the rage in post-McNamara days) of force requirements and design needs for future systems.²⁸⁰

At the same time, the Pacific Fleet's ASWFORPAC conducted a series of experiments from 1969 to 1972, to explore alternate approaches to ASW warfare. Realizing that current Hunter-Killer (HUK) approaches were less effective against modern threats, particularly the emerging Soviet SSGN force, and that the HUK/CVS force was facing retirement, ASWFORPAC tested new options to preserve the US advantage. Although in the end the CVS force itself was still retired (along with ASWFORPAC), the lessons of the UPTIDE experiments, particularly the emphasis on strict emission and acoustic control and passive sonar would be critical in future developments, including the techniques employed in the 1980s.²⁸¹

Many of these initiatives in continued undersea innovations were driven by the perceived threat of Russian undersea advances, particularly the Alfa SSN and Charlie SSGN. As it turned out, the US response to many of the perceived Soviet advancements outpaced them, as the Soviet capabilities were never fielded as fast as feared. US improvements such as the faster Mk 48 heavy torpedo, towed array sonar systems, ASW helicopters deployed onboard surface systems, and investments in better US submarines improved US advantages through the 1970s, although the US did not fully realize that at

²⁸⁰ Cote, 50.

²⁸¹ Angevine, "Innovation and Experimentation in the US Navy: The UPTIDE Antisubmarine Warfare Experiments, 1969-721."

the time. It wasn't until the coming of the Soviet Victor III SSN in the late 1970s, that the Soviet threat was fully realized.²⁸²

Multipurpose carriers

In 1975 the Navy redesignated all its attack carriers and ASW carriers as CVs, including multipurpose air wings. Along with that, the carrier battle group (CVBG) replaced the previous strike carrier task forces and ASW task forces (HUK). This was on the other bigger doctrinal shifts that survived this era, as initially proposed by Project 60. Since World War II, with the emergence of Escort Carriers, the Navy had been separated into the battle fleet carriers and the escort carriers. Initially the escort carriers were converted merchant vessels design for ASW missions during World War II, but as they aged, older *Essex*-class aircraft carriers were converted into anti-submarine carriers (CVS). Entering the 1970s, the fleet was organized into attack carriers of the CVA/CVAN classes and hunter-killer groups centered around CVS ships. This organization was upended with the development of the multipurpose carrier and the carrier battle group.²⁸³

The decisions to move away from CVS carriers and the HUK groups was not entirely strategic but seems to be driven by the downsizing of the Navy. The greater capability of land-based ASW such as the P-3C certainly contributed to the decision, but the primary driver seems to have been the bloc obsolescence of the World War II era

²⁸² Cote, The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines,
66.

²⁸³ Peter Swartz, "Origins and Development of the US Navy Carrier Battle Group Concept," August 31, 1998; Robert Powers, "Commanding the Offense," U.S. Naval Institute Proceedings 111, no. 10 (October 1985): 60.
Essex-class carriers. These initial CVS carriers were effectively free, as the expense of building them was already paid during WWII but given the pressures the Navy was under it could not afford to procure a new generation of CVS. The short-lived Sea Control Ship was one solution to this problem, but the ultimate solution was to convert attack carriers (CVA/CVAN) to multipurpose carriers (CV/CVN), which only required the additional of ASW aircraft and some minor command and control modifications to the larger attack carrier. This ultimately would contribute to the emergence of the Composite Warfare Commander Concept, as the Navy now had combined multiple missions onto a smaller number of carriers.²⁸⁴

Composite Warfare Commander

The Composite Warfare Commander (CWC) concept is one of the major shifts in Naval command and control and operational doctrine since the emergence of the carrier task force concepts during World War II. It was developed in 1970s to deal with "complex and fast paced command and control realities of modern multi-threat war at sea against the Soviets"²⁸⁵ and concerns that the speed of threat, particularly with the growth in Soviet missile capacity and capability and expected jamming would degrade tactical picture. Contemporary strategists believed this would prevent one individual from exerting positive control per the current doctrine. So, the Navy developed a policy of "clearly articulated commander's intent, wide dissemination of standardized procedures,

 ²⁸⁴ Cote, The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines,
 52–54; Zumwalt, On Watch, 77.

²⁸⁵ Henry Kamradt, "Technology's Impact on Seapower in the 21st Century" (Center for Naval Warfare Studies, U.S. Naval War College, October 7, 2000), 35.

control by negation, and loose coordination directly between elements at the tactical level.²⁸⁶ This was primarily a defensive command structure, with coordinators for common resources and subordinate commanders for key warfare areas. It emerged slowly in the 1970s, championed by the Navy's Third Fleet, until being widely adopted at the end of the decade.²⁸⁷

The key tenants of CWC, beyond the noted emphasis on command by negation, was that Naval Operational Command was divided between the Officer-in-Tactical Control and the Composite Warfare Commander (although they could be the same person), and specific warfare areas were delegated down to subordinate commanders. As the Joint Publication 3-32 defines, "when multiple warfare functions (e.g., AMD, ASW, IO and SUW) are assigned the OTC also designates a composite warfare commander (CWC) to coordinate overall operations." While in some cases the OTC and CWC may be the same individual, the roles are distinctly defined.²⁸⁸

CWC emerged due to a variety of needs. First, controlling multiple weapons systems across an entire battle group (e.g., cruise missiles and aircraft) was beyond the capability of contemporary command structures. Second, there was no system for multicarrier operations and CWC enabled a more scalable organizational structure that proved useful for this need. Another key driver for CWC was that weapons capability

²⁸⁶ Kamradt, "Technology's Impact on Seapower in the 21st Century."

²⁸⁷ Bill Shifley, "A New Carrier Strike Group Staff for Warfighting and Warfighters," *Center for International Maritime Security* (blog), February 24, 2020, 3, https://cimsec.org/a-new-carrier-strike-group-staff-for-warfighting-and-warfighters/; Kamradt, "Technology's Impact on Seapower in the 21st Century," 35; E.D. McGrady, "Military Organizations and the Navy: Facilitating Joint Communication" (Center for Naval Analyses, Alexandria, VA, January 2001), 58.

²⁸⁸ McGrady, "Military Organizations and the Navy: Facilitating Joint Communication," 58.

grew faster than C3 capability. As Robert Powers notes, "the satellite and the computer, like wireless communications, produced a revolution in tactical organization...suddenly a commander had more information that he could manage."²⁸⁹ Combined with the responsiveness required to respond to supersonic missiles from quiet nuclear submarines, a new organization was required. At the same time, the budgetary cutbacks of the 1970s led to a reduction in fleet flagships, seen as extravagances for the "brass." Existing group command staffs were largely administrative units and not prepared to function as 24-7 multi-warfare battle staffs. The CWC was a way to pull Destroyer Squadron staffs and cruiser commanding officers into the staff organization, leveraging senior members of the battle group to lessen the load on the small staff.²⁹⁰

As the contemporary Third Fleet commander described it, he was fixing the problem where there was too much responsibility for one person and one staff..."so my staff and I devised what we called the Composite Warfare Commander (CWC) concept. We issued a tactical memorandum in early '75 as a guide for organizing a task group to fight all warfare areas simultaneously. The command of the task would continue to be in overall command, but he would assign an anti-air warfare coordinator, an anti-submarine warfare coordinator and a strike coordinator...after issuing the TacMemo, task group commanders began using it, and gradually it became, for the next twenty years, naval doctrine."²⁹¹

²⁸⁹ Powers, "Commanding the Offense," 60.

²⁹⁰ Powers, 61; Terry Pierce, "Disguising Innovation" (Dissertation, Cambridge, Mass, John F. Kennedy School of Government, Harvard University, 2001), 256.

²⁹¹ David Winkler, Oral History of VADM James Doyle, October 1997.

For most of the post-World War II period, the organizational construct had the Destroyer Squadron (DESRON) commander function as the screen commander, responsible for the protection of the carrier using his 8 destroyers. However, his authority was limited to the screening distance of destroyers, normally the visible horizon. There was a parallel construct of the Surface/Subsurface Surveillance Coordinator (SSSC), who worked with several other coordinators for specific functional areas, but importantly lacked direct control over assets – and also did not coordinate other mission areas (such as air). Third Fleet, conducting exercises, concluded both the Screen Commander and SSSC concept was inadequate for these reasons. An August 1974 Tactical Note (TACNOTE) entitled Composite Warfare Coordinator elevated the SSSC to the CWC and granted additional responsibilities and authority. The CWC was the one that would maintain the composite picture of all threats across domains. Each subordinate warfare commander had authority to initiate action in their areas of responsibility, while the CWC had overriding authority and ability to control through negation based on the overall picture.²⁹²

Of course, implementing a new operational doctrine wasn't as easy writing a TACNOTE. Third Fleet's first step was to form a "small innovation group led by Bernie Schneiderman, a civilian analyst employed by Third Fleet."²⁹³ Schneiderman reasoned that if the Navy was willing to coordinate all anti-air resources under one commander,

²⁹² Maureen Wigge and George Walne, "Doctrinal and Operational Issues in Naval Command and Control" (Center for Naval Analyses, Alexandria, VA, October 1994); Stuart Landersman, *Stu's Sea Stories* (Middletown: Xlibris, 2018), 324–25.

²⁹³ Pierce, "Disguising Innovation," 257.

might as well do the same for other warfare areas. Another key player was CAPT Stuart Landersman, who was serving as the commander of Destroyer Squadron 23 in the 3rd Fleet. COMTHIRDFLET TACNOTE 310-1-76 was being tested as part of an upcoming exercise, as the same time Landersman had all his ships in overhaul (and effectively nothing to do). Given his free time, he volunteered his DESRON 23 staff to participate in the test occurring in 1977.²⁹⁴

Landersman joined Schneiderman's small innovation group and became the operational champion. Beyond just participating in the test of the TACNOTE, he advocated moving his ASW coordinator role onboard the carrier. His parent surface community resisted this change, as they didn't approve the principle of the DESRON commander being on a carrier and not his ships. On the other hand, the aviators on the carrier staff welcomed but wanted him to be subordinate to their staff and fully integrated with the carrier group staff, with all messages coming from the carrier staff vice the ASWC. Landersman objected as the TACNOTE described ASWC as a separate function and "like a pouting kid, Landersman started to pick up his toys to go home. He knew that as he had volunteered for the exercise, he could get the scheduling officer to change him back to looking after ships in overhaul."²⁹⁵ As it turned out, this moment defined the future of CWC as it preserved the independence of warfare coordinators, a key element

²⁹⁴ P. J. Doerr, "CWC Revisited," U.S. Naval Institute Proceedings 112, no. 4 (April 1986): 39; Landersman, Stu's Sea Stories, 319.

²⁹⁵ Landersman, *Stu's Sea Stories*, 321.

of the CWC concept. Over next two years, Landersman and his team tested and improved the CWC concept in 12 major fleet exercises.²⁹⁶

A key element of CWC was synchronizing the efforts of the different tribes. Submariners traditionally resisted subordinating their subs to the carrier admirals, however submariners were trying to gain approval for their 688-class submarine and proving it had value in direct support to the carrier would provide an additional justification for this expensive program. CAPT Jerry Holland, the Submarine Squadron One commander, cooperated with Landersman, serving as the Submarine Element Coordinator on the carrier. Together they proved that submarines could function as part of a battle group and in doing so Landersman gained an ally for the CWC concept in the submarine force. Of course, CAPT Landersman does note that after 688 program was funded, SSNs were withdrawn from carrier support group until after the end of the Cold War when SSNs were in need of a mission. CAPT Holland denies that 688 drove the integrated support experiment, that there was instead a desire to provide ASW to carriers in support of Admiral Hayward's Sea Strike. Still, the submarine community now supported the CWC concept.²⁹⁷

The surface community continued to resist because cruiser-destroyer groups commanders could not command carrier battle groups (only aviators could) and thus CWC reduced their independent role, as everything was integrated and subordinated to the battle group. Landersman was able to slowly convince them, pointing out that the

²⁹⁶ Pierce, "Disguising Innovation," 259; Landersman, Stu's Sea Stories, 321.

²⁹⁷ Pierce, "Disguising Innovation," 262; Landersman, Stu's Sea Stories, 328–29.

principal warfare commanders of CWC were all surface officers, even if they were subordinated to the carrier commander. As it turns out, command by negation gave them considerable independence. Eventually cruiser-destroyer community came to support the concept, but the sub community of amphibious sailors never did and CWC remained limited the surface and carrier formations, never growing to encompass amphibious operations.²⁹⁸

Ultimately these experiments proved successful and CWC was widely adopted. The initial CWC concept gained a champion in Pacific Fleet Commander Hayward and following his DESRON tour Landersman went on to teach CWC to Pacific Fleet at a new school, Tactical Training Group Pacific (TACTRAGRUPAC). Admiral Hayward provided top cover for this innovation, effectively shielding Landersman from bureaucratic interference and eventually offering him an opportunity to continue to serve after he was passed over for promotion. It was also while Landersman was teaching at Tactical Training Group Pacific that he trained some Atlantic Fleet leadership on CWC, leading to its eventual spread to the other coast.²⁹⁹

The story of CWC, and of Captain Landersman, didn't end with the decade, and connects nicely into the next chapter. Having failed selection for promotion three times, in May 1981 Landersman was due to retire in 3 days when the CNO called him at home and invited him to the new Strategic Studies Group (SSG). As far the CWC, it was widely adopted but it wasn't until 1982 that this officially incorporated into Navy

²⁹⁸ Pierce, "Disguising Innovation," 263; Landersman, Stu's Sea Stories, 341.

²⁹⁹ Pierce, "Disguising Innovation," 261–65.

doctrine with the promulgation of NWP 8-1, Composite Warfare Doctrine. This NWP explicitly specified the OTC was responsible for accomplishing the mission, while the CWC would wage "aggressive combat operations to counter threats to the force."³⁰⁰ When the Maritime Strategy eventually emerges, CWC provides the means for the OTC to delegate defense of the battle group to the CWC, while the OTC can focus on offensive operations. This CWC concept, the result of Landersman and others, remains the cornerstone concept of Navy operational doctrine even today.³⁰¹

Sea Control and Subsequent Concepts

While Admiral Zumwalt started the shift to a sea control focus in Project Sixty, the idea of sea control, and defining the Navy's missions more broadly, was not just limited to the CNO's brief time in office. Admiral Stansfield Turner authored a 1974 article defining the missions of the US Navy, building on some concepts he had developed during Project SIXTY, and Admiral Holloway, Zumwalt's successor as CNO, wrote the 1975 NWP 1 doctrinal publication titled "Strategic Concepts for the US Navy." While they differ slightly in emphasis and definitions, it is notable how sea control plays a central role in their narrative, as opposed to the previous concepts.

Turner's Missions defines three primary roles for the US Navy: Sea Control, Power Projection and Naval Presence. Sea Control is the ability to "exert air, submarine, and surface control temporarily in an area while moving ships into position to project

 ³⁰⁰ Wigge and Walne, "Doctrinal and Operational Issues in Naval Command and Control," 13.
 ³⁰¹ Landersman, *Stu's Sea Stories*, 246; Wigge and Walne, "Doctrinal and Operational Issues in Naval Command and Control," 13.

power ashore or to resupply overseas forces."³⁰² It can be viewed from two directions, either denying the enemy right to use some seas or asserting our right to use those same seas. Power Projection is about the use of naval power to influence activities on land, and consists of amphibious assault, naval bombardment, and tactical air strikes.³⁰³ Lastly, Turner defines Naval Presence as a primary mission for the Navy, which he defines as the "use of naval forces, short of war, to achieve political objectives."³⁰⁴ While Turner doesn't say anything about sea control relative importance, it is notable that sea control features prominently as one of the 3 primary missions for the Navy.³⁰⁵

Admiral Holloway released NWP 1, Strategic Concepts for the US Navy, in 1975 and subsequently refined in 1978. This doctrinal publication covers a lot of ground, but importantly defines the US Navy's role in national military strategy as consisting of "Strategic Nuclear Deterrence, to provide overseas-deployed forces, and security of the Sea Lines of Communication."³⁰⁶ He also re-defines the Navy missions as sea control (local and area) and power projection (supportive for sea control and strategic deterrence). He doesn't move away from the idea of sea control, although he likely envisions it as more of an equal partner with power projection than Zumwalt would, and he importantly codifies the concept of sea control within Navy doctrine.³⁰⁷

 ³⁰² Stansfield Turner, "Missions of the U.S. Navy," in U.S. Naval Strategy in the 1970s, Newport Papers, no.
 30 (Newport, R.I: Naval War College Press, 2007), 39.

³⁰³ Turner, 41.

³⁰⁴ Turner, 47.

³⁰⁵ Turner, "Missions of the U.S. Navy."

³⁰⁶ James L. Holloway, "Strategic Concepts for the U.S. Navy," in *U.S. Naval Strategy in the 1970s*, Newport Papers, no. 30 (Newport, R.I: Naval War College Press, 2007), 57.

³⁰⁷ Holloway, "Strategic Concepts for the U.S. Navy."

Force Structure

The 1970s saw a dramatic change in force structure, as the Navy wrestled with changing technology, shrinking budgets and the retirement of many of its aging WWIIera platforms. Fleet size fell from the mid-700s to around 530 across the decade, as the shrinking budget provided little room for replacement of retiring ships. Many of the Navy's surface ships were WWII-era frigates, destroyers and cruisers and while they had been modernized via the FRAM program in the 1950s, that was at best a patchwork solution not providing them with state-of-the-art missile and sensor capabilities. In any case, these modernized World War II ships were now thirty years old and had largely reached the end of their useful life given the changes in weapons systems. Determining the right mix of platforms to recapitalize most of the fleet would dominate this era, but in the end despite a number of innovative ideas, the Navy largely replace its existing fleet with a smaller number of larger ships.

The fleet generally declined over this period, and with it most individual ship types similarly declined, as show in Figure 3. Only submarines and frigates appear to have even modest growth, as those building programs start hitting the fleet. Carriers, the centerpiece of the fleet drop from 19 in 1970 to 13 in 1979, thanks to the retirement of many of the Essex-class CVSs and only stayed at 13 due to a variety of measures to preserve some of the aging platforms.



Figure 3: Navy Force Structure (1970-1979)³⁰⁸

Even while the Navy was retiring ships, it was replacing them with new, more capable ships. The overall shipbuilding rate dropped as compared to the earlier decade, but an impressive set of new ships was coming online. 1971 saw the first *Tarawa*-class LHA, while 1972 saw the first of many *Los Angeles*-class SSNs and *Spruance*-class destroyers. In 1975, the first of the 50-odd frigates of the *Oliver Hazard Perry*-class FFG (what started as Zumwalt's Patrol Frigate) were ordered and the first of the *Ticonderoga*-class Aegis Cruisers was ordered in 1978. The Navy also began production of the *Ohio*-class SSBN and the *Pegasus*-class hydrofoil at this time, the *Pegasus* being one of

³⁰⁸ "US Ship Force Levels."

Zumwalt's other "Low" platforms. Zumwalt's Low building program was not very successful outside the OHP-class FFG, as only a handful of hydrofoils were built and no SCS or surface-effect ships.³⁰⁹

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Table 9: Ship Procurement by Type, 1965-1979 ³¹⁰								
	1965-69		1970-74		1975-79			
SSN	22	15%	23	37%	10	11%		
SSBN	0	0%	1	2%	6	7%		
CARRIER	1	1%	2	3%	0	0%		
CRUISER	2	1%	3	5%	2	2%		
DESTROYER	0	0%	23	37%	12	13%		
ESCORT	30	21%	1	2%	33	36%		
AMPHIB	32	22%	4	6%	0	0%		
PATROL	15	10%	1	2%	5	5%		
MINESWEEPER	0	0%	0	0%	0	0%		
AUXILIARY	44	30%	5	8%	23	25%		
TOTAL	146		63		91			

Zumwalt's successor Admiral Holloway tried to reverse some of the High Low Mix, fully supporting the nuclear carrier, but only so much could be done with the very limited resources available to the Navy during this era. As shown above, ship procurement did not change too dramatically across the different eras, although the second half of the decade saw numbers creep up slightly, largely thanks to the increased numbers of presumably less expensive escorts and auxiliaries purchased. At the same time, even though the SCS was dead, the idea of a small carrier reemerged in the mid-

³⁰⁹ John B. Hattendorf, ed., *U.S. Naval Strategy in the 1970s: Selected Documents*, Newport Papers, no. 30 (Newport, R.I: Naval War College Press, 2007).

³¹⁰ Polmar, *The Ships and Aircraft of the U.S. Fleet*.

1970s, now rechristened the VSS, and this small carrier idea would continue percolating through the decade, setting up one the major force structure showdowns of the decade over carrier force structure.³¹¹

Force Structure Continued – The Carrier Debate

The Carter Administration moved aggressively to downsize Navy shipbuilding, trying to cut Navy's shipbuilding program from 150 to sixty ships over five years, despite President Carter having served as a Naval submarine officer. This was in keeping with the overall Administration goals to reduce military spending. On the Navy side, Aircraft Carriers played a central role in the debate between Congress, the Navy and the OSD. Unlike Zumwalt's earlier proposals which envisioned the SCS supplementing the large CVN force, now the Administration was thinking about wholesale replacement of the expensive large carriers with these smaller options. President Carter tried to eliminate nuclear carriers, dropping the 1978 carrier and when one was restored in 1979 the President vetoed the bill (although a congress alarmed by Soviet moves restored it). This eventually became the *USS Theodore Roosevelt* which entered the fleet in 1986.³¹²

The small carrier concept was a broad continuation of the earlier concepts of the Sea Control Ship and the VSS. Intended to capitalize on advances in vertical takeoff technology, what eventually became the Harrier aircraft, the Ford and then Carter Administrations began investigating the concept of a CVV, about half the size of the nuclear CVNs. As the Ford and Carter Administration didn't see a need for offensive

³¹¹ Peeks, Aircraft Carrier Requirements and Strategy, 1977-2001, 41.

³¹² Marolda, Admirals under Fire, 344.

carrier warfare, mainly wanting the Navy to ensure free flow of troops and supplies across the Atlantic, a shift away from big-deck aircraft carriers to smaller ASW-centric carriers seemed to make sense, as it both saved money and reflected a continued shift towards sea control.³¹³

The lame duck Ford Administration 1978 budget included a CVV in 79 and in 81, in place of one CVN, although some advanced funding for a fourth Nimitz-class was provided by Congress. Additionally, studying the Carrier force, a National Security Council study did endorse a minimum carrier number of 12, somewhat a relief for the Navy, but the study "maintained that the Navy's primary role in war remained sea control, not power projection."³¹⁴ Reflecting these findings, and the soon-to-be PRM-10, the Carter Administration moved to "rescind" this advanced funding for a fourth Nimitz, the CVN-71 bitterly opposed by Congress (and the Navy) and in the forthcoming 1979 budget, removed the fourth Nimitz carrier from the shipbuilding plan. Congress subsequently restored CVN-71 to the FY1979 budget, which caused it to be vetoed by Carter stating that "Within the \$126.0 billion allocated for defense, we cannot have both an adequately balanced defense program and the luxury of an unneeded nuclear-powered aircraft carrier."³¹⁶ Unable to override the President's veto, no carrier was built in 1979.³¹⁶

³¹³ Peeks, *Aircraft Carrier Requirements and Strategy, 1977-2001,* 16–18. ³¹⁴ Peeks, 22.

³¹⁵ "Message to the House of Representatives Returning H.R. 10929 Without Approval | The American Presidency Project," accessed November 27, 2021,

https://www.presidency.ucsb.edu/documents/message-the-house-representatives-returning-hr-10929-without-approval.

³¹⁶ Peeks, Aircraft Carrier Requirements and Strategy, 1977-2001, 21–30.

The Navy still desired a CVN and attempted to restore it to the 1980 budget, to no avail as instead only one CVV was requested in 1980 by the Administration. However, in the meantime the world was changing. Conflicts in Iran and Afghanistan created the third deployment hub in the Middle East, serviced by two carriers during the crisis. With the geopolitical situation shifting, a Congress skeptical of the CVV replaced the smaller carrier with full funding for CVN-71. This time, President Carter was not ready to veto the bill and accepted the CVN addition, the future USS Theodore Roosevelt which would join the fleet in 1986.³¹⁷

Doctrinal Concepts of the 1970s

The Navy reoriented itself both strategically and operationally throughout the 1970s, at least on paper. Navy doctrine shifted to a defensive strategy, embracing sea control as the primary mission. Operationally, the Navy shifted to a CVBG concept, replacing the previous strike and ASW groups, enabled by the new CWC concept. And while the Navy continued procurement of traditional fleet units, it envisioned a future force of smaller ships to perform similar missions, ranging from the hydrofoil missile boat to the small carrier.

³¹⁷ Peeks, 41.

Table 10: 1970s Doctrinal Change Summary					
	Preceding Era	1970s Navy Doctrine			
Strategic	Power projection against flanks	Primarily defense/support of			
Concept	of adversary landmass	ground war			
	 Strategic Deterrence as 	 Sea Control of SLOCs 			
	emerging mission	 Strategic Deterrence as core 			
	 Air strikes and presence 	mission			
	missions in ongoing conflicts	 Sealift 			
Employment	Continued multicarrier task	Sea control and presence			
Concept	force fleet organization in	 Composite Warfare 			
	theory, but primarily organized	Commander concept			
	around:	 CV (vice strike and ASW) 			
	Strike carrier task forces	carrier groups			
	 ASW carrier task forces 	 Barrier strategy (GIUK gap) 			
	 Strategic missile submarines 				
	• ASW focused submarine force				
Deployment	Combat credible forward	Combat Credible Forward			
Concept	presence, rotating through two	Presence			
	deployment hubs	2 deployment hubs			
		 Added Forward based ships 			
Fleet	Shrinking, but balanced fleet	High-low Mix			
Architecture	Centered around supercarriers	 Continued traditional fleet 			
Concept	• ASW and nuclear submarines	units			
	 Modernization and 	 Sea Control Ship 			
	remobilization of legacy ships	 Escort Frigate 			
		 Hydrofoil 			

Strategic Concept

The Strategic Concept in this era shifted dramatically away from those of the preceding decades of the Cold War. Immediately after World War II, the Admiral Forrest Sherman developed the early "attack at the source" concept, of power projection against the flanks of the adversary. As time went on, the Navy's missions evolved to include strategic deterrence as a primary mission along with power projection in support of conflicts in Korea and Vietnam. The 1970s changed that focus, as sea control became the primary role of the Navy.

Different administrations had different ways of describing the Navy's mission, but the consistent and underlying theme was a Navy that was primarily in a supportive role, providing sea control to enable other services or capabilities. Project SIXTY was what started this trend, with its clear prioritization of sea control over power projection and its identification of strategic deterrence as a core Navy mission. Holloway continued this trend, with his NWP 1 noting that core missions for the Navy were strategic nuclear deterrence and protection of the SLOCs, in addition to forward presence. PRM-10 was more blunt, identifying that the Navy had little direct combat role in the envisioned conflict with the Soviets, other than providing for security of those SLOCs.

Sea control was always at least a partial, if unstated, mission for the Navy, and not absent during the previous decades, as the Cuban Missile Crisis is one of the more notable real-world examples of the use of sea control by the US Navy. Doctrinally the Navy began emphasizing sea control over other functions in the 1970s, as the US faced emerging sea denial threats and a growing Soviet Navy. Throughout this era, there is a clear shift towards sea control as the primary organizing function of the Navy.

Employment Concept

Operationally, the 1970s was an era of innovation as a number of new technologies were fielded, requiring entirely new employment concepts. Technology, such as improved nuclear submarines and capable cruise missiles, cut both ways as new capabilities challenged US defensive plans but also created new options. The biggest

change was a new organizing construct for the battle fleet, as the Carrier Battle Group (CVBG) and associated CWC replaced the previous strike carrier task force and HUK/ASW carrier task force organization. At the same time, the fleet developed new ways of operating its forces, with land-based ASW capabilities growing their role, SSNs taking on a larger role in peacetime tracking of Russian submarines, and new concepts for the survival of fleet forces in the face of modern submarine threats emerging. The result was a new Employment Concept that effectively replaced the World War II era concept the fleet had been organized around for decades.

The emergence of the dual-mission carrier and the CWC concept to allow for command and control of this multi-mission formation is a major change that has effectively lasted until today. The rapid retirement of the ASW carriers (CVS) and the incorporation of their capabilities into what was previously known as a strike carrier (CVA/CVAN) created the new designation of CV/CVN (if nuclear) and the only current type of carrier in the US Navy today. The CWC concept, that allowed for control of multi-mission operations at the speed of modern warfare. CWC also allowed for the incorporation of attack submarines into US carrier battle group formations, even if only for briefly.

At the operational-tactical level, there were additional innovations. Improved US submarines found themselves able to begin the peacetime tracking of Russian submarines, previously deemed too risky, which created yet another mission for the US submarine force. Additionally, improved IUSS capabilities and land-based ASW aircraft (the P-3 Orion) meant that the land-based assets could carry out the barrier strategy

without help, freeing submarines from barrier duty and allowing them to surge further forward, effectively putting an advanced barrier line up in the adversary's home waters. Lastly, in the face of emerging sea denial threats, principally improving adversary submarines including the first Charlie SSGNs, the fleet developed tactics to safely operate, principally early use of tactical deception and emissions control, in the UPTIDE experiments. The combined result was a new vision for how the Navy was employed, organized around a multi-mission CVBG but also, and somewhat paradoxically given the defensive nature of this era, with an even more forward submarine presence.

Deployment Concept

If the Employment Concept was an innovation in this era, the Deployment Concept largely was not. At a high level, the fleet continued providing combat credible forward presence, rotating capital formations through forward deployment hubs. At the tail end of this decade a third fleet deployment hub in the Indian Ocean was added to the existing ones in the Mediterranean and the Western Pacific. But that wasn't much of a change in concept, just in what locations forces were rotated too. Forward basing was more of a change, even if short-lived in the Mediterranean, as capital ships were permanently deployed forward along with their entire support structure and families. This reduced the transit time and in theory allowed for sustained presence from a shrinking fleet. So, while the Deployment Concept evolved with some important tweaks, in the end the overall concept of forward rotational forces remains about the same.

Fleet Architecture Concept

Unlike the Deployment Concept, Fleet Architecture was significantly changed. Fleet size was significantly reduced throughout the era, largely as the bloc of World War II era ships were retired without effective replacement. But at the same time, the Navy continually wrestled with its future force structure, as multiple proposals for smaller ships were repeatedly fielded. Some of these were fielded, and the *Oliver Hazard Perry* FFG would prove to be a successful program of over fifty ships, but in general the Navy never embraced these proposals for smaller combatants. This left the Navy mainly without an accepted Fleet Architecture Concept (at least accepted throughout Naval leadership) throughout this era, as it lacked a clear decision on what its future force would look like.

As the World War II era ships, even those fully modernized and life extended, aged out, a new generation of forces were beginning to be fielded, but not in sufficient numbers to replace them. Thus, the fleet shrunk from 745 at the beginning of the decade to 530 at the end. Many of these new ships were more capable, as the *Nimitz*-class supercarrier, the *Tarawa*-class LHA (itself a carrier to many smaller navies), the *Spruance*-class Destroyers, the *LA*-class attack submarines, and the *Ohio*-class ballistic missile submarines are entered the force, along with later the previously mentioned *Oliver Hazard Perry* and then the *Ticonderoga*-class Aegis Cruiser. These more capable platforms were built with modern technology designed in and were a generational leap in combat capability, but their numbers were not enough to make up for the retiring ships.

This, among other issues, led to the High Low Mix, where smaller ships in larger numbers would supplement the larger, more capable combatants that were seen as too

expensive to mass produce. As Zumwalt, the architect of this concept described it, it continued important High programs but refocuses on lower end combatants were the Navy had a gap. Patrol boats were fielded as an interim solution, to be followed by more capable forces including high speed hydrofoil missile boats (PHM), the Patrol Frigate (eventually the *Oliver Hazard Perry* class), and the Sea Control Ship, effectively a small aircraft carrier. As it turns out, only the Patrol Frigate was fielded in numbers, although a few PHM were also bought.

The idea of small ships didn't go away with Zumwalt, and would be proposed again and again throughout the decade. Zumwalt's SCS died an early death, but was resurrected under Ford as the VSS, again a small carrier relying on helicopters and vertical takeoff aircraft (the Harriers). Later in the decade, VSS was reborn as the CVV, another proposal for a small aircraft carrier. Significantly, unlike SCS and VSS that supplemented the larger carriers, this CVV was intended to replace the larger CVN and was important enough that President Carter vetoed the defense appropriations bill to kill a proposed CVN. The point is that throughout this decade, the Navy's Fleet Architecture was intensely debated and while there are formal force structure documents, these were largely proposed by reformers and resisted by the general Navy. So, there is not a widely accepted concept, just the general idea that the Navy needed something smaller as it continued replacing the bloc of retiring ships.

Drivers of Change

Given the change in doctrine described above that shifted the Navy from its previously more defensive posture, into the unabashedly offensive and forward doctrine,

the key question is why and how this change occurred. The section below tests the six hypotheses against the available evidence. In all cases, there is at least some evidence for each of the hypotheses. However, there is stronger evidence for some of these hypotheses over the others and in some cases a hypothesis may explain why a change occurred, but not how the eventual final product emerged.

Balance of Power

Leaders during this decade were intently aware of a shifting balance of power as the US was in a period of relative decline, and clearly were motivated to change US naval doctrine to adjust to the changing balance of power. The combination of growing Soviet naval forces combined with shrinking US naval power, and national power more broadly, led many contemporaries to conclude that the current path was untenable. Thus, the changing balance of power is one of the major drivers for a need for a new naval doctrine, and the resulting changes at the strategic and operational levels of US doctrine.

The alarming increase in Soviet naval power is apparent in many of the contemporary analyses, and leaders explicitly conclude that a US-Soviet naval conflict would be a toss-up. Over the years proceeding this decade, as a result of their embarrassment during the Cuban Missile Crises the Soviet Navy had grown in strength and professionalism, and openly demonstrated these new capabilities in global exercises such as Okean '70. At the same time, new systems such as fast and deep-diving Alfa SSN, the innovative Charlie SSGN, and the satellite radar-based Soviet ocean surveillance system challenged the US control of the sea, something the US Navy had assumed to be a permanent state for many years.

While the Soviet fleet was growing, both in strength and capacity, the US fleet was shrinking. Bloc obsolescence of the World War II-era combatants significantly contributed to the collapse in fleet size, as they largely retired without replacement. The speed of the modern Soviet threat, from supersonic cruise missiles to more capable nuclear submarines, changed the threat calculus, meaning that existing US systems and tactics were not able to effectively keep up. This is directly apparent in the CWC concept, where decision authority was delegated down to subordinate warfare areas commanders in an attempt to meet the speed of decision making required, but also can be seen in the emergence of the Aegis missile defense system and the longer-range F-14 interceptor, as in all cases there was a realization that current tactics were no longer capable of the required pace. This combination of rising Soviet power and falling US power significantly contributed to the need for a new doctrine, although as in other cases it does not appear to have explained exactly what that doctrine would be.

Domestic Politics and Budget

The change in naval doctrine was also driven by domestic factors as a war-weary America looked to lower defense spending and reduce America's overseas investments, as the economy contracted and foreign powers looked likely to overtake the US economy. These domestic factors were closely linked to the balance of power discussed above, as domestic factors contributed to the shrinking US fleet.

As Admiral Zumwalt noted in Project SIXTY, one of the first written statements outlining the Navy's inability to recapitalize its forces, "it is impossible to make these changes outside the context of potential budget reductions."³¹⁸ The drive to smaller ships then was clearly driven by concerns over affordability, and was not limited just to Zumwalt, even though he was a particularly passionate advocate of the High-Low Mix. The small carrier idea would not go away, as much as the Navy institutionally seems to have wished it would, and successive Administrations resurrected this idea, until the Carter Admin settled on CVV as a cheap replacement for the CVN and was serious enough about this less expensive replacement to the large CVN that President Carter vetoed the defense appropriations bill to eliminate a CVN. This was not just about the number and type of ships in the Navy's arsenal, as budget constraints drove other decisions. This is apparent in the decision to forward base ships as forward basing capital ships was not something the Navy seriously considered prior to this time, but Zumwalt concluded that given the budget-constrained fleet size the future held, forward-basing was the only option to preserve the Navy's forward presence.

More generally, there is strong evidence of general world-weariness in the post-Vietnam environment. This clearly led to policies such as the Nixon Doctrine, promising to reduce US presence overseas. In the face of this policy demand for a less offensive posture and one that was more narrowly focused on the now principal land conflict in Europe, the Navy had to shift its doctrine from the role it had embraced over the past decades of limited war. Late in the decade, the Iranian crisis led to the Carter Doctrine and the subsequent addition of a third "deployment hub." Interestingly, even while the focus returned to potential war in Europe, much as it had in the immediate post-WWII

³¹⁸ Zumwalt, "Project SIXTY," 3.

environment, the Navy came to a different doctrinal choice in its Strategic Concept but continued down the same (and expanded) Deployment Concept.

Bureaucratic Politics

Somewhat surprisingly, inter- and intra-service competition doesn't seem to have a starring role in these changes. Instead, bureaucratic politics, specifically the intraservice tribal affiliations within the Navy seem to have acted as a potential brake on proposed changes. Zumwalt felt very strongly that the tribes were the cause of many challenges, both from the decision to prioritize investments in aircraft carriers as well as the reluctance to invest in "seam" issues such as electronic warfare that didn't have a tribal champion. Zumwalt also identified Rickover and his organization as a primary bureaucratic obstacle and villain in the story of failed Naval doctrinal change.

When change did occur, in many cases it was not due to bureaucratic politics but due to the elimination the bureaucratic incentives to resist change. An example of this is the development of CWC, where CAPT Landersman concluded that "support for CWC was based on parochial internal Navy objectives."³¹⁹ The Navy aviation community supported it because all resources were synchronized in support of the carrier, but he was able to get surface community at least mostly onboard by showing how it gave principal leadership roles (previously restricted to aviators) to the surface community. The land-based ASW patrol aircraft sub-community within aviation supported CWC as well because it provided a means for them to integrate with the carrier groups, where they were previously left out. The submarine community was an early collaborator in CWC,

³¹⁹ Landersman, *Stu's Sea Stories*, 340.

but some suspect their motives were not entirely pure and submariners only supported CWC as a means to justify force design (by creating a demand for fast attack submarines while the Los Angeles-class submarine was under development) and to maintain operational control over their submarines, even in battle group tactical support. In this case, the co-option of the different bureaucratic actors seems to have been an essential element of the success of CWC, but not a cause of it.³²⁰

Civilian Intervention

There are some examples of civilian intervention in this case, but in general they are cases of ineffective innovation that was successfully resisted by the Navy. There was constant pressure by civilian leaders to force the Navy to accept smaller platforms and while civilian leaders were able to reduce the Navy's budget, something entirely in their control, changing the role of the Navy or its fleet architecture proved to be more difficult. Civilian leaders, and systems analysts, attempted to push ideas on the Navy, and at least in Zumwalt's case, selected a maverick to champion them, someone who would have been far too junior to normally be selected as CNO. However, many of the ideas coming from civilian leaders were not implemented or were reduced and delayed. Despite constant pressure for smaller carriers, the Navy kept lobbying for its preferred solution of a CVN and they were supported in their endeavors by the Hill, who restored funding and helped block the change. So there is little evidence of civilian intervention driving change in this case.

Learning Organization

³²⁰ Landersman, 339–41.

Elements of learning organization are present during this period, as small groups helped develop ideas. Some of these were effective such as CWC, but flaws in the learning organization design appear to have contributed to some of the failure of many of these ideas, particularly Zumwalt's revolutionary ideas, to last (although it's also possible that the ideas themselves were flawed). It is apparent that many of the successful innovations started with a small team and built a broad base of advocacy, while those failed innovations from this era did not.

Zumwalt's efforts were intentionally transformational and, in an attempt, to limit institutional resistance, excluded most of the bureaucracy. He relied on a small group of incubators, ranging from the retention study groups to his "'kitchen cabinet' of very bright, young, eager beavers who had little experience at sea but great experience buttering up the boss."³²¹ The limited membership of these groups allowed for Zumwalt to craft revolutionary policies on everything from force structure to uniform regulations, but also meant that a majority of the Navy's mid and senior leadership were left out of the decision process. Zumwalt had relatively few advocacy networks, instead trying to speak directly to the rank and file or just brief leadership on his decisions. Zumwalt's Zgrams in particular were effective in communicating directly to the deck plate but entirely bypassed the leadership. While Zumwalt clearly didn't trust his middle management, bypassing them only strengthened their resistance as they felt left out of the process. The result seems to be that many of Zumwalt's reforms were softened or eliminated by his successors.

³²¹ Marolda, Admirals under Fire, 292.

Fleet experimentation was more successful. The UPTIDE experiments, innovations in ASW, and CWC development all benefited from incubators, advocacy networks and feedback loops. UPTIDE was undertaken over a series of successive exercises allowing a small team at ASWFORPAC to test and iteratively improve ideas, that were subsequently incorporated into ASW doctrine. DEVRON 12 and its TAG similarly functioned as an incubator for new ideas, with its unique position in submarine force tactical development allowing for it to test ideas and then incorporate into force doctrine and promulgate to the force. CWC was effectively developed by an ad hoc incubator of 3rd Fleet staff and Landersman's DESRON 23. Landersman's ability to complete a tour developing CWC ideas and then subsequently head the new Tactical Training Group Pacific allowed him to train a generation of officers on this new CWC concept, with TACTRAGRUPAC functioning as an institutionalized advocacy network.

Culture, Norms, and Ideas

Little direct evidence of cultural and ideas directly influencing doctrinal development, but it is telling that at no point does there seem to have been a serious discussion about reducing US naval forward presence in the face of changed defense budgets and national postures. An option leadership might have considered would have been a further withdrawal back to a pre-World War II homeported Navy. Instead, the Navy did not seriously consider that option and instead Zumwalt rummaged for less expensive concepts for forward presence, ranging from forward basing to smaller ships. Later leaders were even unwilling to consider smaller ships and successfully resisted successive attempts to push for a small aircraft carrier. While cultural factors don't play

an overt role, it is likely that cultural predispositions for forward presence and larger vessels play a role in biasing leadership thinking, even if there is no easily identifiable causal link. Much like bureaucratic politics, while cultural factors don't explain any of the changes, they may have much to say about the roads not taken.

Conclusion

The 1970s present an interesting case where truly innovative ideas were presented that would dramatically change how the Navy operated and supported the broader national security strategy. However, while there were substantial movements in this era that were embraced, particularly at the technical and operational level, in large part the doctrine remained formally published but not fully implemented and the shift to a sea control focused doctrine proved short-lived. Table 11 below summarized the major findings.

	Significance			
<i>H</i> ₀ : <i>Balance of Power</i>	Major	Rising Soviet capacity, decreasing		
		American and changing technology		
		rendered current strategy null		
<i>H</i> ₁ : <i>Domestic Politics</i>	Major	Budgetary stress and no domestic		
		support for offensive power		
<i>H</i> ₂ : <i>Civilian Intervention</i>	Minor	No apparent civilian push to change		
		Navy, other than reducing budget		
H ₃ : Bureaucratic	Minor	Not cause of change, but explanation		
Competition		for failed change		
<i>H</i> ₄ : Learning	Major (when used)	Elements of learning organization in		
Organization		CWC and ASW. Lack of learning		
		explains some failure of Zumwalt		
		initiatives		
<i>H</i> ₅ : Service Culture and	Underlying	Not direct, but cultural preferences		
Ideas		contributed to resisting change		
		throughout the decade		
	1			

Table 11: 1970s Doctrinal Change Hypotheses

Relative Impact

As in other cases, changing balance of power and domestic factors seem to have driven the need for a new strategy. The combination of rising Soviet power, falling US naval strength (closely linked to the domestic factor of shrinking budgets), new technologies such as cruise missiles, downward budgetary pressure, challenges adjusting to new social structures and a war-weary public mean the US had to rethink how the Navy fit in the national strategy. The drive to have the Navy's primary mission be ensuring the transatlantic supply lines reflects growing concern that the Navy lacked the capability to operate offensively forward, and the investments to do so (e.g. large CVNs) were too expensive in this era of reduced ambitions. As a result, successive leaders wrestled with how to define the Navy's role.

Those changes that were successful and lasting were largely at the operational level of doctrine and the result of effective learning organizations. The CWC concept and innovations in ASW and submarine warfare are the clearest examples of this, as they relied on incubators to develop new concepts combined with formalized advocacy networks to update doctrine once developed. Additionally, these innovations that did occur, and last, happened a level below Strategic and were largely the province of Navy leaders and not of much interest to political leadership, possibly explaining how they evolved under the radar.

On the other hand, many changes were less successful. Zumwalt in particular had a transformative vision for the Navy but many of his changes, ranging from force structure to uniform regulations didn't survive his tenure. While he relied on a series on incubators to develop ideas and communicated them directly to the rank and file, Zumwalt didn't trust the Navy's middle management and thus had no advocacy network reaching out to them. Whether the result was right or wrong, this lack of effective advocacy likely contributed to the short lifespan of some of his ideas. Similarly, the Navy resisted many of the force structure proposals pushed on it through the 1970s, reflecting the bureaucratic interests attached to specific platforms or communities and underlying Naval cultural predispositions. Perhaps a small carrier was truly a bad idea and should not have been pursued, but it's clear that the Navy largely rejected the idea, and it was

only civilian intervention that kept it alive. But the civilian intervention was intermittent and never really penetrated the institution. Under the surface, Navy leaders were laying the groundwork for the future Maritime Strategy, that rejected many of the assumptions of the 1970s and more closely aligned with existing Navy preferences.

Foreshadowing the Future

The dynamics of this decade were once described as a "shake-and-bake" with CNO "Zumwalt shaking up the culture and with Holloway, a close colleague and even friend, following in the flamboyant and charismatic Zumwalt's footsteps to smooth over things and put the Navy on an even keel while at the same time keeping what was best of Zumwalt's reforms."³²² From a doctrinal perspective, the early 1970s under Zumwalt were more clearly a period of internally motivated change as the CNO proposed major and dramatic shifts in Navy doctrine, particularly focusing on sea control and advocating for smaller ships to carry out traditional Navy missions. Admiral Holloway came in and restored stability to the Navy, even though external actors would keep pushing for a smaller Navy and smaller aircraft carriers. He dropped some of Zumwalt's more controversial programs but kept those that worked and even moved to introduce his own more mature measures. Moving the Navy away vision of simply maintaining sea control, he "reaffirmed the central role of America's aircraft carriers and battle fleets based in Europe and Asia in deterring Soviet aggression."³²³ At the same time, shrinking budgets

³²² "McMullen 2021 Naval History Symposium Part II | H-War | H-Net," accessed October 2, 2021, https://networks.h-net.org/node/12840/discussions/8431151/mcmullen-2021%C2%A0-naval-history-symposium-part-ii.

³²³ Marolda, Admirals under Fire, 359.

and political pressures meant that the Navy would still be directed to look for alternatives to its traditional fleet architecture and role. It would take some time as the Navy doctrine remained defensive, but these underlying threads would bear fruit in the next decade.

Even as leaders were debating dramatic doctrinal shifts towards a defensive doctrine, new fleet architectures of the High Low Mix, and smaller carriers, elements of what would become the Maritime Strategy of the next decade were starting to emerge. Admiral Stansfield Turner, one of the primary authors of Project Sixty, reinvigorated the Navy War College, one of the incubators of the future Maritime Strategy. Admiral Holloway created a new battle force organization, centered around the CVBG, and started the process for the Composite Warfare Commander that would enable the CVBG operations of next decade. A Sea Plan 2000 was completed in 1977, essentially as an immature version of the future Maritime Strategy, while Admiral Hayward was similarly conducting his Sea Strike experiments in the Pacific.³²⁴

³²⁴ Hattendorf, U.S. Naval Strategy in the 1970s.

CHAPTER SIX: FULL SPEED AHEAD, 1981-1989

"It was a perfect storm. All kinds of things came together. You had Hayward inventing the SSG...You had Lehman coming in as the Secretary...You had whatever the hell was going on in the ATP. You had changes in Navy intelligence on the Soviets...and you had the creation of Strike U and Outer Air Battle..." 325

Introduction

The 1980s saw the emergence of a more assertive US foreign policy, and with it the shift back towards an openly offensive doctrine by the US Navy. Rather than a doctrine focused on sea control to ensure the flow of reinforcements to Europe, what the new Secretary of the Navy described as just throwing a "barrier across the GIUK gap," ³²⁶ the Navy embraced a more Mahanian concept where the war would be won by, or at least more directly influenced by, sea power, thereby placing a premium on initiative and forward presence. Reflecting the presidential guidance of NSDD-32, this new doctrine would seek to reverse Soviet expansion and emphasized the forward deployment of conventional forces. As Secretary John Lehman describes, given the limited forces available and global nature of conflict the strategy must "be a forward one, a strategy that identifies and exploits Soviet weaknesses such as unfavorable maritime geography."³²⁷ This shift in national strategy was reflected in the Maritime Strategy that was developed in the early 1980s, promoting an offensive strategic concept for the use of seapower.³²⁸

³²⁵ The Maritime Strategy: Oral History of Captain Peter M. Swartz, USN (Ret.), interview by Ryan Peeks and Justin Blanton, July 24, 2019, 40, http://public1.nhhcaws.local/research/library/oral-histories/navy-strategy/swartz-oral-history.html.

³²⁶ John Lehman, "Nine Principles for the Future of American Naval Power," U.S. Naval Institute Proceedings 110, no. 2 (February 1984): 50–51.

³²⁷ John F. Lehman, *Command of the Seas*, 1st ed. (New York: Scribner, 1988), 137.

³²⁸ "Maritime Strategy Presentation (for the Secretary of the Navy, 4 November 1982)," in *U.S. Naval Strategy in the 1980s*, Naval War College Newport Papers 33 (Newport: Naval War College Press, n.d.), 21–23.

The story of how this doctrinal change unfolded was-the convergence of multiple independent activities that together created the new service-level doctrine known as the Maritime Strategy. Strands such as a new Administration, an activist Secretary of the Navy, the reinvigoration of the Navy War College and its wargaming, innovative fleet exercises to test out new concepts, an ongoing push within the Navy by the Submarine Force to develop an anti-SSBN campaign, and the longstanding cultural desire to restore Naval operations to a more central role in national security, all came together to first open the space for a new doctrine and then iteratively evolve that new doctrine into the form we know as the Maritime Strategy. The primary drivers of this doctrinal change were the combination of a change in understanding of adversary strategy and domestic politics that created the need for a new strategy, which was then developed by the Navy supported by a forward-thinking civilian leader and based on long-standing cultural and bureaucratic preferences but most importantly evolved, tested and improved by an impressive peacetime learning organization.

Background

The Maritime Strategy was a ground-breaking change, but at the same time many elements of it can be traced back to earlier developments in the 1970s. Obviously the 1970s were a period of turmoil for the US in general, and the defense community in particular, and Zumwalt's doctrinal reforms in the early 1970s were only one of several attempts to deal with the challenges this era. Overall, naval forces were reduced throughout the 1970s and although an early 600-ship Navy concept was floated by CNO Admiral Holloway in 1977, long before it became part of Reagan's political platform, he

found no support for that level of shipbuilding. Facing a reduced share of resources, intraservice parochialism led to infighting between the Navy's semi-independent warfare communities. Later in 1978, Carter's OMB Defense Program Director "read the riot act" to a collection of Navy Admirals and other leaders, accusing them of not having their act together.³²⁹

At the same time all this was going on, the elements within the Navy were starting to develop new concepts. Earlier in 1977, John Lehman, at the time a consultant for the Navy, describes a meeting at the Black Pearl restaurant in Newport RI with Secretary of the Navy Claytor, Under Secretary of the Navy Woolsey and the Navy War College's Director of Strategic Research Bing West, where a strategy was sketched out on the back of a napkin that became the genesis of Sea Plan 2000 and eventually the Maritime Strategy. The Sea Plan 2000 study proposal was eventually authorized by the Carter Administration as an independent review of naval policy and strategy, surprisingly including participation by Lehman and others whose views did not match the policies of the Carter Administration.³³⁰

Sea Plan 2000 can be seen as the immediate Navy response to Carter Administration guidance, namely Presidential Review Memorandum 10 (PRM-10) and the subsequent Presidential Decision 18 (PD-18). PD-18 in particular downplayed Navy contributions to national security, at least in Navy opinions, and recommended a reduced

³²⁹ Oral History of Captain Peter M. Swartz, 20; Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy*, 1977-1986, 9–12.

³³⁰ John F Lehman, *Oceans Ventured: Winning the Cold War at Sea.* (New York: W W NORTON, 2018), 52–54.
force level. In response, Sea Plan 2000 determined that the Navy had unique value in deterrence of a major war and exerting pressure on Soviets in war and peace. In many ways, it was also aligned with much of what would become the Maritime Strategy, specifically the invocation of an offensive strategy to eliminate Soviet sea denial forces vice the current defensive barrier strategy. Although Sea Plan 2000 did not appear to have much impact on the Carter Administration and the Navy remained relegated to a supporting role, it introduced established key elements of a naval institutional vision, setting the stage for future political developments, and led to Bing West starting a series of annual "Global War Games" in 1979 to test the proposed strategy.³³¹

Despite the Carter Administration's guidance, the DoD had started reverse course and grow military forces at the end of the Administration, particularly as the Navy found itself deployed in force to the Persian Gulf. One of the authors of the Maritime Strategy noted that the Carter Administration didn't slow down putting new systems into the fleet, but instead mainly cut back on the quantity of what was being purchased. So, while *Nimitz* Carriers, *Ticonderoga* Cruisers, *Ohio* SSBNs, *Los Angeles* SSNs, and F-14 Fighters were not procured in bulk under Carter, they were developed and entered fleet service in some numbers. Without that hot production line, it is unlikely that the Navy force structure could have ramped up in the way the Maritime Strategy called for. The fielding of these platforms was also important for the new doctrine in that the officers drafting the Maritime Strategy were coming back to the Navy Staff with recent

³³¹ Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy*, 1977-1986, 14; Lehman, *Oceans Ventured*, 51–52.

experience operating on these brand-new platforms and could integrate their capabilities into doctrinal developments.³³²

Experimentation was not just occurring in war games but also and, apparently independently, in the fleet. Admiral Hayward as Pacific Fleet commander championed a project called Sea Strike, that he briefed at multiple levels. This project looked for an active role for the Pacific Fleet and analyzed an offensive strike against the Soviet eastern territories (Petroplavovsk, Vladivostok and the Kuriles) to draw Soviet forces away from Europe. This would allow US Pacific Fleet to make a difference during a conventional conflict and placed the Pacific campaign in a global strategy, which also helped eliminate the standing plan to "swing" pacific assets to the Atlantic in the event of a war. These strands of Navy strategic planning, wargaming, and fleet experimentation appear to have little immediate impact on Navy doctrine in the near term, but they laid the groundwork for what would become the Maritime Strategy.³³³

As far as the Maritime Strategy itself, it was not one document but a series of Maritime Strategies produced from 1982 through 1986, reflecting the evolution of strategic thought although the core concepts remained consistent through the multiple revisions. The first Maritime Strategy document was a 1982 presentation to the Secretary of the Navy. This presentation was followed by 1984 and 1985 formal versions of the Maritime Strategy, ones that were promulgated as official strategic documents, all classified like the early SECNAV brief and thus not publicly accessible. There was a

³³² Oral History of Captain Peter M. Swartz, 23.

³³³ Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy*, 1977-1986, 18.

corresponding Amphibious Warfare Strategy released in 1985, that translated the Maritime Strategy's tenets for the Marine Corps. And finally, in 1986, a special supplement of the United States Naval Institute's *Proceedings* was devoted to the public and unclassified release of the Maritime Strategy by the Chief of Naval Operations, the Amphibious Warfare Strategy by the Commandant of the Marine Corps, and the basis for the 600 Ship Navy by the Secretary of the Navy.³³⁴

Although it was called a "Strategy," the various versions provided an overall vision for naval forces, as opposed to a strategy or operational plan and as such is closer to a strategic concept or in my definition a service-level doctrine. Indeed, the Chief of Naval Operations argued in the 1986 *Proceedings* article publicly releasing the Maritime Strategy that it "does not purport to be a detailed war plan...offers a global perspective to operational commanders...or equal value for shaping and disseminating a professional consensus on warfighting where it matters – at sea."³³⁵ Taken this way, the Maritime Strategy, despite its name, is the authoritative document of naval service-level doctrine over this period, up until the end of the Cold War.

Evolution of Naval Doctrine

Setting the Stage

Reagan's 600-ship Navy was a key element in his national security platform as a candidate and he campaigned on reversing the reduction in defense expenditures of the

³³⁴ Peter Swartz and John B Hattendorf, eds., *U.S. Naval Strategy in the 1980s*, Naval War College Newport Papers 33 (Newport: Naval War College Press, 2008).

³³⁵ James Watkins, "The Maritime Strategy," U.S. Naval Institute Proceedings 112, no. 1 (January 1986): 4, https://www.usni.org/magazines/proceedings/1986/january-supplement/maritime-strategy-0.

1970s and a more assertive foreign policy. Reagan's preferred policy of rolling back perceived Soviet gains would clearly require a more active military and an offensively capable Navy. Future Secretary of the Navy Lehman himself was previously a Republican political appointee and once he transitioned back to private status when the Carter Administration came in, he joined the Republican National Committee's Advisory Council on Defense to challenge Carter's defense policies and personally wrote a book defending the utility of large Aircraft Carriers, whose continued value was under question at the time. Lehman helped get the 600-ship Navy concept included in Reagan's political platform, a defense plank that proved surprisingly popular.³³⁶

The defense budget also grew in this era, with corresponding increases in the Navy's budget share, enabled by the policies of the Reagan Administration. In 1981, the U.S. Navy budget was \$57.4B, but throughout the decade saw repeated increases and by 1988 peaked at \$100.3B. This budgetary largesse, compared to the fiscal austerity of the previous decade, enabled the fleet growth that made the Maritime Strategy feasible. As many contemporary strategists identified, the Maritime Strategy required a large force both to maintain the desired peacetime presence and to be able to rapidly mass sufficient offensive firepower. While even in its heyday it was never certain that the Navy could execute as proposed, it clearly would not have been able to carry out the new doctrinal missions without this growth in both capacity and capability.³³⁷

³³⁶ Lehman, *Command of the Seas*, 92–102.

³³⁷ Swartz and Hattendorf, U.S. Naval Strategy in the 1980s, 10–11.

Naval Intelligence Informs the Debate

As early 1968 and then repeatedly throughout the 1970s, leveraging unclassified reports, a series of analysts at the Center for Naval Analyses (CNA) concluded that the Soviet Navy had a primarily defensive posture, focused on defending SSBN bastions in local waters vice attacking the Atlantic SLOCs. They concluded that while the Soviet were building more capable platforms that appeared to be power projection platforms, they actually were intended to augment their SSBN bastions. While it took time for these conclusions to be accepted and have an impact on Navy plans, eventually the CNA campaign convinced Navy leadership and in 1981 the Director of Naval Intelligence requested a National Intelligence Estimate to assess likely Soviet strategy.³³⁸

Reporting out in March of 1982, the Central Intelligence Agency agreed with CNA and concluded that despite recent Soviet procurement of more capable and longerranged ships, the overall wartime strategy was:

- "To deploy and provide protection for ballistic missile submarines in preparation for and conduct of strategic and theater nuclear strikes.
- To defend the USSR and its allies from strikes by enemy ballistic missile submarines and aircraft carriers."³³⁹

Thus, Soviet forces would be primarily deployed in local waters, although the need to counter long-range US carrier air strikes and Tomahawk cruise missile-armed combatants would likely push sea denial forces outside local waters, up to about 2000 km.

Stated more directly, the NIE concluded that:

³³⁸ Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986, 24.

³³⁹ "Central Intelligence Agency National Intelligence Estimate 11-15-82/D. March 1982," in *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986,* Newport Papers 19 (Newport: Naval War College Press, 2004), 109.

We believe that virtually all major surface combatants and combat aircraft available in the Northern and Pacific Fleets and some three-quarters of their submarines would be initially committed to conducting "sea-control" and "seadenial" operations in these waters…leaving relatively few units for operations in areas such as the North Atlantic and Central Pacific.³⁴⁰

While attacking transatlantic SLOC was a proven tactic of the past two wars and an entirely reasonable strategic concern, in this case the Soviets did not believe they would need to resort to that tactic. The NIE concluded that the Soviets believed a conflict would be short and they could defeat the NATO forces in Central Europe before American reinforcements could arrive via sea, or that the conflict would escalate to nuclear before then. As such, only a few submarines, mainly less capable diesel boats, were allocated to the SLOC mission. While the NIE judged that this plan could change if the conflict unexpectedly became an extended conventional conflict, the standing Soviet naval strategy was to focus on protecting Soviet SSBNs, countering American conventional maritime strike capabilities, and if possible reducing the American SSBN force, not the longstanding concern over Soviet threats to the SLOCs. The previous barrier strategy that the US had embraced appeared to no longer have a strategic impact, or perhaps have succeeded and shifted the realm of conflict. Thus, a new approach was necessary.³⁴¹

Soviet Posture and Capabilities

At the same time, Soviet Naval capabilities were rapidly expanding. The Soviet Navy did build a large number of modern vessels, if not up to US standards, in the 1960s and 1970s, almost all of which were armed with long-range anti-ship cruise missiles.

³⁴⁰ "Central Intelligence Agency National Intelligence Estimate 11-15-82/D. March 1982," 121.

³⁴¹ "Central Intelligence Agency National Intelligence Estimate 11-15-82/D. March 1982," 128.

Entering the 1980s, the Navy began to see an increase in capability, as the Soviet fleet appeared to have hit capacity and started instead investing in better platforms, some of them approaching technical capability of similar US platforms. Notably this included the Akula submarines, as well as their first nuclear supercarrier in the mid-80s. Additionally, Soviet ocean surveillance satellites expanded their capability, thereby providing cueing and offboard targeting to undersea and air sea denial platforms, such as SSGNs and new Backfire land-based bombers.³⁴²

This new Soviet Naval force structure also undermined the previous barrier strategy. Previously, the relatively short-range of Soviet SSBNs required them to operate in forward areas where they were more vulnerable to American ASW forces. The same barrier approach and pre-positioned forces that were intended to stop the tactical submarines supposedly sortieing against the transatlantic SLOCs were also quite effective against the older SSBNs, such as the Yankee class. However, new Delta-III SSBNs were being fielded in numbers and the large Typhoon SSBN was assumed to be entering service by 1984. These larger SSBNs could range targets in the US from their home waters, enabling a Soviet bastion strategy and eliminating any utility of the defense barrier against the Soviet SSBN force.³⁴³

Soviet sea denial forces were also becoming more capable, further undermining the barrier strategy. The Victor III SSN with modern acoustics and quieting was being

³⁴² Lehman, Command of the Seas, 135; Cote, The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines, 61.

³⁴³ Cote, The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines, 65–66.

fielded in numbers, and an even more capable Akula SSN was under development. The new Oscar SSGN was also being fielded with the ability to launch 24 ASCMs with a 300-mile range, posing a new threat to carriers and other high value units. Even though the Navy had now concluded that these forces were not intended for use against the SLOCs, a primary mission did remain neutralizing the ability of American forces to help defend the NATO flanks and threaten to strike at the Soviet flanks. These new platforms were quiet enough that the existing barrier forces might not reliably detect them. With the SOSUS barrier effectiveness reduced, these capable forces could penetrate the GIUK gap and threaten US carrier battle groups. While the Navy did pursue technical solutions to this problem, the near-term solution to mitigate this threat was by eliminating them at the source as discussed in the Maritime Strategy.³⁴⁴

The Navy's Offensive Role – Attack at the Source Redux

In this environment, the first version of Maritime Strategy in 1982 was developed,

and declaring that the "essence of our national strategy is *global forward deterrence*."³⁴⁵ Similarly, Secretary of the Navy John Leman wrote that the US Navy policy at the time was to "ensure use of the seas to carry the fight to the enemy and terminate the war on



Figure 4: Maritime Strategy Overall Concept (Source: 1984 Maritime Strategy, p. 70)

 ³⁴⁴ "Central Intelligence Agency National Intelligence Estimate 11-15-82/D. March 1982," 134–36; Cote, *The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines*, 70–72.
 ³⁴⁵ "Maritime Strategy Presentation (for the Secretary of the Navy, 4 November 1982)," 25.

favorable terms."³⁴⁶ The two quotations sum up the core tenets of the Strategic Concept, namely globally forward operations in peacetime and offensive operations in conflict. This strategy would use sea power to deter in peacetime, but in a crisis or conflict exert pressure on the adversary, escalating horizontally and gaining bargaining leverage to terminate a war on US terms.

What made this Strategic Concept so different than the previous concept was the idea of defeating the Soviet threat to the SLOCs (and CONUS) by "early forward defense."³⁴⁷ While the Maritime Strategy did not totally abandon traditional SLOC defense plans (e.g., convoys), It proposed to do so forward by eliminating threat to vital SLOCs at source. US forces would seize key islands and establish barriers to prevent Soviet attacks on sea lanes, followed by offensive strikes against Soviet sea denial bases once naval forces were able to fight their way into range. As the same time, the vital military and economic flow would be protected by the Naval Control and Protection of Shipping (NCAPS) forces, with global zones convoys and protected lanes. Importantly, while some of these forces were active US navy assets, the escort forces primarily came from the Naval reserves, US Coast Guard, and allied forces.³⁴⁸

As part of this concept, the fleet would quickly transition to forward operations, with goal of "*destruction of the Soviet submarine fleet, as far forward as possible.*"³⁴⁹ This was done by a coordinated ASW campaign, including forward SSN operations, task

³⁴⁶ Lehman, *Command of the Seas*, 126.

³⁴⁷ "Maritime Strategy Presentation (for the Secretary of the Navy, 4 November 1982)," 27.

³⁴⁸ "Maritime Strategy for the 1990s," in *U.S. Naval Strategy in the 1980s*, Naval War College Newport Papers 33 (Newport: Naval War College Press, 2008), 89.

³⁴⁹ "Maritime Strategy for the 1990s," 79.

group operations against area ASW targets, MPRA operations, and mining of chokepoints. Sea lanes would be defended, but not via traditional defense tactics. Instead, the "primary defense would be made well north of the major transoceanic SLOC."³⁵⁰ Or, as the Chief of Naval Operations proposed in the 1986 *Proceedings* article:

Aggressive forward movement of anti-submarine warfare forces, both submarines and maritime patrol aircraft, will force Soviet submarines to retreat into defensive bastions to protect their ballistic missile submarines. This denies the Soviets the option of a massive, early attempt to interdict our sea lines of communication and counters such operations against them that the Soviets undertake.³⁵¹

If these forward operations were successful at eliminating the threat, sea transit lanes

could shift northward to reduce transit time.

While forward offensive operations were a key element of sea lane protection, offensive naval power was also used to generate pressure against the Soviet flanks during the expect land war in central Europe. Forward submarine forces would conduct sea denial and offensive strike operations, pushing Soviet forces onto the defensive while major fleet task forces were generated. Carrier strike forces would blunt the initial attack and once generated use their combined power to support the land war and to strike at the Soviet homeland. At the same time, amphibious operations would be conducted with the goal of "gaining leverage for war termination, securing strategic choke points, or *recovering territory* lost to Soviet attack."³⁵² The restoration of Amphibious Warfare as a primary line of effort was a marked shift, on par with the restoration of Carrier primacy,

³⁵⁰ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," in U.S. Naval Strategy in the 1980s, Naval War College Newport Papers 33 (Newport: Naval War College Press, 2008), 182.

³⁵¹ Watkins, "The Maritime Strategy," 9.

³⁵² "Maritime Strategy for the 1990s," 86.

from the pre-Maritime Strategy doctrine, which downplayed the role of Amphibious Warfare. Addressing criticisms of the futility of amphibious operations in the modern era, a marine Major argued that "a credible amphibious force positioned on the North Flank of the Soviet's Western TVD would threat vital Soviet lines of communication,"³⁵³ divert forces from the central front, and enhance sea control by seizing choke points. As the author argued, if this wasn't a threat, why else would Soviets have coastal defense. Taken together, this concept proposed using Naval forces not just as a supporting element in the ground war, although they certainly would do that to some extent, but to obtain bargaining power and bring the conflict to an end.³⁵⁴

The last element of the Strategic Concept was more controversial, and only made public in the 1986 version, although it appears to have been a hidden part of the plan from the beginning. This was the plan to attack Soviet ballistic missile submarines in their home water bastions. In the *Proceedings* article releasing the Maritime Strategy, Admiral Watkins argued that "maritime force can influence that correlation, both by destroying Soviet ballistic missile submarines and by improving our own nuclear posture."³⁵⁵ The theory was that this action would gain further leverage against the Soviets, by threatening the survivable second strike forces and "by altering the nuclear correlation of forces at sea, the strategy makes escalation less attractive each day."³⁵⁶

³⁵³ Thomas Linn, "Amphibious War: A Misunderstood Capability," Armed Forces Journal International, August 1987, 94.

³⁵⁴ Swartz and Hattendorf, "Maritime Strategy Presentation (for the Secretary of the Navy, 4 November 1982)," 37.

³⁵⁵ Watkins, "The Maritime Strategy," 223.

³⁵⁶ Linton F. Brooks, "The Nuclear Maritime Strategy," U.S. Naval Institute Proceedings 113, no. 4 (April 1987): 34.

While once revealed this was a probably the most criticized³⁵⁷ aspect of the strategy, it was consistent with the Strategic Concept of using US naval superiority to obtain leverage.³⁵⁸

Removing the Obstacles

Lehman made his mark on the establishment, and in no greater way than removing obstacles to the implementation of this strategy. A key bureaucratic battle during this era was within the Navy itself and it is telling that Lehman, much like Zumwalt, was vexed by Rickover. One of the first moves he made, its importance highlighted by being the first chapter in his book, was to forcibly retire Rickover. As Lehman himself put it, "the cult created by Admiral Rickover was itself a major obstacle to recovery, entwining nearly all the issues of culture and policy within the Navy."³⁵⁹ Over time, Rickover had obtained separate power base, using his dual authorities from the Department of the Navy and the Department of Energy to ignore orders from generations of secretaries and CNO's. Additionally, his bureaucratic power was enhanced when he "gained effective control of the assignments, promotions, and destinies of all nuclear-trained officers."³⁶⁰ This included not just submariners, but the prestigious carrier command billets that were the steppingstone to Admiral's rank. While commending Rickover's conservatism for keeping nuclear power safe and effective, Lehman believed that the way in which his conservative policies began to dominate the Navy's entire

 ³⁵⁷ John J. Mearsheimer, "A Strategic Misstep: The Maritime Strategy and Deterrence in Europe," *International Security* 11, no. 2 (1986): 3–57, https://doi.org/10.2307/2538957.
 ³⁵⁸ Watkins, "The Maritime Strategy," 13.

³⁵⁹ Lehman. *Command of the Seas*. 1.

³⁶⁰ Lehman, 23.

shipbuilding enterprise, not just the submarine community, put the Navy at a technological disadvantage. In one of his first moves, he coordinated the dramatic removal of Rickover, including a no-holds-barred final battle in the Oval Office. With Rickover removed, he felt he was able to put Navy shipbuilding and force employment on a better path.

Rickover's removal relieved the greatest internal obstacle to the plan changes, but that doesn't mean that normal it was smooth sailing bureaucratically. The three Navy "tribes" of surface, submarine and air remained, and the Navy built its force investment strategy, or "programmed," on a competitive basis between the three warfare barons. As such, throughout Maritime Strategy era as before, CNO's struggled with bridging over these barons. Even new weapons systems were subject to this normal tension – as an example consider the Tomahawk cruise missile. This weapon system came from Air Force concept and wasn't loved by anyone: submariners saw it as taking away from primary ASW mission; aviators didn't love it because it couldn't carry a pilot; and surface sailors saw it as a distraction from ASW and anti-air warfare (AAW). It initially emerged only nuclear weapon, and after accepted by the fleet as such, the non-nuclear variants that we know now were introduced. Lastly, as one of the authors of the Maritime Strategy noted, even prior to the Strategy doctrinal moment, there was "constant bottomup pressure for a forward offensive strategy by the submarines, who didn't give a damn about the Carter administration...they had a submarine and its job was to go as far forward as possible."³⁶¹ Taken together, it's clear that normal bureaucratic dynamics

³⁶¹ Oral History of Captain Peter M. Swartz, 24.

were at play and the Maritime Strategy had to satisfy multiple bureaucratic players who had their own "rice bowl" to defend.³⁶²

More generally, when Lehman started as Secretary of the Navy, he was dismayed to learn that the Navy bureaucratic apparatus put all policy and strategy decision making under the CNO, not the Secretary. In response he created a Navy Policy Board, with the Assistant SECNAVs, CNO, commandant and their principal assistants to ensure he had influence in this area. Then in August 1983 he held the first Navy Strategy Board, an offsite meeting in Boston, Virginia, subsequently held annually. These retreats included uniformed leadership of the Navy and Marines and civilian leadership of the Department and were valuable in getting priorities in line, without the distractions of day-to-day management. Lehman credits number of innovations to the board, such as elimination of Navy Material Command, PMP system, and establishment of acquisition professional community.³⁶³

Beyond Rickover, Lehman's biggest bureaucratic impact was his suppression of the operational analysis community. For many years, there had been ongoing battle between the strategist community, personified by OP-603, and the operations analysis community, personified by OP-965, the Navy's Long Range Planning branch. OP-965 was a creation of Admiral Zumwalt, and it grew to have significant influence on the Navy's budget. One of Lehman's primary goals was to restore strategy to a preeminent role in the Navy's planning, and not be so tied to what he saw as the overreach of the

³⁶² Lehman, *Command of the Seas*, 164–69; Oral History of Captain Peter M. Swartz, 64.

³⁶³ Lehman, *Command of the Seas*, 240.

systems analysts. Further motivating Lehman was the 1982 Extended Planning Assessment produced by OP-965 stating that the 600-Ship Navy, and with it the Maritime Strategy, was unaffordable, and the Navy should consider more realistic strategies and force structure plans. In response to this, by March 1983 Lehman was able to abolish the entire OP-96 organization, transferring parts of its mission to other OPNAV branches, including OP-603, and retiring its leader.³⁶⁴

There is also evidence of Lehman selecting individuals for key roles that would support his initiatives, a typical indication of civilian intervention. This is very apparent in Lehman's own telling of his efforts to embolden the Navy, since he openly stated that "I had specifically selected Ace Lyons as Second Fleet commander because of the centrality of the Norwegian Sea campaign."³⁶⁵ That being said, Lyons and Lehman had a long history, as Lehman was an active naval reservist who still saw himself as a sailor and had served with Lyons previously. And although Lyons was Lehman's choice for Second Fleet due to his aggressiveness, he embraced an employment strategy that wasn't new, but was the same as the Sea Strike concept championed by Admiral Watkins in the Pacific. And it is worth noting that he was the one who taught Lehman how to operate the Navy, and perhaps not the other way around.³⁶⁶

³⁶⁴ Sebastian Bruns, ed., *Conceptualizing Maritime and Naval Strategy*, The Kiel Seapower Series (Kiel: NOMOS VERLAGSGESELLSCHAFT, 2020), 58–60.

³⁶⁵ Lehman, *Oceans Ventured*, 68.

³⁶⁶ Lehman, 67.

The CNO SSG and the Naval War College

Chief of Naval Operations Admiral Hayward formed the CNO Strategic Studies Group (SSG) in 1981, as part of a broader reorganization of the Naval War College and the creation of the Center for Naval Warfare Studies at the War College. Over its first year, the SSG had discussions at all levels of the Navy, as well as joint partners. Its initial findings aligned with what would become the Maritime Strategy, openly focused on "forward area power projection" and the global conduct of the war. Follow on SSGs expanded the global approach, moving beyond the first SSG's initial deep dive into Norwegian Sea into Southern Europe and Pacific, dealing with Soviet client states, regional strategies, and nuclear deterrence during a conventional conflict over successive years.³⁶⁷

The SSG was a group of six Navy and two Marine officers all at the O5 or O6 level serving one year assignments. It was specifically made up not of strategists, but of line officers just leaving at sea (or field) command in the fleet, considered do have great flag officer potential, with the goal to "give naval officers a chance to think through warfighting issues and go back to the fleet and spread the word."³⁶⁸ By exposing fleet operators to strategic issues, allowing them time to think the issues through, and then getting out and discussing naval strategy with the at the highest level of the fleet

³⁶⁷ Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986, 45–64.

³⁶⁸ "Interview - A Warfighting Perspective," U.S. Naval Institute Proceedings 109, no. 10 (October 1983):
67.

command structure, the SSG served the CNO as an incubator for developing possible flag officers and least formally writing down new ideas.³⁶⁹

The Naval War College, beyond hosting the autonomous SSG, was another organization critical in this doctrinal change with a strong tradition of leading naval change. Early NWC leaders such as Mahan and Luce used the War College to help develop and promulgate their ideas, but by the time of World War I it had largely transformed into a training institution, not worried about theoretic or analytical capabilities. In particularly, the previously robust wargaming efforts had largely atrophied and when the new director of the Center for Naval Warfare Studies arrived, he viewed their wargaming was mainly for training students and set about restoring the wargaming capacity of this organization. As described by a contemporary analyst, the same factors that drove Luce to create the Naval War College encouraged the establishment of Center for Naval Warfare Studies under outgoing Under Secretary of the Navy Robert Murray that provided important wargaming inputs to the development of the Maritime Strategy.³⁷⁰

The new CNWS was focused on naval strategy, using both SSG and separate wargaming efforts to test ideas, as well as the affiliated center for Advanced Research and distribution via the Naval War College Press. As noted above, the SSG maintained a close relationship with fleet elements to ensure free flow of ideas. The Wargaming Center

³⁶⁹ "Interview - A Warfighting Perspective," 74.

³⁷⁰ Floyd Kennedy, "Naval Strategy for the Next Century: Resurgence of the Naval War College as the Center for Strategic Naval Thought," *National Defense* LXVII, no. 387 (April 1983): 28–29; "Interview - A Warfighting Perspective," 74.

developed at NWC was described in the Proceedings rollout as the "most advanced such facility in the world."³⁷¹ As part the movement towards a more influential role, the NWC revised its wargaming charter to work with all the fleets, test real world problems and develop CONOPS. It also worked to build a symbiotic relationship between its wargaming and academic departments, where issues that arose from wargame play could be research by the officers and faculty assigned to the College.³⁷²

The centerpiece of the NWC wargaming efforts was the Global War Games started in 1979, reportedly fallout from Lehman's self-described Black Pearl meeting. By the time the Reagan Administration arrived on the scene ready to change naval doctrine, three Global War Games had been run. These wargames provided insights into this new offensive approach for planning at a global level, as well as offensive force combinations. As an event, the Global War Game typically combined multiple theater scenarios, with air land and maritime activity, over a three-week period. It would include several hundred players, exploring effectiveness of naval forces in a global conflict and analyze different combinations U.S. and allied naval forces in a global war strategy. From these wargames, conducted through the Maritime Strategy period, key insights into the value of forward offensive presence and the importance of taking the initiative early were developed and incorporated into successive iterations of the Maritime Strategy. The NWC ultimately served as a "strategic crucible"³⁷³ for the Maritime Strategy.³⁷⁴

³⁷¹ Watkins, "The Maritime Strategy," 17.

³⁷² Robert S Wood, "The Conceptual Framework for Strategic Development at the Naval War College" 40, no. 2 (1987): 15.

³⁷³ Jim Stavridis, "An Ocean Away," *Shipmate* 48, no. 8 (November 1985): 8.

³⁷⁴ Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986*, 17; Tracy Connors, "Gaming for the World," U.S. Naval Institute Proceedings 110, no. 1 (January 1984): 106.

Pentagon Change Elements

A core element, if small, of the Maritime Strategy development was the OP-603 branch, the strategic concepts group within the OPNAV "Plans, Policy and Operations" Directorate. OP-603 was the home to a small cadre of Navy strategy specialists who functioned as an advocacy network, helping not just develop the maritime strategy but also due to their rotational assignments helping spread the word. As Peter Swartz noted when describing the unclassified publication of the Maritime Strategy, "it was a team effort, by the appropriately educated and experienced community of Navy strategists."³⁷⁵ It was the development of this team and their ability to spread the word via their community and public means that helped build the support for this new doctrine.³⁷⁶

Earlier in the 1970s, the Navy built a cadre of strategists, sending them to graduate education at institutions such as Fletcher, Harvard, and SAIS. These officers had repeated rotations through OP-06, institutional home of the subspecialty community of naval political-military strategic planners. Unlike the SSG, these were generally not line officers fresh from command, but instead had time to rotate repeatedly through OP-06 and similar posts, gaining a detailed understanding of and experience with naval strategy and policy. Lehman credits this small community with keeping the ideas of Sea Plan 2000 alive, even as it failed to gain traction in the Pentagon.³⁷⁷

³⁷⁵ Oral History of Captain Peter M. Swartz, 38.

³⁷⁶ Thomas C Hone and A. Utz Curtis, "History of the Office of the Chief of Naval Operations, 1915-2015" (Washington, D.C: Naval History and Heritage Center, September 22, 2020), 320,

http://public2.nhhcaws.local/research/publications/publications-by-subject/opnav-100.html.

³⁷⁷ Lehman, *Command of the Seas*, 123; Oral History of Captain Peter M. Swartz, 13.

It was to OP-603 that the CNO turned after Reagan opened the door to a more aggressive doctrine. As the Maritime Strategy was a series of documents produced and improved over many years, a series of action officers successively took lead for writing and staffing the report, from LCDR Stanley Weeks to CDR Richard "Mitch" Brown. Their goal was not just to draft a strategic document, but to develop one that would influence the Navy's planning and budgetary process, the byzantine world of the PPBE. As such, the Maritime Strategy was described as "a centralized planning document from which all other detailed planning should flow."³⁷⁸ In late 1982, CNO Admiral Watkins had the OP-603 team brief the Fleet CINCs and then subsequently to the SECNAV. After Lehman approved this initial draft, it was given widely over 1982-1983 to build support and gain feedback. This ongoing effort to socialize the Maritime Strategy to as many levels of the Fleet as possible, combined with the SSG's efforts, helped ensure that the Navy was singing from the same sheet of music.³⁷⁹

Another key influencer of this new doctrine, specifically focused on the Anti-SSBN campaign was an organization known as the Advanced Technology Panel. Not a dedicated organization, but instead a team lead by the VCNO and including four senior admirals, and their direct staff, drawing from the OPNAV organizations responsible for Naval Warfare integration, Submarine Warfare, Program Planning, and Research and Development, this Panel was a key driver in the development of the Anti-SSBN campaign portion of the Maritime Strategy. Due to the highly classified nature of their

³⁷⁸ Stavridis, "An Ocean Away," 8.

³⁷⁹ Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986*, 73; Hone and Curtis, "History of the Office of the Chief of Naval Operations, 1915-2015," 319.

work, even many of the authors³⁸⁰ of the Maritime Strategy were not fully aware of their activities but the OP603 action officers did get input (even if one-way) from the ATP ensuring that the Maritime Strategy aligned with what the ATP was working on. Through the early 1980s, the ATP coordinated a Soviet Strategy Study Group that also contributed to a series of associated wargames and studies. The output of this this incubator was one of the key efforts in shaping the Maritime Strategy, even if the Maritime Strategy authors were not fully read in.³⁸¹

There were additional efforts to expand the advocacy circle beyond the OP603 strategist community. In addition to the normal interactions and briefings part of any organizational structure, there were "Young Turk" lunches hosted by the SECNAV, Navy Discussion Groups hosted by an OPNAV Commander in the 1980s, and a series of CNA and USNI symposia organized on the subject. Additionally, as noted above the SSG served an important role in spreading the word, as its research trips included interactions with fleet levels at multiple levels, and more importantly once their one-year rotational assignment was complete, the SSG members returned to the fleet as Maritime Strategy true believers.³⁸²

Fleet Operations and Organization

To carry out the offensive missions envisioned by this new doctrine, the Navy would rely on its proven carrier and amphibious organizations, while integrating

 ³⁸⁰ As Peter Swartz noted early on, keeping the Maritime Strategy at the more accessible SECRET level was a primary goal of his, thus limiting its ability to explicitly integrate these more sensitive aspects.
 ³⁸¹ Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986, 32–26*; Swartz and Hattendorf, *U.S. Naval Strategy in the 1980s, 2*; Oral History of Captain Peter M. Swartz, 22.
 ³⁸² Swartz and Hattendorf, *U.S. Naval Strategy in the 1980s, 2*; Oral History of Captain Peter M. Swartz, 22.

³⁸² Swartz and Hattendorf, U.S. Naval Strategy in the 1980s, 11.

individual groups into larger task forces in a way that was not evident in recent past plans. The Maritime Strategy fully supported the traditional organization, affirming that "Carrier Battle Groups and Amphibious Forces have been the primary instruments of naval crisis response."³⁸³ But while the basic carrier battle group organization and Composite Warfare Commander (CWC) doctrine was essentially unchanged, the Maritime Strategy would aggregate these forces into multicarrier Task Forces to generate sufficient offensive and defensive firepower for the anticipated battles. Effectively employing multicarrier Task Forces was not something that the Navy had recently planned or thought through, but in this period the fleet began emphasizing exercises with multiple carrier battle groups.³⁸⁴

Supporting the new offensive role of Carrier Battle Groups in the face of Soviet sea denial created a need for new doctrine and tactics beyond just the multi-carrier task forces. First, a key doctrinal element was the "Outer Air Battle" concept, where new technology enabled US carriers to neutralize Soviet long-range bombers before they entered striking range. By using new Navy E-2 radar planes, and eventually USAF E-3 radar planes with embarked Navy liaisons, the fleet could intercept bombers with the new long-range F-14 Tomcats and their longer-range Phoenix missiles, defeating the incoming Soviet Backfires bombers before they could threaten the carriers. Second, as discussed further below, the Atlantic Fleet successfully experimented with using Norwegian fjords to mask the radar signature of Carrier Battle Groups and both Fleets

 ³⁸³ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 161.
 ³⁸⁴ "Maritime Strategy for the 1990s," 74; "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 229.

developed low signature "EMCON" techniques for avoiding Soviet ocean surveillance systems, further complicating the adversary targeting. Lastly, the fleet command structure was revised as both Second and Third Fleets shifted to at sea commands, vice their previous homeported training and defensive role, enabling increased mobility and strike in the Norwegian Sea and Northern Pacific respectively and augmenting the forward deployed Sixth and Seventh Fleets.³⁸⁵

At the same time, while focused on carrier Task Forces as a key element of the force employment, the Maritime Strategy included employment plans for organizing other naval forces. The recently restored battleships were organized into Battleship Groups, while individual Surface Action Groups, Amphibious Ready Groups, and hydrofoil squadrons would all be deployed to individual operational areas. These forward forces would be supported by comprehensive forward based logistics, organized into Underway Replenishment Groups and Advanced Base Functional Components (ABFCs). These employment plans comprehensively organized Navy combat power into a series of building blocks, with only the far forward attack submarines operating independently.³⁸⁶

The forward offensive operations of the submarine forces were a key element of the strategy. It called for what Owen Cote described as the "diversion strategy," where submarines could threaten both the Soviet SSBNs in their home waters and eventually with TLAM-N the Soviet homeland itself, thereby forcing the Soviet navy to devote most

³⁸⁵ D. Hernandez, "The New Third Fleet," *Proceedings* 109, no. 11 (November 1983): 74; James Winnefeld, "Winning the Outer Air Battle," *U.S. Naval Institute Proceedings* 115, no. 8 (August 1989): 37; Lehman, *Oceans Ventured*.

³⁸⁶ "Maritime Strategy for the 1990s," 74; "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 171.

of its capabilities to countering this threat. In peacetime the Navy would continue to push its submarine forces forward, maintaining a continuous threat and learning to operate in the Soviet home waters, while in event of war, all attack submarines would be surged into Soviet bastions, attempting to pick up trail of Soviet SSBNs leaving homeports, to conduct an anti-SSBN ASW campaign. Based on the far forward nature of these operations, Navy strategists assumed other Navy ASW forces MPRA and SOSUS would not be effective, and thus this was primarily a submarine mission. However, even though this was a submarine-only mission, the expected diversion of Soviet forces to meeting this threat, opened a window for the rest of the Navy to surge forward and thus supported the overall Maritime Strategy Employment Concept, in addition to its primary goal of altering the nuclear correlation of forces and gaining leverage for war termination.³⁸⁷

Joint Operations

Joint operations were another key, and often overlooked, element of the Maritime Strategy. In the 1985 version, the authors of the strategy declared that the "Maritime Strategy is based on the concept of *joint and combined operations*."³⁸⁸ Even from the beginning, the application of Naval power was never a Navy only concept. Early plans included the rapid deployment of Army defensive forces, both air defense and infantry, to reinforce the Aleutians, Iceland, and the Azores, along with Marine and Air Force elements deploying to Norway. Other key initiatives during the period included a series of Memoranda of Agreement with other services, documenting the integration of certain

³⁸⁷ Brooks, "The Nuclear Maritime Strategy," 39; Cote, *The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines*, 70–72.

³⁸⁸ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 77.

missions. A September 1982 MOA between the US Navy and the US Air Force documented agreements for Air Force support to airborne offensive mining and sea strike missions. Other examples included a March 1984 MOA with the US Coast Guard establishing Maritime Defense Zones and a July 1984 MOA with the US Army establishing integrated sealift procedures for safe movement of forces to Europe in the event of a conflict. So, while the Maritime Strategy, as a Navy document, is understandably Navy centric, the inclusion of joint forces was an important element of the Employment Concept.³⁸⁹

The US Coast Guard was an important partner that served an important role in the Maritime Strategy. As a separate service this is technically another example of joint operations, but the maritime nature of the Coast Guard makes this integration even deeper. Early in a conflict, key assets such as Coast Guard high endurance cutters would shift to Navy control. But more than individual cutter or units, the Maritime Strategy would have the entire Coast Guard mobilized, with key Coast Guard admirals serving as "Commanders, Maritime Defense Zone Atlantic and Pacific, responsible to Navy Fleet Commanders-in-Chief."³⁹⁰ With Coast Guard officers heads of these Maritime Defense Zones, 200-mile sea zones extending out from the US coast, and reporting to the US Navy's Atlantic and Pacific Fleets, the Coast Guard began growing its competencies in ASW, harbor defense and port security, skills that were not core Coast Guard missions at the time. Thus, a key element of the Employment Concept can be seen as seamless

³⁸⁹ "Maritime Strategy for the 1990s," 65–77; "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 148.

³⁹⁰ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 168.

integration with Coast Guard forces to defend the homeland and augment convoy escorts, freeing up Navy forces to conducting primarily forward operations.³⁹¹

The Navy's Total Force

Like the prominent role given the Coast Guard in the Maritime Strategy, the Naval Reserves is another key, and often under looked, element of the Employment Strategy – possibly given prominence based on Lehman's position. In the event of a conflict or heightened tensions, the Maritime Strategy included the plan that the Navy Reserves would be activated, bringing with them 10 combatants and 18 minesweepers, noted that "timely activation of the reserves is crucial."³⁹² Beyond these combatants and minesweepers, the Reserves provided extra capacity in patrol aircraft squadrons, cargo handling, and combat search and rescue, as well as leading the Naval Control and Protection of Shipping (or convoy escort) mission.³⁹³

For the Reserves to be able to carry out the role assigned in the Maritime Strategy, Secretary of the Navy Lehman, himself a reservist, proposed a set of initiatives called "horizontal integration." This meant equipping the reserves with modern equipment and organized them to directly support active units, compared to the previous reserve organization that was almost entirely separate from the active Navy chain of command. By doing so, Lehman was able to eliminate two active carrier air wings, those assigned to carriers in an extended shipyard period, and replace them with reserve air wings at a significantly lower cost. At the same time, Lehman ensured that 17 frigates and 24

 ³⁹¹ Paul Yost, "The Bright Slash Of Liberty," U.S. Naval Institute Proceedings 115, no. 8 (August 1989): 11.
 ³⁹² "Maritime Strategy for the 1990s," 75.

³⁹³ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 168–217.

minesweepers were eventually assigned to the reserves and Naval air reserves were given modern aircraft.³⁹⁴

As far as why Lehman made such a point of emphasizing the reserves so much, beyond the fact that he was himself a reservist, was a recognition that the Employment Concept required those capabilities resident in the Reserves. Specifically, the Navy Reserve possessed 100% of logistics support squadrons, 100% of light attack helicopter squadrons, 100% of the "brown water" navy, 99% of Naval Control and Protection of Shipping forces, 86% of minesweepers, 86% of cargo handling battalions, 85% of military sealift command personnel, 68% of construction battalion personnel, and 66% of special boat forces, among others. These capabilities, particularly the escort, logistics, sealift, and minesweeping forces were critical enablers for the Employment Concept.³⁹⁵

Exercises and Tactical Development

In the end, the most visible demonstration of the Maritime Strategy's development was not the public discourse, but its aggressive exercises. In Secretary Lehman's view, the exercises were the very centerpiece of the strategy and the way he was communicating to the Soviets (in fact, he wrote an entire book about this). While the Navy had been seriously conducting exercises for almost a century, CNO Watkins concluded that "for too many years, our fleet exercises suffered from a lack of realism and focus, and our routine operations seemed to be lacking in purpose."³⁹⁶ Throughout this era of doctrinal development, exercises were anything but routine. And while they

³⁹⁴ Lehman, *Command of the Seas*, 257.

³⁹⁵ Lehman, 259.

³⁹⁶ Watkins, "The Maritime Strategy," 17.

did serve important roles in demonstrating US resolve, these exercises also proved new Employment Concepts such as tactical deception, integration with other forces, and multi-carrier operations.³⁹⁷

This aggressive exercise and tactical development strategy was in place almost on day one of the Reagan Administration. Lehman, who if you remember hand selected Admiral Lyons for command of Second Fleet, obtained Reagan's permission to revise a standing exercise. Under his direction, Ocean Venture '81 would test out the Maritime Strategy's initial concepts and "in a total departure from previous exercises, Lyons was going to blow right through the NATO Maginot Line of the GIUK Gap with the entire NATO Striking Fleet."³⁹⁸ In this exercise, beyond testing Second Fleet itself as a forward operating organization, the Navy tested a two-carrier battle force operation and conducted a transit for the USS Forrestal Carrier Battle Group under total radio silence, catching the Soviet Navy by surprise. In particular, the adroit use of foul weather, EMCON, and EM decoy ships proved that the Navy could surprise the Soviets and sneak into their own backyard.³⁹⁹

Multicarrier operations and tactical deception would continue to be hallmarks of exercises in this era. NORPAC '82 consisted of a 2-carrier strike exercise off the Aleutians, including an EMCON transit for the largest force in Alaska since WWII. By 1986 operations like this barely seemed notable and that year RIMPAC '86 includes two carrier battle groups, with now familiar EMCON transit. These were essential elements of

³⁹⁷ Oral History of Captain Peter M. Swartz, 29.

³⁹⁸ Lehman, Oceans Ventured, 78.

³⁹⁹ Lehman, *Command of the Seas*, 78.

the Maritime Strategy, which called for forward operations, in the face of adversary defenses, by multiple carrier battle groups. Testing how to minimize detection via EMCON and deception was critical to defeating the Soviet ocean surveillance system, as was understanding how to organize multi-carrier task forces, something the Navy had not realistically done since World War II. These efforts allowed the Maritime Strategy's assumptions to be validated and improved.⁴⁰⁰

Integration with other forces was another key element of the fleet experimentation. Even early exercises such as Ocean Venture '81 tested out new ideas, such as the integration of submarine force into carrier strike force operations and a scheme for eliminating fratricide. Ocean Venture also included Air Force integration, primarily with the use of AWACS aircraft for improved early warning. The Navy learned to embark Navy air controllers on these Air Force planes to improve their ability to talk to Navy fighters. When Admiral Lyons was promoted to Pacific Fleet, he took what he learned in the Atlantic with him and used Third Fleet much like Second Fleet, as his primary striking force. He began integrating USAF F-15s, AWACS, KC-10 tankers, and B-52 bombers into routine fleet operations, leveraging his experiences as early as Ocean Venture.⁴⁰¹

Cold weather operations were another area where the fleet began to learn. Early Pacific and Northern Atlantic exercises exposed the Navy to the initial challenges of near arctic operations. As the initial lessons were incorporated, more advanced events such as

⁴⁰⁰ Lehman, *Oceans Ventured*, 111; Lehman, 187.

⁴⁰¹ Lehman, *Oceans Ventured*, 81; Lehman, 174.

Anchor Express in 1986 tested cold weather winter ops in Norway, learning to mitigate the effects of cold weather on complex machine. At the same time, the submarine force continued with ICEXes to test tactics and equipment in that challenging environment, and at the same time conveniently remind the Soviets that US SSNs could operate near their arctic SSBN bastions.⁴⁰²

Another advanced concept developed and tested via fleet exercises was the use of Fjords for tactical advantage in Ocean Safari '85 and Northern Wedding '86. These experiments relied on new tactical ideas coming from SSG and new technology coming online, particularly in the areas of radar and long-range missiles, and saw the first use of Norwegian fjords as carrier havens and radar shadow zones. The new 2nd Fleet commander, Admiral Mustin, had studied German use of fjords to defend their battleships from English attack and took *USS America* into the Vestfjord, dashing across the Atlantic at flank speed. The *America* entered a Fjord sanitized by an American attack sub and subsequently sealed with Captor mines. Once inside this safe zone, due to this use of the steep fjord walls, Soviet Backfire long-range bombers were unable to target the US carrier without coming in range of its escorts anti-air weapons, thereby mitigating the long-range strike advantage of cruise missile carrying bombers. The US repeated these exercises in subsequent years with more operations in the Norwegian fjords and multiple amphibious landings in Northern Europe.⁴⁰³

⁴⁰² Lehman, *Oceans Ventured*, 112; Lehman, 180.

⁴⁰³ Lehman, Oceans Ventured, 169–94.

The combined effect of these exercises and experimentations was to prove the initial concepts of the Maritime Strategy, namely that the Navy could operate far forward in the face of the enemy and improve upon the initial Employment Concept with inclusion of elements ranging from Air Force integration to the use of Fjords as carrier havens. As such, the major exercises of the 1980s were "essential tactical development and training evolutions."⁴⁰⁴ With these large exercises, the fleet was able to engage in learning behavior. And at the same time, the fleet empowered in several other doctrinal innovation organizations. Early on Admiral Hayward started process for creation of Tactical Training Groups in each fleet for experimentation. And copying the submarine training model, naval aviation created "Strike University" to improve air-to-ground tactics, improving the ability of the fleet to influence events on shore as the Maritime Strategy demanded. And lastly, experimentation was occurring not just in the fleet but also in wargaming, particularly at the NWC, as described in the incubator section.⁴⁰⁵

Navy Deployment Patterns

Throughout this period, the Navy was organized in roughly the same manner it had been for the majority of the Cold War, with two forward deployed fleets, the Sixth in the Mediterranean and the Seventh in the Western Pacific, and two additional homebased fleets, the Second in the Atlantic and the Third in the Pacific. The forward deployed fleets had relatively few, if any, permanent forces, instead relying on the forward rotational deployments by homeported carrier battle groups, amphibious ready groups,

⁴⁰⁴ Lehman, 88.

⁴⁰⁵ Lehman, 88–92.

and individual submarines and other assets. What may have been new was the use of the Second and Third fleets not just as "force generator" for the deployed hubs in the Mediterranean and Western Pacific, but the employment of these numbered fleets as warfighting organizations. This operational role was reflected not just in the plans, but in actual execution of exercises such as Ocean Venture in 1981, where Second Fleet embraced its role as NATO's Atlantic Striking Fleet, and commanded multiple carriers and other forces operating in the North Atlantic and Norwegian Sea.⁴⁰⁶

In peacetime, barring exercises like the above, this Deployment Concept meant the continued permanent presence of ARGs, CVBGs, SSN and SAGs in the Middle East, Atlantic, Mediterranean and Western Pacific. Deployment patterns demonstrated the continuous presence of at least one deployed carrier battle group in the Sixth Fleet theater and 2 deployed in the Seventh Fleet theater (which included the Persian Gulf area). Second Fleet had six carrier strike groups, some of which would be operational in the North Atlantic, and Third had five carrier strike groups – both these numbers included ships in overhaul, as opposed to the deployed numbers for Sixth and Seventh fleets. The specific laydown is summarized in the table in the graphic below.⁴⁰⁷

⁴⁰⁶ Lehman, *Command of the Seas*, 139–45; Donald Chipman, "Rethinking Forward Strategy and the Distant Blockade," *Armed Forces Journal International*, August 1987, 82.

⁴⁰⁷ John Lehman, "The 600-Ship Navy," U.S. Naval Institute Proceedings 112, no. 1 (January 1986): 34, https://www.usni.org/magazines/proceedings/1986/january-supplement/600-ship-navy.



PEACETIME PRESENCE—ACTIVE USN/USMC FORCES

Figure 5: Naval Forward Presence as depicted in the Maritime Strategy⁴⁰⁸

The Persian Gulf presence called for above was one of the new elements in the Maritime Strategy Deployment Concept. US naval forces operating in the Persian Gulf was by itself not new, as the US Pacific Fleet began taking interest in the Middle East in immediate post-WWII power vacuum and in 1951 the Navy designated a Middle East Task Force to be commanded by a Rear Admiral. However, actual naval forces in the theater were minimal, largely consisting of secondary forces – as an example the flagship for many years was a former seaplane tender. This changed with the 1973 Arab-Israeli War and subsequent oil boycott, starting intermittent carrier battle group deployments to

⁴⁰⁸ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 156.

the region, and accelerated with the 1979 Iranian Revolution and hostage crisis. The result of this was to create a third, or perhaps second-and-a-half, deployment hub in the Persian Gulf and Indian Ocean, where US naval forces spent the 1980s increasingly engaging in low-level combat operations against Iranian forces, while competing with growing Soviet naval forces.⁴⁰⁹

The fielding of Maritime Prepositioning Ships (MPS) was another notable change in the Deployment Concept, as the 1985 Maritime Strategy stated that "rapidly deployable, prepositioned equipment above the Maritime Prepositioning Ships (MPS) and other pre-positioned ships is an important ingredient in our forward strategy."⁴¹⁰ One MPS squadron was based in the Eastern Atlantic by 1985 and a second MPS squadron was being established in the Indian Ocean, based out of the British territory of Diego Garcia, to relieve an interim afloat staging solution using several retired ships. A third MPS squadron was planned for Guam, but its implementation was far enough in the future it was not included in the Maritime Strategy plans. These MPS squadrons were an innovative attempt to provide more affordable sealift capacity than the limited ARG deployments that only carried a single Marine Amphibious Unit (essentially a reinforced battalion). By prepositioning equipment onboard forward based ships, the Navy developed the ability to move equipment to debarkation sites on short notice where they could mate up with personnel, being easier to transport than equipment, and support the rapid offensive vision envisioned by the Maritime Strategy.⁴¹¹

⁴⁰⁹ Lehman, *Command of the Seas*, 387.

⁴¹⁰ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 167.

⁴¹¹ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 167–68.

The forward presence required by the Strategy was coordinated by a new "FLEXOPS" deployment pattern. The Navy felt that deployments had fallen into a rigid deployment pattern that was burning readiness with little return on that investment. Thus, the FLEXOPS plan called for a more flexible deployment pattern with more liberty ports, both to improve quality of life and for partnership building, and more focused efforts vice a mechanical deployment schedule. This change to the Deployment Concept allowed naval commanders to restructure their peacetime deployment, allowing for multicarrier and amphibious operations and reducing time out of homeport for personnel. While it is not clear how much it changed deployments at a force-level, since the continuous deployments to the same deployment hubs continued, it does seem that the deployments internally were made a little more flexible and consisted of less time sitting "on station." The number of port visits and large exercises certainly increased and it seems reasonable that it was enabled by a less rigid deployment pattern.⁴¹²

Force Design and Procurement

The main driver of overall force structure appears to have been the number of Carrier Battle Groups. As early as 1982, the writers of the Maritime Strategy identified that aggregating COCOM requirements would lead to a force structure of 22 Carrier Battle Groups, while the US only had 13 carrier battle groups, and of them only 11 could be available day to day due to maintenance and operational cycle requirements.⁴¹³

⁴¹² "Maritime Strategy for the 1990s," 54; Lehman, *Command of the Seas*, 390.

⁴¹³ "Maritime Strategy Presentation (for the Secretary of the Navy, 4 November 1982)," 29.

Combined with other required ships, Secretary of the Navy Lehman writes that the 600-

ship Navy would "... add up to the following:

- Fifteen carrier battle groups
- Four battleship surface action groups
- One-hundred attack submarines
- An adequate number of ballistic missile submarines
- Lift for the assault echelons of a Marine amphibious force and a Marine amphibious brigade

When escort, mine warfare, auxiliary, and replenishment units are considered, about 600

ships emerge from this accounting—a force that can be described as prudent."414

The basis of this force structure is described in the Figure 6. Although focused on

major combatants (Carriers and Battleships) along with their Underway Replenishment Groups and leaving out submarines and amphibious ships altogether, this table from the 1986 *Proceedings* article shows both the peacetime and wartime requirements for these assets. Tying force structure not just

	PEACETIME MARITIME STRATEGY	WARTIME MARITIME STRATEGY
	Sixth Fleet	
CVBG	1.3	4
BBSAG	.3	1
URG	1	2
	Second Fleet*	
CVBG	6.7	4
BBSAG	1.7	1
URG	4	3
	Seventh Fleet*	
CVBG	2	5
BBSAG	.5	2
URG	1	4
	Third Fleet*	
CVBG	5	2
BBSAG	1.5	_
URG	4	1

Table 12: Contemporary Navy Force Requirements

"600 Ship Navy", Newport 33, p 251

• Includes indian Ocean forces
Note: CVBG = carrier battle group; BBSAG = battleship surface action group; URG = underway replenishment group.

to the wartime plan, but also the peacetime forward presence mission (where there is a need to balance readiness, maintenance, and training time along with deployment),

⁴¹⁴ Lehman, "The 600-Ship Navy," 35–36.
clearly demonstrates the basis of the desired battle fleet – and from it the 600-ship Navy is derived.

To develop the force structure called for the Maritime Strategy, the Reagan administration embarked on an ambitious shipbuilding program, ramping up hot production lines of large naval combatants. While the Carter admin had tried to move towards a smaller, non-nuclear Aircraft Carrier, known as the CVV⁴¹⁵, the Maritime Strategy strongly endorsed more large *Nimitz* class carriers. Secretary Lehman himself supported large Aircraft Carriers and had prior to his service as Secretary of the Navy, due to the speed, endurance, larger deck area, and sortie rate that only a large carrier could supply. At the same time, the Navy designed new multifunction LHD (successor to the LHA) along with a new landing craft air cushion (LCAC) for offshore, rapid amphibious capability. Beyond the combatants, during this period the Navy embarked on a major building program for support ships and strategic sealift. This included fast logistic ships to carry armored forces from the US as well as an expanded system of prepositioning ships, able to support three marine brigades.⁴¹⁶

The actual procurement of ships during the decade prior and the period of the Maritime Strategy is shown below. Among some of the key findings by ship type is that the procurement of small ships, specifically the *Oliver Hazard Perry*-class Frigate and Hydrofoil patrol boats dominated numbers in the 1970s, while larger combatants including Carriers, Cruisers and Amphibious warfare ships dominated the 1980s. On two

⁴¹⁵ While on paper the Carter administration endorsed the CVV, in practice the Hill still forced them to procure more Nimitz-class Aircraft Carriers.

⁴¹⁶ Lehman, *Command of the Seas*, 173–81.

occasions, the Navy actually purchased two large supercarriers in one year – although admittedly that was for contracting and financial benefit, and actual construction appears spread out over several years. It is also important to note once again the long lead time associated with naval platforms. The lead ship of the Ticonderaga-class Cruiser, the first Aegis platform, was purchased in 1978 but not in service until 1983. So, while the Maritime Strategy is notable for its procurement of these platforms, particularly in multiple numbers a year, the idea of *Ticonderaga* itself was not groundbreaking just the numbers.

Table 13: Ship Procurement, 1975-1987						
	1975-1980		1981-1987			
SSN	12	12%	17	17%		
SSBN	7	7%	4	4%		
Carrier	1	1%	3	3%		
Cruiser	3	3%	17	17%		
Destroyer	12	12%	1	1%		
Escort	38	37%	13	13%		
Amphib	0	0%	10	10%		
Patrol	5	5%	0	0%		
Minesweeper	0	0%	12	12%		
Auxiliary	24	24%	26	25%		
	102		103			

Table 12. Shin Dreamont 1075 1097417

There is a significant uptick in Carrier, Cruiser and Amphib procurement, both as absolute numbers and as percentage of overall shipbuilding, along with somewhat

⁴¹⁷ Polmar, *The Ships and Aircraft of the U.S. Fleet*, 638–41.

surprisingly minesweeper procurement.⁴¹⁸ Escort procurements drop significantly, and only remain as high as they are due to the end of the delivery of the *Oliver Hazard Perry*class that got its start under Zumwalt as the Patrol Frigate program. The short-lived patrol craft procurement also comes to an end. Submarine numbers remain relatively consistent, and while they pick up somewhat and SSBN numbers drop slightly, that also can be explained by transition between programs and major shipbuilding problems as the submarine yard.⁴¹⁹ Lastly, and possibly most importantly, the numbers of ship procured through these two periods is about the same. What changed was the type of ships that were procured, as the force emphasized procurement of capital assets over the smaller frigate and patrol craft that helped drive numbers up in the pre-Maritime Strategy era.

While overall ship procurement numbers as shown above remained somewhat consistent, there were some force structure changes not reflected in the battle force procurement numbers. Specifically, the Navy invested in new sealift and prepositioning ships that in some cases didn't count as battle force auxiliaries, particularly those that were converted from civilian use instead of being purpose built. And most famously, the four *Iowa*-class battleships were restored to service, modernized with Tomahawk missiles.

⁴¹⁸ In addition to the long lead time characteristic of naval ship production, generational replacements of entire capabilities is also one. The case of minesweepers demonstrate how investment can be driven by class obsolescence as much as strategic need.

⁴¹⁹ As discussed in *Running Critical*, Lehman withheld SSN buys to punish Electric Boat, which was in the throes of a major scandal, one that resulted in the eventual conviction of its CEO for fraud.

	1976		1986	-	Change
Carriers	13	2%	14	2%	1
Large Surface Combatant	125	23%	104	18%	-21
Small Surface Combatant	77	14%	119	20%	42
Tactical Submarine	74	14%	101	17%	27
Strategic Submarine	41	8%	39	7%	-2
Amphibious	65	12%	58	10%	-7
Auxiliary	116	22%	127	22%	11
Mine Warfare	25	5%	21	4%	-4
Total	536		583		47

Table 14: US Navy Force Structure, 1976-1986⁴²⁰

At the same time and despite the reactivation and procurement of capital assets, as shown in Table 13 overall fleet force mix actual drifted towards a more balanced fleet. This was primarily due to the lagging fielding of frigates purchased in the last decade and the retirement of aging fleet assets. But as a combined result of all the fleet changes, in the end carrier numbers went up by only one, even if less capable *Essex*-class (WWIIera) carriers were replaced by *Nimitz*-class super carriers and aging WWII era cruisers and destroyers were replaced by much more capable *Ticonderoga*-class Aegis cruisers. Similarly, although numbers of amphibious ships dropped, the aging and smaller ships were being replaced by large amphibious transport docks and the new LHD amphibious assault ship which was roughly the size of many other nations' aircraft carriers. And even the *Oliver Hazard Perry*-class frigates that began fielding in the 1970s were much more capable than previous frigates and other escort ships, with 2 embarked helicopters, Harpoon cruise missiles and a Standard air defense missile launcher.

⁴²⁰ "US Ship Force Levels."

The Bureaucracy's Response

Just as the Navy had to balance internal bureaucratic politics, interservice politics was not gone. At least some of the Navy's reasons for championing the Maritime Strategy, and earlier efforts such as Sea Strike, were because the 1970s strategy placed the Navy in a subordinate position and these strategic moves elevated sea power to an independent element supporting the national strategy. The Army and some of the Air Force consistently hated the Maritime Strategy, seeing it as a bureaucratic play for more resources. There were public responses to the Maritime Strategy from active members of these services, including an Air Force colonel opining in Proceedings in 1983 about the value of land based air assets in sea control when facing an adversary whose fleet was built around destroying aircraft carriers.⁴²¹ Similarly, following the public rollout of the Strategy, an Army major responded in Proceedings that "the Navy has not told Army and Air Force officers how it intends to fight, operationally and tactically in support of its airland campaigns and the overall theater campaign plan."⁴²² Clearly he did not see an independent role of the Navy. In another anecdote, the Navy tried to include Army and Air Force pictures in the 1986 Proceedings article and while the Air Force provided tanker pictures, the Army refused any cooperation, not allowing the desired inclusion of pictures of missile defense batteries. These interservice concerns went both ways, as Navy admirals were worried about the Air Force's prominent presence in the strategy,

⁴²¹ Thomas Wilkerson, "Two If By Sea," U.S. Naval Institute Proceedings 109, no. 11 (November 1983): 34– 40.

⁴²² Glenn Harned, "The Maritime Strategy," U.S. Naval Institute Proceedings 112, no. 2 (February 1986):
26.

and there are anecdotes where they attacked drafters of strategy for including the Navy's joint partners.⁴²³

And it was not just other services that the Navy had to battle in this doctrinal change. Lehman notes that the most threatening interservice threat came from the OSD/JCS bureaucracy, not the Air Force or Army. Reformers in these organizations liked small cheap ships, harkening back to Zumwalt's fleet architecture in Project Sixty. The Maritime Strategy came to different conclusions in its Fleet Architecture Concept, leading to lots of bureaucratic battles, particularly with the systems analysts in the Pentagon. Congressional critics additionally weighed in, including a key analyst at the Congressional Research Service who publicly challenged the Navy with 20 questions about the feasibility of the Maritime Strategy in the pages of Proceedings, again desiring more of a supporting role for the Navy in line with the pre-Maritime Strategy doctrine. These players resisted the development and implementation of the Maritime Strategy.⁴²⁴

The Strategy Goes Public

Lastly, one of the elements that made the Maritime Strategy era unique, was its emphasis on public discourse. While the early versions of the Maritime Strategy were classified, in 1986 an unclassified version was released in a special series of proceedings. This unclassified version grew out of need to "sell" the maritime strategy. At a May 1985 Naval War College conference, rising academic star Professor John Mearsheimer was

⁴²³ Wilkerson, "Two If By Sea"; Oral History of Captain Peter M. Swartz, 21–33; Harned, "The Maritime Strategy."

⁴²⁴ John M Collins, "The Maritime Strategy," U.S. Naval Institute Proceedings 112, no. 3 (March 1986): 18– 22; Lehman, Command of the Seas, 146–49.

highly critical of the strategy. CAPT Linton Brooks of the CNO Staff was in attendance, and he encouraged CNO Admiral Watkins to release an unclassified version to rebut Mearsheimer's remarks. In parallel, a Marine major (and Maritime Strategy "insider") published a September 1985 proceedings article, explaining the Maritime Strategy. Subsequently, and following a series of hearings on the 600-ship Navy, the Navy published a four-part series in Proceedings, with articles by the CNO, SECNAV, CMC and summary of the debate by Peter Swartz, one of the primary authors of the Maritime Strategy and at the time on the Navy Secretariat staff.⁴²⁵

This was all facilitated by *Proceedings*, an independently produced venue for Naval and maritime debates published by non-profit U.S. Naval Institute, which got its start in the Mahanian Era. The *Proceedings* Editor, Fred Rainbow, orchestrated a heated debate of the Maritime Strategy on the pages of Proceedings, starting with the special January 1986 issue unveiling the unclassified strategy to the world. He claims *Proceedings* wasn't just one-sided Navy propaganda and that he published a series of responses by John M. Collins from the Library of Congress who challenged the strategy, among others. And he said he personally saw value in getting the message out to the fleet operators, who don't normally get exposed to these doctrinal debates.⁴²⁶

The public debate expanded beyond the Navy-centric *Proceedings* and into the pages of *International Security*, a prestigious academic journal. Continuing the debate started the year earlier at the Navy War College, CAPT Linton Brooks defended the

⁴²⁵ Swartz and Hattendorf, U.S. Naval Strategy in the 1980s, 205.

⁴²⁶ Charles Clark, "In Person - Fred H. Rainbow," *National Journal* 19, no. 8 (February 21, 1987): 435.

strategy in the article "Naval Power and National Security: The Case for the Maritime Strategy." Once again, Professor John Mearsheimer stood against the Strategy, authoring "A Strategic Misstep: The Maritime Strategy and Deterrence in Europe" arguing that it risked unnecessary escalation. These pair of articles, both appear in the Fall 1986 edition of the journal took the strategy into public, academic circles.⁴²⁷

Doctrinal Concepts of the Maritime Strategy

The Maritime Strategy marked the end of a shift in the doctrinal concepts of the Navy from the earlier defensive doctrine, with the only major continuity to the prior doctrine being within the deployment concept, which although different remained roughly consistent with previous deployment concepts. In the Strategic, Employment and Fleet Architecture Concepts, major shifts are evident as the Navy reoriented from a more defensive posture serving as an enabler of joint victory to an offensive posture where naval power would serve an independent role in conflict.

⁴²⁷ Linton F. Brooks, "Naval Power and National Security: The Case for the Maritime Strategy," *International Security* 11, no. 2 (1986): 58–88, https://doi.org/10.2307/2538958; Mearsheimer, "A Strategic Misstep."

	Pre-Maritime Strategy	Maritime Strategy
Strategic	Primarily defense/support of	Offensive strategy
Concept	ground war	 Defeat Soviet forces forward
1	 Sea Control of SLOCs 	 Exert pressure on Soviet flanks
	 Strategic Deterrence 	 Threaten Soviet SSBN force
	 Sealift 	
Employment	Sea control and presence	Integrated forward operations
Concept	 Composite Warfare 	 Multicarrier operations
	Commander concept	 EMCON and tactical deception
	 CV (vice strike and ASW) 	 Far Forward Anti-SSBN
	carrier groups	campaign
	 Barrier strategy (GIUK gap) 	 Joint/Reserve/USCG
		integration
Deployment	Combat Credible Forward	Combat Credible Forward
Concept	Presence	Presence
	2 deployment hubs	 Third Deployment Hub
	 Added Forward based ships 	 Pre Positioning Ships
		 Forward Presence as a
		deterrent mission
Fleet	High-low Mix	Balanced fleet
Architecture	 Continued traditional fleet 	 Endorsement of large carriers
Concept	units	 Major expansion in fleet size
	 Sea Control Ship 	 New submarine, amphib and
	 Escort Frigate 	cruiser developments
	 Hydrofoil 	 Major additional weapons
		systems (F-14, Tomahawk)

Table 15: 1980s Doctrinal Change Comparison

Strategic Concept

The Strategic Concept of the Maritime Strategy was unashamedly offensive, rejecting the defensive mindset of the previous navy doctrine, exemplified in capstone documents such as Project Sixty. In many ways similar to initial post-WWII strategy of Admiral Forrest Sherman, the Maritime Strategy was a renewed call for the aggressive use of sea power against the flanks for Soviet state, striking Soviet sea denial capabilities at their source and obtaining sea control in Soviet waters to enable sustained power projection against the soviet state.



Figure 6: Phase III Naval Ops⁴²⁸

The first 1982 draft of Maritime Strategy stressed the importance of pre-hostilities surveillance operations, early deployment of supporting ground forces, and early deployment of SSNs to forward barriers. This offensive strategy would "carry fight to enemy" with pressure on the Soviet flanks and attacks on Norway, Jutland, Korea, and Kuriles. US attack submarines would operate in "far forward positions, including the Arctic, deep into the Soviet sea control and se denial areas."⁴²⁹ As part of this, the US submarines would explicitly target the Soviet SSBN force. Carrier battle forces would thrust as far forward as possible to defeat and wear down the Soviet air threat, supported by land-based tactical air from Allied flanks. Because of the striking power of Soviet sea

 ⁴²⁸ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 185–86.
 ⁴²⁹ "Maritime Strategy for the 1990s," 74.

denial forces, and particularly their tactical nuclear advantage, strategists felt that the US would be at a disadvantage as the conflict escalated and thus there was a premium on neutralizing Soviet antiship platforms early in the war before any escalation occurred. After US naval forces established local sea control in the forward contested areas, the naval campaign would culminate in heavy strikes on Soviet territory itself. Forward presence was key to making this happen, both to shape the battle space before conflict but just as importantly to ensure that offensive power was able to be brought to bear quickly.⁴³⁰

This was a clear change from the doctrine of the past decade, moving away from the more defensive posture of the past. Instead of a strategic role for the Navy that primarily enabled and supported the ground war in Europe, the Maritime Strategy championed the offensive use of seapower, both to eliminate the adversary maritime capabilities at the source but also to use sea power to horizontally escalate and directly affect the outcome of the conflict.

Employment Concept

The Maritime Strategy explicitly called for offensive action via integrated maritime power. It was primarily focused on forward submarine operations and carrier and amphibious group employment but also included joint operations with Army and Marine Corps forces securing key islands, Air Force bombers augmenting strike operations, and support from lesser-included elements such as Coast Guard cutters and

⁴³⁰ "Maritime Strategy Presentation (for the Secretary of the Navy, 4 November 1982)"; "Maritime Strategy for the 1990s," 80–85; Brooks, "The Nuclear Maritime Strategy," 37.

Naval Reserve forces. Carrier operations were heavily emphasized, with 3-4 carrier battle groups operating as a task force in the Norwegian Sea, plus similar forces in the Northwest Pacific. The key elements of the Employment Concept were forward offensive strike operations, forward ASW, emissions control and tactical deception, multicarrier force employment, integration with joint forces, and use of Naval reserves and Coast Guard forces.

This Employment Concept is a clear change from the earlier Navy plans for a more defensive posture, emphasizing control of the trans-Atlantic SLOCs to enable the safe transport of ground forces to the European theater – the primary line of effort per US national strategy. The emphasis on carrier strike groups as the primary element of Naval power was consistent, but that was about it. Gone was the barrier strategy and even the defensive focus of the early Composite Warfare Commander concept. Instead new tactical concepts, such as the Outer Air Battle and tactical deception, were developed to allow the US carriers to operate well inside the Soviet anti-ship strike range. Combined with a whole of defense approach, utilizing ground forces to seize key elements of maritime terrain, integration with other services, and utilization of other maritime forces, this Employment Concept promised that forward offensive operations were possible and effective in the modern era.

Deployment Concept

The Maritime Strategy's Deployment Concept was consistent with long-standing US Navy emphasis on combat credible forward presence with rotational deployment of capital formations to a number of deployment hubs, with some changes mostly on the

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margins. There was the addition of a third (at times) deployment hub in the Middle East starting with the 1979 Iranian hostage crisis, although the strategy was primarily focused on the primary hubs of Europe and the Western Pacific. Secretary of the Navy Lehman claims that the Navy developed a new "FLEXOPS" deployment strategy moving away from predictable deployment routines to a more flexible construct, but it's admittedly unclear in practice what that meant, as deployments continued largely to the same areas. As significant as the continuity in Deployment Concepts, was the Maritime Strategy's endorsement of forward presence and invocation of forward presence as a key element of deterrence not just in a crisis but for day-to-day deterrence activities.⁴³¹

The Maritime Strategy Deployment Concept emphasized forward operations as a key tenet, not just in wartime but also in peace. This was in line with NSDD-32 and the 1984 version of the Maritime Strategy asserted that "the Navy serves the U.S. Government across the entire range of conflict...the Navy's peacetime presence is constant and worldwide."⁴³² This role of forward deployments was further amplified by in the 1985 version which stated that the "objectives of peacetime operations are enhancing deterrence, supporting the diplomatic objectives of the U.S., and sustaining high readiness and rapid response capability of the overall strategy."⁴³³ This core tenet of forward operations was consistent through the multiple version of the Maritime Strategy both to ensure readiness but also to deter and facilitate crisis response. It was further described in the public version of the 1986 Maritime Strategy as a case of train as you

⁴³¹ Swartz, "Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002."

⁴³² "Maritime Strategy for the 1990s," 48.

⁴³³ "The Maritime Strategy: Global Maritime Elements for U.S. Naval Strategy, 1985," 155.

fight, in that the Navy deployed in peacetime just as it would in wartime, just at a lower intensity.⁴³⁴

Fleet Architecture Concept

While the 600-Ship Navy is known for its big-ticket items such as carriers, the force that emerged during this period was a relatively balanced fleet, with a large number of small combatants and auxiliaries. However, it is true that in this period the Navy did invest heavily in large platforms such as Carriers and Cruisers and the balanced fleet emerged as much as from the decisions to procure large numbers of escorts in the earlier eras as it did from the Maritime Strategy direction. At the same time, even as the Maritime Strategy emphasized offensive fleet units, relatively few brand-new platforms were fielded. Instead, the minimal investments in these platforms during earlier periods, even if not procured in large numbers, ensured that the *Nimitz* Carrier, *Ticonderoga* Cruiser and other weapons systems such as the F-14 were ready for production when the demand ramped up.

The 1980s saw a renewed investment in capital fleet assets at the expense of smaller combatants, while individual combatants, whether large or small became more capable. Although the fleet became more balanced as a result of the lagging fielding of escort vessels initially procured in the 1970s, at the same time the Navy was trying to rebalance its forces to field more offensive capabilities, via large *Nimitz*-class Aircraft Carriers and other similar platforms, reflecting the overall intent of the Maritime Strategy.

⁴³⁴ "Maritime Strategy for the 1990s," 55; Lehman, "The 600-Ship Navy," 35.

Drivers of Change

Given the change in doctrine described above that shifted the Navy from its previously more defensive posture, into the unabashedly offensive and forward doctrine, the key question is why and how this change occurred. The section below tests the six hypotheses against the available evidence. In all cases, there is at least some evidence for each of the hypotheses. However, there is stronger evidence for some of these hypotheses over the others and in some cases a hypothesis may explain why a change occurred, but not how the eventual final product emerged.

Adversary Strategy

While the Soviets remained the enemy and the correlation of forces did not immediately change appreciably, the change in Strategic Concept was at least largely driven by the realization that the long-standing concern over threats to transatlantic SLOCs by the Soviet Navy was not an immediate goal of the USSR, as documented in the NIE. This realization eliminated the threat that so motivated Zumwalt and the more defensive strategies of the 1970s and cleared the way for a more aggressive strategy. At the same time, changing Soviet capabilities threatened to undermine the utility of Naval forces in a more defensive strategy. The combination of new understanding of Soviet strategy and fielding of new Soviet capabilities helped lead to the search for a new strategy.

This assessment of Soviet strategy was reflected in the Maritime Strategy, and the Strategy explicitly cites the NIE. The 1984 version similarly concludes that although any war with the USSR would be global, for the Soviet Navy it would be focused on Strategic

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Strike and Sea Denial out to 2000km and relatively little SLOC interdiction. Furthermore, the Soviet threat was judged to be primarily air and subsurface, except in local areas, despite the Soviet investment in more capable surface platforms and initial aircraft carrier operations.⁴³⁵

Thus, there is strong evidence that Soviet changes in strategy and capabilities caused the Navy to reassess its strategy. The strategy built around stopping Soviet SLOC attacks was no longer relevant if that was no longer their primary mission and improved capabilities eliminated the efficacy of the previous barrier strategy. That said, changes in understanding of adversary strategy don't necessarily explain how the Maritime Strategy became the Navy's doctrine. Adversary changes necessitated adjustments, but an offensive strategy was likely not the only option. Other variables will have to explain how this happened.

Domestic Politics and Budget

Clearly, it is impossible to ignore the influences of the Reagan's Administration's political goals and the rising defense budget he championed on the emergence of this new strategy. After all, Reagan's 600-ship Navy was a key element in his national security platform as a candidate and he campaigned on reversing the reduction in defense expenditures of the 1970s. While there was much continuity with doctrinal developments that began during the earlier Carter Administration, clearly domestic politics played a role and it is hard to see the Maritime Strategy emerging in its eventual form under a second Carter term. While the Reagan Administration may have only accelerated a shift

⁴³⁵ "Maritime Strategy for the 1990s," 60.

begun earlier leveraging the groundwork of the 1970s, the Administration clearly saw their strategy as a break with the past in its aggressive scope and national strategy to confront communism.⁴³⁶

In the end, it seems clear that there is a strong causal relationship between domestic politics and the emergence of the Maritime Strategy. It's unlikely that the more offensive, escalatory aspects of the doctrine would have been acceptable without the strategic direction set by the Reagan Administration and the resources that were made available to the Navy made this strategy executable. Without both of these, the Maritime Strategy would not have been what we know it as. That being said, domestic politics and budgetary largesse don't necessarily explain the exact form of what emerged, just that they provided the opening for the Maritime Strategy. As such, this variable can explain why a doctrinal change occurred, but not how the doctrine changed.

Bureaucratic Politics

Bureaucratic politics were certainly present in the development of the Maritime Strategy, both interservice, intraservice and more broadly between the Navy and DoD. Given the hugely bureaucratic nature of the defense establishment and the multiple competing viewpoints that should hardly be surprising. However, while an influence, interservice and intraservice dynamics do not appear to be a key driver of the new doctrine. Certainly, there were some snide comments over the Navy's grandiose ambitions and individual warfare communities within the Navy had their pet projects, but the rising defense budget calmed those rivalries, unlikely the earlier doctrinal moments

⁴³⁶ Lehman, *Command of the Seas*, 92–102.

where a shrinking defense budget led to open warfare over the smaller shares of the pie. More than anything, the adroit elimination of bureaucratic obstacles appears to have made some of this new doctrine possible as opposed to the doctrine being primarily determined by bureaucratic incentives.

The Navy was effective in minimizing the impact of some of these political considerations, particularly by aligning its messaging and coopting key players. The inclusion of other services in the Maritime Strategy softened the threat of too much interservice sniping, although the Army remained a skeptic. Removing Rickover helped remove his independent influence within the Navy, and in an attempt to manage internal Navy battles, CNO Hayward created a new cross cutting directorate, the "Director of Naval Warfare," to oversee the three warfare barons. Additionally, Peter Swartz noted that "we parsed the three-phrase war by 'warfare 'area'...so as to downplay to the role of the individual platforms."⁴³⁷ This concept aligned with the still relatively new Composite Warfare Commander view of naval warfare, but also avoid explicitly framing the Maritime Strategy as tradeoffs between the warfare communities. Thus, bureaucratic politics appears to be an obstacle to be negotiated and not a primary driver of this new doctrine.⁴³⁸

Civilian Intervention

There is little to no evidence of civilian intervention in its classical sense driving the doctrinal changes in this era, but Lehman certainly served as a catalyst and civilian

⁴³⁷ Oral History of Captain Peter M. Swartz, 17.

⁴³⁸ Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986*, 43; Oral History of Captain Peter M. Swartz, 64.

intervention did play an important role in eliminating bureaucratic obstacles to the doctrinal change. While Lehman and other civilian leaders were champions of the efforts to increase defense spending, enlarge the navy, and develop a more assertive strategy, most of the changes developed from within the Navy, in some cases predating the Reagan Administration, and were not the result of a maverick supported against the establishment but rather a civilian leader enabling, and perhaps unleashing, his principal naval subordinates. One of Lehman's biggest contributions was in restoring strategy to the center of the Navy staff's operations, placing at the beginning of the POM process, and destroying the hated system analysis shop within the OPNAV staff (OP-965). These initiatives enabled the bureaucratic processes that led to the Strategy's success.

Most importantly, even a contemporary strategist concluded that there was little daylight between the Secretary and the Admirals on maritime strategy. While there was disagreement, the main issues were programmatic revolving around affordability and what capability was too much, not the more overarching purpose and role of the Navy. As such, there is no evidence to support the civilian intervention hypothesis that Lehman drove the Navy to embrace a new concept. Instead it seems that he was a part of the team and while he was in a position to be a chief proponent of the Maritime Strategy, his presence cannot explain what emerged.⁴³⁹

Learning Organization

In this era, there is an overabundance of evidence of a functioning peacetime learning organization, assisted by the investments in the previous decade in building a

⁴³⁹ Oral History of Captain Peter M. Swartz, 30.

strategist community and reinvigorating the Naval War College. Incubators such as the CNO Strategic Studies Group were established to help analyze and build support for this doctrinal change. Advocacy networks served important roles in building support from within the Navy, ranging from semi-formal strategist communities to the use of venues such as *Proceedings*. Experimentation was important, as the Global wargame series and the exercises such Ocean Venture '81, and many others, developed some of the offensive concepts codified in the Maritime Strategy.

The combined initiatives of the SSG, the Naval War College, and the ATP helped flesh out the ideas of the Maritime Strategy, significantly evolving the early Sea Plan 2000 concepts. These small organizations, insulated from the normal bureaucracy and enabled by senior leader advocacy, were able to develop the concepts that would be incorporated into the eventual strategy and tested by the fleet. The CNO Strategic Studies Group (SSG) was an early example of an incubator, an organization to help shepherd new ideas through the bureaucracy. In the 1986 Maritime Strategy Article, CNO Watkins noted that the development of the Strategy "has benefited from the efforts of the Strategic Studies Group, top-performing Navy and Marine Crops officers who spend a year in Newport working directly for me in refining and expanding our strategic horizons"⁴⁴⁰ and "materially affected the ongoing development of the strategy."⁴⁴¹ This high level endorsement makes clear that the SSG played an important role in the emergence of this new doctrine.

⁴⁴⁰ Watkins, "The Maritime Strategy," 15.

⁴⁴¹ Watkins, 17.

Overall, the Navy of the Maritime Strategy era displays many attributes of an effective learning organization. Special organizations, notably the SSG but also the NWC's CNWS and OPNAVs ATP, were set up as incubators for new ideas. Advocacy networks, from the OP603 strategists to the *Proceedings* readers to small discussion groups, helped spread the concepts of the Maritime Strategy outside the small incubators and build a groundswell of support for it. And the fleet embarked on an aggressive series of experiments, putting the theoretical concepts to the test in the challenging waters of the Norwegian Sea and Northern Pacific. While admittedly some of these elements did predate the Maritime Strategy, as for example the Global War Game did start in 1979, the scale of learning organizational features dwarfs that of the earlier periods.

Given all that, there is a strong causal relationship between the Navy's learning organization and the shape of the doctrinal change that took place in this era. The learning institutions enabled a process of peacetime operational improvements, as the doctrine was iteratively evolved based on the results of the learning. As such, it can explain how the doctrine evolved, but it can less well explain why this step change in doctrine occurred at this moment.

Culture, Norms, and Ideas

While there is little hard evidence of the cultural and ideational roles in developing the Maritime Strategy, clearly this offensive, forward, global strategy was in keeping with the Navy's culture. The 600-ship Navy was an idea that existed in parallel with the Maritime Strategy and clearly generated some public interest that made the Strategy theoretically possible, but it may have also simply been a domestic political

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construct. There is evidence of Navy leaders trying to harness the power of ideas, particularly in the 1986 publication of the Maritime Strategy in Proceedings and the public debate in the pages of *International Security* between Linton Brooks and Mearsheimer. In the end, it's not possible to prove that cultural ideas were the "how" or "why" of the Maritime Strategy, but they clearly affected the perceptions of key players and at the same time were used as a tool to help build support for this new doctrine.

The Maritime Strategy is clearly a return to a more assertive and active Navy, embracing a more Mahanian conception of the role of sea power in national security where the Naval forces played an independent part. In his part of the Proceedings Maritime Strategy rollout, Secretary Lehman even cites "the influence of sea power upon history"⁴⁴² invoking the Mahanian ideal, whether consciously or not. Similarly, Admiral Watkins invokes the unique nature of the Navy in his portion of Proceedings, stating that "the United States is inevitably a maritime nation, and the United States and its Navy have inescapable global responsibilities."⁴⁴³ While it does seem obvious that the US is a maritime nation, surrounded as it is by oceans on two sides, this is also an appeal to the role the Navy has historically filled, particularly in the minds of naval officers. So, although there isn't evidence of a specific decision being affected by a cultural appeal, it is striking that the Maritime Strategy ends up being entirely in line with the ideals of Naval culture.⁴⁴⁴

⁴⁴² Lehman, "The 600-Ship Navy," 36.

⁴⁴³ Watkins, "The Maritime Strategy," 4.

⁴⁴⁴ Donnithorne, *Four Guardians: A Principled Agent View of American Civil-Military Relations*.

Similarly, Navy leadership tried to invoke ideas as a tool to gain acceptance in a way that previous strategies did not. While this is largely covered by the advocacy network discussion in the learning organization section above, it is notable how the leadership of this era used personnel exchanges, widespread briefings, and publications to spread the word. Their advocacy was not limited to the typically friendly Navy channels, but as noted earlier even carried on a debate in the pages of *International Security*, with CAPT Linton Brooks facing off against Professor John Mearsheimer.⁴⁴⁵ By coopting many of the Navy leadership and gaining acceptance for the ideas of the Maritime Strategy, they were able to build a consistent groundswell of support that outlasted specific leader's terms of service. Of course, it didn't hurt that this public campaign aligned with cultural predisposition for Naval independence, the centrality of seagoing operations and forward presence, but it wasn't as easy road to build that support and many leaders had to be convinced along the way.

This widespread acceptance, and the public campaign the created it, is probably the biggest difference between the Maritime Strategy and its immediate post-World War II predecessor which had a remarkably similar approach. In that case, although many other variables were similar, the lack of an appeal to cultural and ideational elements separates the two doctrinal eras and may help explain why the post-World War II era is forgotten, while the Maritime Strategy lives on in institutional memory.

⁴⁴⁵ Mearsheimer, "A Strategic Misstep"; Brooks, "Naval Power and National Security."

Conclusion

Taken in totality, what does this all mean for the question of doctrinal change and the US Navy? First, there clearly was a major shift in Naval doctrine in this era. While there were elements of this new doctrine emerging in the 1970s, and it is a bit of a simplification to describe one doctrine as defensive and another offense, there clearly was a marked shift in the role of seapower in the national strategy, the employment of naval forces, and the types of forces required. The documents from the earlier doctrinal period focus on strategic deterrence and sea control as an enabler for the sealift of land forces to the European theater. By contrast, the Maritime Strategy describes a doctrine of global power projection, using sea power to alter the nuclear correlation of forces and to independently exert pressure on the adversary flanks via multicarrier battle forces integrated with joint forces. The manner in which this doctrinal change occurred as the result of multiple, overlapping causal factors, as opposed to a single factor, as summarized below in Table 15.

<i>H</i> ₀ : <i>Balance of Power</i>	Major Factor	Adversary changes negated	
		barrier strategy, requiring new	
		concept	
<i>H</i> ₁ : <i>Domestic Politics</i>	Major Factor	Made a more offensive doctrine	
		not just palatable, but desired	
<i>H</i> ₂ : <i>Civilian Intervention</i>	Enabler and Catalyst	While the Maritime Strategy was	
		already emerging without him,	
		Lehman eliminated bureaucratic	
		obstacles and catalyzed the	
		primacy of strategy	
H ₃ : Bureaucratic	Minor, but still	Primarily elimination of	
Competition	relevant	bureaucratic obstacles, rather than	
		driver of change	
H ₄ : Learning	Major Factor	Learning organizational capacity	
Organization		enabled development of a	
		cohesive doctrine	
<i>H</i> ₅ : Service Culture and	Minor, but still	Although little direct evidence of	
Ideas	relevant	cultural impacts, this change	
		aligned with cultural	
		predispositions	

Table 16: Maritime Strategy Doctrine Hypotheses Relative Significance Impact

The first part of the answer to the question of doctrinal change is why this change happened in the first place. That answer is a combination of domestic politics and balance of power considerations, although the change in balance of power was less at the geopolitical than the operational-technological level. On the domestic front, the Reagan Administration committed to reversing the drawdown in US military forces and more directly challenging the USSR, reflecting a move away from the dynamics of the 1970s. At the same time, the US understanding of Soviet strategy evolved and the US realized that its barrier plan was based on an incorrect assumption of Soviet plans. So, at the same time that the US Navy realized it was planning to fight the wrong war, a shift in domestic politics opened the window for a new doctrine and funding to go along with it. However, neither of these truly explain how the Maritime Strategy came to be, just why a doctrinal shift happened. Other variables seem to better explain the how and what of the Maritime Strategy.

The leading explanation for the "how" of the Maritime Strategy is the extent to which a learning organization came together in the 1980s. Incubators such as the SSG, the NWC, and the ATP developed new concepts for naval warfare. Advocacy networks ranging from the OP-603 strategist community to the pages of *Proceedings* helped spread the word and build support in the broader naval community, while aggressive fleet experimentation tested these theoretical concepts in the real world. This combination of learning capacity helped shape the development of the new doctrine, as even early efforts pre-Reagan Administration (such as the Global War Game and the ATP) ensured that options were ready when the demand for a doctrinal shift finally appeared.

A number of other factors additionally played supporting roles and although not as significant as the above factors, cannot be ignored. Civilian intervention was not a major factor, for although Secretary Lehman was a particularly compelling advocate for the Navy and often closely associated with the Maritime Strategy, he primarily supported Navy's leadership's plans vice enabling a maverick idea against the intransigent

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bureaucracy (as the civilian intervention school argues). He did serve as an important catalyst for restoring strategy to a preeminent role and in eliminating bureaucratic obstacles with the Pentagon. But given the broader strategic changes within defense plan associated with the Reagan Administration, another Secretary may have ended up allowing the Navy to move in this direction, albeit not as eloquently as Lehman did. Similarly, bureaucratic politics, while ever present, don't appear to have played a major role. Certainly, the Army viewed the Maritime Strategy as merely justification for a budget grab and communities within the Navy may have had their own agendas (e.g. the submarine force push for an anti-SSBN strategy that conveniently starred them), but we don't see the internecine warfare that defined some of the earlier eras. Instead, a rising budgetary tide appears to have mitigated many of these traditional competitions and the primary bureaucratic maneuvering appears to have been eliminating bureaucratic obstacles to achieve the desired doctrinal evolution, vice the doctrinal evolution being the result of bureaucratic incentives.

Lastly, there is no explicit evidence of cultural factors playing a major role. It is telling that the Maritime Strategy aligns well with existing service cultural identity, independence of command and the Navy as a forward presence, but that is circumstantial at best. It primarily seems that service culture made this doctrinal shift more acceptable to the Navy as a whole, but again does not appear that it was a driving factor in creating this change, but the lack of resistance to the Maritime Strategy is a big change from the resistance to change of the 1970s.

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In conclusion, in this case there is little evidence to support the assumption of many military innovation theories that "military organizations will seldom innovate autonomously, particularly in matters of doctrine,"⁴⁴⁶ and only change in response to external civilian intervention or as a result of bureaucratic competition. Instead, we see strong evidence that the Navy responded to a changing understanding of the geostrategic situation, adversary strategy, and available resources. These factors together created the need for a new naval doctrine, to align naval power with the new US national security strategy. This new doctrine was developed by a broad learning organization, including multiple elements to develop, test and build support for the new doctrine, using wargaming and exercises to innovate in a peacetime environment. Interestingly, in this case many of the systems and technologies were actually developed in an earlier era and under a previous doctrine, but under this doctrine produced in larger numbers and utilized in new and novel ways. While undoubtedly Lehman's leadership, a desire to gain greater budget share for the Navy, and cultural and bureaucratic incentives to return large carriers to a starring role helped shape the naval doctrine that emerged, they were supporting or enabling actors in this endeavor. The "why" of the Maritime Strategy was driven by changes in adversary strategy and domestic budgets and politics, while the robust and agile learning organization is the "how" a new doctrine was successfully developed and implemented.

⁴⁴⁶ Posen, The Sources of Military Doctrine: France, Britain, and Germany between the World Wars, 224.

CHAPTER SEVEN: THE DOLDRUMS, 1989-2001

*"It was a period of intellectual turmoil and concern and of fragmenting consensus among senior naval officers, a fragmenting that stemmed from the West's victory in the Cold War."*⁴⁴⁷

Introduction

The 1990s was an era of multiple systemic challenges to the Navy, with the collapse of the Soviet Union's defining threat and the emergence of a new joint way of warfare, one that was showcased in Desert Storm. The rapid collapse of the USSR created opportunities for use of naval forces in entirely new ways now that the US Navy was effectively invulnerable on high seas and no reasonable threat to the SLOCs existed. At the same time, the end of the Soviet threat forced the US Navy to rapidly pivot, as it was quickly realized that the previously successful Maritime Strategy of the 1980s was no longer a compelling concept.⁴⁴⁸

Strategically, the US wrestled with that a post-Cold War environment looked like, but relatively quickly embraced the new unipolar moment, even as cautiously watching the USSR to make sure there wasn't a reversal. As early as 1990, President Bush was talking about what became known as the New World Order, and at the Aspen Institute clearly articulated that the nation's defense would look a lot different going forward without the Soviet Union as a threat. The Clinton Administration had similar

⁴⁴⁷ William A. Owens, *High Seas: The Naval Passage to an Uncharted World* (Annapolis, Md: Naval Institute Press, 1995), 121.

⁴⁴⁸ Bruns, US Naval Strategy and National Security, 113.

perspectives, focused on international engagement and the transition from the Cold War order, as discussed in National Security Advisor Lake's 1993 "From Containment to Enlargement" speech. He argued for an expansion of the US-led global system, supporting democracies and market-based economies. This was also the era where policy makers were hopeful that engagement with China could tamp down potential competition. This major strategic shift would have major implications for the US Navy, with had just effectively lost its self-declared reason for being.⁴⁴⁹

The implementation of the Goldwater-Nichols Act further challenged the Navy's preferred doctrinal path. Passed in 1986, this Act downgraded the service chief's role, and shifted operational, and strategic planning, responsibilities from the services to the regional unified commands. Additionally, and although it took time for the implications to be realized, Goldwater-Nichols had significant implications for the informal Navy strategist community that had developed in the 1970s and 80s. Strategists were forced into joint billets in order to meet personnel requirements, as opposed to rotating through OP603 where they built relationships and gained Navy experience. Steve Wills concludes that the strategist dispersion as a result the new jointness "would hinder the Navy in the first decade of the twenty-first century as it sought new strategic solutions to a dwindling budget and an aging, contracting force structure."⁴⁵⁰

 ⁴⁴⁹ Bruns, 114–18; "Tony Lake - 'From Containment to Enlargement' 9/21/93 · Clinton Digital Library," accessed January 29, 2022, https://clinton.presidentiallibraries.us/items/show/9013; Ola Tunander,
 "Bush's Brave New World: A New World Order – A New Military Strategy," *Bulletin of Peace Proposals* 22, no. 4 (1991): 355–68.

⁴⁵⁰ Steven T. Wills, *Strategy Shelved: The Collapse of Cold War Naval Strategic Planning* (Annapolis, Maryland: Naval Institute Press, 2021), 108.

Throughout this period, the Navy underwent a fundamental doctrinal shift as it shifted from a focus on defeating the Soviet Navy forward to projection power and influence ashore. Facing multiple exogenous shocks from the end of the Cold War, a new style of warfare showcased in Desert Storm, the new Joint rules of Goldwater Nichols, and the reduced budgets coming from the peace dividend, the Navy was threatened in a way it hadn't been since the 1940s. With its usefulness to the nation questioned, Navy strategist refocused the Navy's doctrine on forward presence, influence operations and power projection, ultimately leading to the promulgation of a new strategy in the early 1990s, with the legacy learning organizational capacity of the 1980s providing much of the intellectual thought.

Evolution of Naval Doctrine

Naval Strategy in the 1990s

The Navy was aware of the impending challenges of the post-Soviet era and attempted to get ahead of the public debate. CNO Admiral Trost published an article in Proceedings on 1 May 1990, just before the subsequent Base Force concept was released. Titled "Maritime Strategy for the 1990s" this article attempted to defend the relevance of the Navy and its capstone document. Trost posited that there were three broad principles for global employment of naval forces: deterrence, forward defense, and alliances. The Navy served an important role in representing U.S. global interests as a maritime nation, regardless of the Soviet threat.⁴⁵¹

⁴⁵¹ "Maritime Strategy for the 1990s," 310.

The Strategic Concept he explained was that the Navy existed to establish sea control to enable power projection. He explicitly notes that they are linked and that power projection (e.g., strikes, raids) have always been key elements of the sea control campaign. Once naval threat mitigated, then the Navy can focus on projecting power ashore. He also emphasized that a proliferation of anti-access capabilities meant the US Navy still needed high-end ships to survive in those environments – that Naval capability was not just driven by the matching Soviet forces.⁴⁵²

Trost also attempted to draw attention to the importance of forward presence. As he stated, "we must attempt to position our forces forward early – prior to any hostilities if possible. Forward positioning, combined with other measures, may extend deterrence and forestall the outbreak of war."⁴⁵³ While previous documents had highlight the importance of routine fleet deployments by Navy and Marine Corps, Trost connects it to deterrence in a way that previous doctrine had not had to do. This role of forward presence will become an important element in the Navy's doctrine going forward.

Trost argued that although the Maritime Strategy only recently received public attention, "its origins predate the Cold War."⁴⁵⁴ Despite Trost's defense, the Maritime Strategy was seen as a Cold War relic and this is effectively that last public defense of it, although the core concept that Trost was trying to convey in this article are relatively consistent throughout the 1990s. While this establishes some key points of continuity in

⁴⁵² "Maritime Strategy for the 1990s," 310–20.

⁴⁵³ "Maritime Strategy for the 1990s," 320.

⁴⁵⁴ "Maritime Strategy for the 1990s," 310.

Navy strategic through, the concurrent release of the Base Force and Trost's apparent defense of a Cold War doctrine minimized its visibility and impact.

The Base Force

Before the Navy had really been able to figure out its post-War strategy (or to be fair the Cold War had even ended), CJCS General Colin Powell began using the newfound powers of Goldwater Nichols to drive strategic planning. He developed the Base Force as a Joint Staff project, with almost no involvement by the services. Anticipating the need to reduce the size of the US military by 25%, he successfully proposed a force sizing construct that would reduce the Navy from 540 to 451 ships.⁴⁵⁵

The beginning of the Base Force predated Powell, as strategist and resource managers began to anticipate a changing environment. The 1989 Joint Strategic Capabilities Plan argued that although a US-Soviet conflict was possible, the more likely threats were regional conflicts and the US military should be shaped appropriately. Joint Staff planners continued to press for more focus on regional issues, and a move from forward defense to global forward presence. Even as changes in strategic thinking were taking place, J8 was exploring implications of future budget reductions. Meeting with congressional staff members in 1988, even before the collapse of the USSR, they concluded that a 25 percent reduction in defense spending over the next five years was possible. This "Quiet Study" was presented to Admiral Crowe, CJCS, in early 1989, who tabled it believing that the strategic environment had not changed yet to justify such a

⁴⁵⁵ Peter D. Haynes, *Toward a New Maritime Strategy: American Naval Thinking in the Post-Cold War Era* (Annapolis, Maryland: Naval Institute Press, 2015), 36.

large shift in force structure. However, even though their study was formally on hold, J8 analysts continued studying this idea under "Quiet Study II".⁴⁵⁶

Conveniently for the Quiet Study, the new CJCS General Powell had the same views as the J8 analysts studying force reductions. As early as 1988 he had reached the conclusion that the Soviet Union was changing and with domestic budgetary pressure increasing that there would eventually need to be changes in US strategy and force structure. Even before he became Chairman he had sketched out the initial concept that would eventually be the core of the Base Force. Under his concept the US military would be organized into four forces: the Atlantic Force, including the Atlantic fleet and a Europe-based Army armored Corps; the Pacific Force, principally Pacific Fleet but also air and land forces in Japan and Korea; the Strategic force, mainly nuclear forces; and the Contingency Force, or CONUS-based light response forces. This new Force would constitute a 20-25 percent reduction in the Army and a reduction of the Navy from 550 ships to 400 ships.⁴⁵⁷

With the fall of the Berlin Wall and the Soviet collapse accelerating, Powell's early planning gained support and the SECDEF approved him to formally propose this plan. The Base Force, envisioned as a "floor" to US force structure to get ahead of potential directed reductions, would result in a fleet of 450 ships including 12 aircraft carriers, among similar reductions to other services. Under domestic pressure to realize the peace dividend, political leadership got onboard with the Base Force and on 2 August

 ⁴⁵⁶ Lorna Jaffe, "The Development of the Base Force: 1989-1992" (Joint History Office: Office of the Chairman of the Joint Chiefs of Staff, Washington DC, July 1993), 2–9.
 ⁴⁵⁷ Jaffe, 11–12.

1990 President Bush announced that "In a world less driven by an immediate threat to Europe and the danger of global war, in a world where the size of our forces will increasingly be shaped by the needs of regional contingencies and peacetime presence, we know that our forces can be ... we calculate that by 1995 our security needs can be met by an active force 25 percent smaller than today's."⁴⁵⁸ This speech at the 40th Anniversary of the Aspen Institute, just as Iraq invaded Kuwait, signaled the official stamp of approval for Powell's plan.⁴⁵⁹

The Base Force was a Joint Staff driven process, with Powell fully utilizing the authorities granted by Goldwater-Nichols. While the Navy was informed at the end of the process, Powell never asked for Service concurrence and instead focused on convincing the SECDEF. By anticipating political guidance, he was able to shape the eventual guidance to his way of thinking, driving force US force structure, including naval, without any involvement by the Navy's leadership.⁴⁶⁰

Desert Storm

In addition to the collapse of the Soviet Union, the other defining strategic shift of the early 1990s was Desert Storm. On 2 August 1990, Iraqi forces invaded Kuwait, triggering a massive US response that would define the following military decade. Although the US Navy performed well, even partisan Naval officers concluded that "Desert Storm, the first post-Cold War conflict, was a magnificent battle-and a doctrinal

⁴⁵⁸ "Public Papers - George Bush Library and Museum," accessed January 29, 2022, https://bush41library.tamu.edu/archives/public-papers/2128.

⁴⁵⁹ Jaffe, "The Development of the Base Force: 1989-1992," 21–36.

⁴⁶⁰ Jaffe, 50.

disaster for the U.S. Navy.⁴⁶¹ The Navy's employment was largely in ways not emphasized by its current doctrine (unlike the Army and Air Force), and its foundational concepts proved unsuited for the new joint era. The Navy found itself in a supporting role, and beyond strike operations, engaged in what were considered secondary missions operating close to shore.⁴⁶²

The Navy was a key enabler in Desert Storm, and even more so in the buildup for Desert Shield, but was not able to execute the high seas offensive maneuver strategy envisioned in the Maritime Strategy. Within days two US carriers were in the theater bringing the first elements of US strike power, as on 7 August USS Eisenhower joined the USS Independence, who was already on station. The Navy secured the seas and allowed heavy forces to flow into Saudi Arabia over sea lanes, building up the massive armored force that would eventually defeat the Iraqi forces. This included extensive near shore operations, as smaller patrol boats and logistics forces were deployed to control and defend key ports, in addition to at-sea enforcement of an embargo.⁴⁶³

Once the flow of forces was secured in Desert Shield, the Navy found itself assigned supporting two primary missions: supporting the air campaign and an amphibious diversion. The fleet in the theater grew to six aircraft carriers for Desert Storm, and although a portion of the Navy's aircraft were withheld for fleet defense, strike operations by Naval aircraft were a key element of the victory. Amphibious

⁴⁶¹ Owens, *High Seas*, 4.

⁴⁶² Marolda and Schneller, *Shield and Sword*, 52; William J. Crowe and David Chanoff, *The Line of Fire: From Washington to the Gulf, the Politics and Battles of the New Military* (New York: Simon & Schuster, 1993), 326.

⁴⁶³ Marolda and Schneller, *Shield and Sword*, 61; Bruns, US Naval Strategy and National Security, 147.
operations on the other hand were only a diversion, as leaders were not interested in the risk of an amphibious operation and most Marine ground forces were used as traditional land formations. In addition to these primary missions, two battleships, reactivated as part of Lehman's fleet expansion, in theater provided extensive naval gunfire support, a traditional mission enhanced by use of UAVs for spotting to improve their accuracy. Naval forces also engaged in traditional defense operations and small-unit actions, including attacking smaller forces on islands and oil platforms.⁴⁶⁴

The air campaign, in which the Navy did play a key role, was a major element of friction – largely as result of doctrinal differences. The Air Force preferred a centrally directed campaign and developed that approach for a campaign in Europe. On the other hand, the Navy preferred a more flexible doctrinal option, letting individual commanders and flight leaders have more independence. Unfortunately for the Navy, Desert Storm was fought under the new Joint structure and the Air Force led the Joint Force Air Component Command (JFACC) within CENTCOM, given the Air Force effective control over all air assets. More importantly, the Navy didn't have the required communications systems to receive the 200-300 page daily Air Tasking Order (ATO) that was the foundation of the JFACC's centrally directed air campaign. In the end, the only way the Navy could participate in the air campaign was by creating a daily "pony express" of transport aircraft to deliver a hard copy of the ATO.⁴⁶⁵

⁴⁶⁴ Marolda and Schneller, *Shield and Sword*, 256; Wills, *Strategy Shelved*, 164.

⁴⁶⁵ Marolda and Schneller, *Shield and Sword*, 184–88.

Much as the Navy was unprepared for the operational demands of the JFACC, it also was unprepared for the Joint command structure of Desert Storm. This would be the first major campaign fought under Goldwater-Nichols, and "with a long tradition of independent blue-water operations, the Navy abhorred the idea of surrendering control of its forces, particularly its carriers, to an Army general."⁴⁶⁶ This theater had previously been a relative backwater for the Navy, despite the demands of the Iranian hostage crisis and the tanker wars in the 1980s that saw more action in the theater. As such, only a small Middle Eastern Force was permanently stationed in the theater and the Naval Component of CENTCOM (NAVCENT) was a junior rear admiral based in Hawaii, neither in the theater or near the CENTCOM peacetime HQ in Tampa, FL.⁴⁶⁷

To address these command structure gaps, the Navy named VADM Mauz, as the commander of the Seventh Fleet, as the new NAVCENT and deployed him to the region to command the growing naval force. However, Admiral Mauz elected to remain at sea to better be able to direct his forces and created a NAVCENT Riyadh command to liaise with CENTCOM. By comparison, the Army and Air Force based their theater commanders at the CENTCOM forward HQ in Riyadh. The disparity in rank at HQ and resulting access to leadership meant that CENTCOM had a significantly better relationship with these component commanders and better understanding of how to use their forces. Not fully understanding or accepting the new Joint command structure, the Navy put itself in a position to be marginalized in the campaign.⁴⁶⁸

⁴⁶⁶ Marolda and Schneller, 80.

⁴⁶⁷ Marolda and Schneller, 72.

⁴⁶⁸ Wills, *Strategy Shelved*, 164; Marolda and Schneller, *Shield and Sword*, 81–82.

While the geography and dynamics of the campaign meant that the Navy would not be able to execute its desired Maritime Strategy, its doctrine, employment concepts and command structures proved to be poorly aligned to Desert Storm. Moreover, the remarkable success of Desert Storm meant that this campaign would be taken as the model for the new post-Cold War era.

The Peace Dividend

The end of the Cold War generated intense political interest in realizing the "peace dividend," a slogan popularized by President George W. Bush. After decades of atypical American defense spending, the public looked forward to reduced defense spending, which promised lower taxes or more resources for domestic spending priorities. This demand was anticipated by Chairman Powell's Base Force, as he explicitly was attempting to get ahead of externally directed force structure cuts. Defense and Navy budgets had already begun to decline slightly from their highs of the mid-1980s, but the 1990s saw a precipitous drop as the Navy budget in 1999 would be only 2/3^{rds} that of the 1989 budget with a similar drop in overall DoD funding levels.⁴⁶⁹

⁴⁶⁹ "FY21_Green_Book.Pdf," 21.



Figure 7: Defense and Navy Budgets, 1989-1999⁴⁷⁰

The Way Ahead

Navy leadership remained content with the Maritime Strategy and the Navy's budget as its strategic statement, but mid-level officers from the Navy strategist community began talking about what a new strategy would look like anyway. What emerged was a yet another article, this one jointly sighed by the CNO and Commandant of the Marine Corps, putting out their views in April 1991. This article, titled "The Way Ahead," had little impact at the time but was consistent with what would emerge.⁴⁷¹

In February 1990, an informal strategist group began to form to address this problem. This informal network, going by the moniker of the "Ancient Mariners" would

⁴⁷⁰ "FY21 Green Book.Pdf."

⁴⁷¹ Wills, Strategy Shelved, 190; Haynes, Toward a New Maritime Strategy, 56.

meet over the next months and develop the initial strategic concepts of the emerging doctrine including the idea that the fleet would support expeditionary operations and power projection. This concept, building on Trost's Maritime Strategy, would mark a clear move away from the 1980's Maritime Strategy and towards a doctrine that embraced closer integration with the Marine Corps. Although the Navy's OP06, chief strategist, was not interested in championing a new strategy, it was also briefed to OP07 (Naval Warfare) who was inside the CNO inner circle. Admiral Miller, the OP07, loved the idea and took it to the new CNO, Admiral Kelso, who cleared it to proceed.⁴⁷²

The Way Ahead acknowledged that the US was entering a period of uncertainty. Explicitly responding to President Bush's August 1990 speech calling on US to adapt to changes in the world, where he announced the Base Force concept, this article reflected the Presidential priorities of deterrence, forward presence, crisis response and force reconstitution.

Identifying the challenges of that the Navy now confronted, the CNO wrote that "we must reshape naval force structure, strategy, tactics, and operating patterns that are wedded to closely to the concept of an Armageddon at sea with the Soviet Union. At the same time, we will deal increasingly with political and fiscal pressures to reduce the national debt."⁴⁷³ The Way Ahead was also careful to note that Desert Storm was not the only model for future conflicts, and the US needed to maintain the ability to establish sea

⁴⁷² Bruns, US Naval Strategy and National Security, 128; Wills, Strategy Shelved, 190; Haynes, Toward a New Maritime Strategy, 52–54.

⁴⁷³ John B Hattendorf, "The Way Ahead," in *U.S. Naval Strategy in the 1990s*, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 24.

control whenever necessary, even as pivoting the Navy towards new missions including presence, humanitarian assistance, security assistance, counterterrorism, counternarcotics, counter-insurgency, and crisis response.⁴⁷⁴

This pivot had real implications for the Navy's deployment, employment, and force structure. The article called for moving away from the deployment hubs of the Cold War and focusing on the need for "forward presence and credible surge capability."⁴⁷⁵ There were to be new plans for the composition of carrier battle groups and amphibious ready groups, now that escort requirements could be lessened. Citing the example of Somalia, the Navy could also organize around new composite units of amphibs, surface ships, and marines, vice solely the traditional CVBG or ARG structure.⁴⁷⁶

With ASW as not as much a mission, Navy forces could reorient to focus on regional power projection and support missions. Existing ASW escorts would be retired or shifted into the reserves. The CNO also emphasized the importance of mine countermeasures and sealift as key Naval contributors to national defense. Lastly, the Way Ahead explicitly endorsed a fleet of 450 ships.⁴⁷⁷

Unfortunately, Way Ahead was published just after Desert Storm. It failed to account for the revolution in military affairs and the accusations that the Navy was not able to effectively contribute to the conflict. And although it considered a shift away from forward presence around traditional deployment hubs, this would not be realized largely

⁴⁷⁴ Hattendorf, 26–29.

⁴⁷⁵ Hattendorf, 29.

⁴⁷⁶ Hattendorf, 29.

⁴⁷⁷ Hattendorf, 30–35.

due to COCOM demands for CVBG-based deployment schedules. As Ryan Peeks noted, "The Way Ahead" provides us a tantalizing hint of alternative deployment patterns that may have eased stress on the fleet during the 1990."⁴⁷⁸ So although many of these ideas would not go away, the "Way Ahead" ultimately appears to have had little impact in moving them into the mainstream.⁴⁷⁹

Navy Policy Book

While CNO Admiral Kelso was initially little interested in strategy, he was more interested in management philosophy and improving the efficiency of the Navy. He primarily focused on implementing a commercial idea known as Total Quality Management, which was renamed Total Quality Leadership for the Navy and signaled a series of structural changes. The CNO's next publication was the Navy Policy Book in May 1992.⁴⁸⁰

From a doctrinal perspective, the Navy Policy Book had little new to offer. It emphasized forward presence to preserve influence overseas, a consistent theme thus far, and defined the core mission of the US Navy as deterrence, sea control, power projection, and sealift. It stated that "Force Projection is our Number One Warfighting Priority,"⁴⁸¹ which wasn't entirely different from the previous Maritime Strategy even if now almost entirely focused on projecting power ashore. The Navy Policy Book also called for a fleet organized around battle groups and task forces as centerpieces for naval operations. All

⁴⁷⁸ Polmar, *The Ships and Aircraft of the U.S. Fleet*, 107.

⁴⁷⁹ Haynes, *Toward a New Maritime Strategy*, 59.

⁴⁸⁰ John B Hattendorf, "The Navy Policy Book," in *U.S. Naval Strategy in the 1990s*, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 39–86; Haynes, *Toward a New Maritime Strategy*, 49.

⁴⁸¹ Hattendorf, "The Navy Policy Book," 70.

of this was largely consistent with the previous statements and the direction the Navy had signaled, and the Policy Book seems to have little impact doctrinally, even if it drove some organizational changes.⁴⁸²

Naval Force Capabilities Planning effort

The next step, really evolving more from the "Way Ahead" than the Navy Policy Book, was the Naval Force Capabilities Planning Effort (NFCPE). CNO was briefed on the emerging strategic thoughts in July 1991 and while he initially continued to resist a new strategy, after some review he reversed himself and embraced the idea that the Navy needed to frame itself as an expeditionary and crisis response force to show it had a unique role in the post-Cold War era. From these discussions came the NFCPE, running from November 1991 to March 1992 in an attempt to develop a new doctrine and associated force structure.⁴⁸³

The NFCPE was run out of the nearby Center for Naval Analyses (CNA) and led by a group referred to as the Gang-of-Five, the five Navy and Marine Flag/General Officers overseeing the effort, but as usual most of the work and writing was handled by a number of mid-grade officers. A key moment came when Naval intelligence officer CAPT Bill Manthorpe briefed view of the future threats, a presentation that became known as the Manthorpe curve. His hypothesis was that, looking at historical powers, after the collapse of an adversary there would typically be several decades of peace, but eventually a new challenger would emerge, likely in 20-25 years. This framing was

⁴⁸² Hattendorf, 70–72.

⁴⁸³ Haynes, *Toward a New Maritime Strategy*, 67; Wills, *Strategy Shelved*, 199.

compelling and the group almost immediately broke into three groups based on what time period of the Manthorpe curve they felt was the most challenging.⁴⁸⁴



Figure 8: Manthorpe Curve⁴⁸⁵

As CAPT Thomas Barnett, a participant in the NFPCE explained it, the three camps were the Transitioners, the Big Sticks, and the Cold Worriers. The Transitioners were focused on early part of Manthorpe curve and saw the primary threat as the chaos associated with the collapse of the USSR. Therefore, the US needed to be engaged

⁴⁸⁴ Thomas P. M. Barnett, *The Pentagon's New Map: War and Peace in the Twenty-First Century* (New York: G.P. Putnam's Sons, 2004), 64.

⁴⁸⁵ Bill Manthorpe, "Manthorpe Curve."

everywhere to manage transition to a safer era. This group was primarily surface warfare and marine officers, who were ready to embrace the new Military Operations Other Than War (MOOTW). Next were the Big Sticks, who looked at the middle of the Manthorpe curve. They were concerned about a rising regional power and believed the US needed to be ready to handle a regional hegemon. If the US was prepared for that, then all the smaller powers would fall into line. These were primarily carrier aviators, as strike warfare was viewed as the primary tool for countering a regional power. Lastly were the Cold Worriers, looking at the return of a great power competitor on the far end of the curve. They thought the US was in a rerun of the 1920s and argued that the US needed to preserve its military readiness to be stay ahead of the emerging great power competitor. This group was primarily made up of submariners, who worried that the US Navy would give up key capabilities it would need when a peer competitor returned.⁴⁸⁶

This debate revolved around what the role of the Navy was, and a key breakthrough came with the change of just one word. Just by changing the mission statement from the "fundamental purpose of naval forces is to *achieve* command of the seas" to the "fundamental purpose of naval forces is to *use* command of the seas"⁴⁸⁷ completely reconceptualized what the Navy did. This debate was not just a fight over semantics, as taking away the need to achieve command of the seas endangered careers of the submariners. The nuclear submarine community had been able to dominate the Navy (in opinion of Barnett) thanks to the priority given the SSBN force. This was at an

⁴⁸⁶ Barnett, *The Pentagon's New Map*, 69–70.

⁴⁸⁷ Barnett, 74.

end due to the collapse of a maritime threat. There were serious implications for force structure in this, as Transitioners wanted a military with lots of platforms, albeit lower end ones, to be able to be constantly engaged. The Cold Worriers wanted to prepare for future threats, and therefore were willing to cut current force structure to develop high end platforms for the future.⁴⁸⁸

In the end, the Cold Worriers lost and a combination of the Transitioners and Big Stickers won. The NFPCE reconceptualized the threat as no longer was command of the seas the end, now it was about using command of the seas for another end. More importantly, as the NFPCE felt that the "Army and the Air Force had cornered the market on regional conflict and major combat operations...the Phase III group decided to stake out everything but the major conflict portion of the spectrum."⁴⁸⁹ This shift to make the Navy's role not about winning major conflicts, but about forward presence and engagement, was unpopular as it bypassed the tried and true path to justifying expensive weapons program against wartime requirements and ultimately proved culturally misaligned with the fleet's self-view, but it does reflect the post-Desert Storm despair at the success the Army and Air Force had achieved. Instead of challenging the Army and Air Force, the NFPCE recommended redefining the threat, making the real enemy the regional instability that was believed to lead to conflict.⁴⁹⁰

Organizationally, the NFPCE recommended a standing expeditionary strike fleet as primary warfighting organization in a region. Reflecting the loss of the Cold Worriers

⁴⁸⁸ Barnett, 76–99.

⁴⁸⁹ Haynes, *Toward a New Maritime Strategy*, 75.

⁴⁹⁰ Haynes, 75.

preferred view, it emphasized forward presence, littoral operations, and power projection. What it was unable to resolve, or necessarily tasked with, was the force design for this new doctrine, but what ultimately emerged was that although the Transitioners were on the winning team, the Navy proved relatively uninterested in buying the numerous small ships they envisioned and instead remained largely focused on higher-end ships, although it subsequently used them for low end missions. The next step for this effort was turning the NFPCE's concepts into an actual strategic document, which came next with the production of "…From the Sea."⁴⁹¹

"...From the Sea."

"...From the Sea" was published in September 1992, reflecting the findings of the NFPCE. It was written explicitly to align the Navy with the Base Force, the new Joint requirements, and reflect the lessons of Desert Storm. The "..." in the title was a rhetorical trick, reminding the reader that all sorts of capabilities would be able to be projected from the sea. This strategy proclaimed it was a "fundamental shift away from open-ocean warfighting on the sea toward joint operations conducted *from* the sea."⁴⁹² This major shift in Naval doctrine received a publicity blitz, and over 140,000 copies of the glossy pamphlet were circulated.⁴⁹³

Although the NFPCE recommended focusing on forward presence and non-major combat operations, "...From the Sea" emphasized the role the Navy served in everything

⁴⁹¹ Haynes, 77; Barnett, *The Pentagon's New Map*, 101.

⁴⁹² John B Hattendorf, …"…From the Sea: Preparing the Naval Service for the 21st Century," in U.S. Naval Strategy in the 1990s, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 90.

⁴⁹³ "Maritime Strategy for the 1990s," 88.

from peacetime presence to high-end power projection. As Peter Haynes noted, "Naval leaders were not about to yield the field of major conflict to the Army and the Air Force...the safest, surest route to asserting the Navy's relevance was to justify it in those terms."⁴⁹⁴ Emphasizing strike warfare aligned well with the Navy's interests in any case, as it further protected the Navy's carrier force and called attention to the new technology such as Tomahawk cruise missiles.⁴⁹⁵

Forward presence wasn't removed entirely and remained a key element, as the US Navy would deploy forward in order to contain crises, demonstrate US commitment and provide for rapid response. More importantly, the strategy called for a shift from a "blue water strategy, to a regional, littoral and expeditionary focus."⁴⁹⁶ When deterrence failed, the Navy would be postured to project power ashore as a primary mission. Organizationally, the strategy demonstrated its new regional view by establishing a new Vice Admiral billet in Central Command, what previously had been a backwater command under the Pacific Fleet.⁴⁹⁷

"...From the Sea" also called for new employment concepts, developing tailored units instead of the previous reliance on only major combat organizations. While CVBGs and ARGs would still exist, they would be reconceptualized as "Naval Expeditionary Forces." These forces would be built as a sea-air-land team and able to sustain long-term operations, ranging from humanitarian relief to major offensive operations. They would

⁴⁹⁴ Haynes, *Toward a New Maritime Strategy*, 80.

⁴⁹⁵ Haynes, 85.

⁴⁹⁶ Hattendorf, ... "... From the Sea: Preparing the Naval Service for the 21st Century," 93.

⁴⁹⁷ Hattendorf, 92.

also be trained to serve as joint task force commanders, demonstrating the Navy's newfound Joint religion. Lastly, attack submarines, maritime patrol aircraft, and mine warfare assets were to be integrated in these new expeditionary forces.⁴⁹⁸

With the publication of "...From the Sea," the Navy seemed to have finally come to grips with its post-Cold War doctrine. The Navy clearly accepted the new Joint rules and described a compelling mission for itself even in the absence of a high seas challenge.

Doctrine Rediscovered

Among the many actions directed in "...From the Sea" was the establishment of Navy doctrine. Subsequently, in March 1993 CNO Admiral Kelso established the Naval Doctrine Command, with the goal of writing formal naval doctrine for the first time. As the Navy had traditionally eschewed formal doctrine, preferring flexible leadership structures, it had very little written doctrine to share, putting it at a disadvantage compared to the Army and Marines well-oiled doctrinal machines. While ultimately the Navy Doctrine Command had little impact on Navy doctrine, it did help the Navy fit better into Joint doctrine and other services/war colleges were fans of what emerged. ⁴⁹⁹

Naval Doctrinal Publication (NDP) 1 was published March 1994, just before Kelso retired and the new "Forward...from the Sea" strategy was released. It was relatively uncontroversial, setting the stage for follow on doctrinal pubs, some of which would address the differences between the Navy and Marines. NDP 1 was well received

⁴⁹⁸ Hattendorf, 90–99.

⁴⁹⁹ Haynes, *Toward a New Maritime Strategy*, 107.

by other services and other Navy's, who appreciated finally having a document to describe what the Navy did. But it had relatively little influence in the fleet and primarily served the purpose of having a Navy pub to put on the bookshelf with the other joint pubs.⁵⁰⁰

NDP 1 described the Navy's role entirely consistent with "…From the Sea" and ongoing strategic thought. The Navy would operate forward, ensuring sea control to provide access, particularly in areas with limited overseas basing. Forward presence was once again emphasized to "help deter conflict and attain a rapid, favorable end to hostilities if conflict should occur."⁵⁰¹ The core missions of the Navy were deterrence, forward presence, Naval Operations Other than War, sealift and joint operations – a notable shift from the four missions of Admiral Turner the Navy had operated by for decades. To meet these missions the Navy had a number of tools including carrier strike, MAGTF, SLCM, special warfare, surface fire support, C2 and prepositioning. These mission areas, and the tools emphasized by NDP 1, are significantly different than those of the Maritime Strategy and help demonstrate the extent of the doctrinal shift.⁵⁰²

While NDP 1 showcases the doctrinal shift at a high level, it didn't really contain any hard details to help the fleet change its employment. The "real" doctrinal document was supposed to be a forthcoming *Naval Operations: NDP3*, but unresolved differences between Marines and Navy ultimately doomed it and it died in coordination. Only a few

⁵⁰⁰ Haynes, 109.

 ⁵⁰¹ John B Hattendorf, "Naval Warfare: Naval Doctrinal Publication 1," in *U.S. Naval Strategy in the 1990s*, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 108.
 ⁵⁰² Haynes, *Toward a New Maritime Strategy*, 112–40.

years later, NDC was moved to Newport in 1998, although it does move again in the future, and renamed the Navy Warfare Development Command. It never gained the same stature as its service counterparts, or similar rank. In his memoirs, Admiral Kelso noted that "I made one big mistake. Well, I probably made more than one, but I meant about Doctrine Command. I should have promoted the guy while I was still CNO to three stars and sent him somewhere to let everybody know this is important. It did not happen and Fred Lewis retired from that job. That probably was the biggest mistake I made about the Doctrine Command. Jobs from which promotions do not come are not recognized as important."⁵⁰³ This decision, along with the Navy's traditional disregard for written doctrine, likely helped ensure formal doctrine remained a secondary consideration for the Navy.⁵⁰⁴

OPNAV Reorganization

While CNO Kelso was involved in strategy and doctrine, as previously indicated he was more motivated by managerial optimization. The Policy Book reflect his interest in implementing Total Quality Leadership, but in October of 1992 he implemented a complete reorganization of the OPNAV staff. The Navy abandoned the OP-numbering system and moved to the N-code system to match the new Joint Staff structure. As part of this the process changed significantly and the organizational reforms of the Lehman era to have strategy drive the Navy's budget were reversed.⁵⁰⁵

⁵⁰³ Frank Kelso and Paul Stillwell, *The Reminiscences of Admiral Frank B. Kelso II, U.S. Navy (Retired)* (Annapolis, Md: U.S. Naval Institute, 2009), 656.

⁵⁰⁴ Haynes, *Toward a New Maritime Strategy*, 110–19.

⁵⁰⁵ Wills, Strategy Shelved, 212; Bruns, US Naval Strategy and National Security, 152.

The new N-code structure of OPNAV was more than just name change. While the N-code's were realigned with the Joint system of 1 for personnel, 3/5 for operations and policy, and 8 for resources and planning, a number of key changes were made that affected the balance of power in the OPNAV staff. First, the resources barons were downgraded from 3-star billets to 2-star billets and placed under a new 3-star position – the N8. This N8 emerged as a powerful bureaucratic player, for not only did the resource sponsors report to it, but N8 also included control of the Navy's budgetary process, determining where funds were actually allocated, and a restored system analyst organization known as N81.⁵⁰⁶

The restoration of N81 reflected a broader reduction in the role of strategy in the Navy's strategic planning process. Lehman had eliminated the systems analyst shop with OPNAV when it resisted the Maritime Strategy, but this reorganization not only restored it but gave it the important role of adjudicating the Navy's budgetary prioritizations. As Peter Haynes noted, all the navy leaders in early 1990s were submariners, and looked at change as a technology and process problem, and focused their efforts in those areas. So although the Navy continued to produce strategic documents, in many ways the OPNAV's strategy first mission was to justify the Navy's desired force structure, rather than drive warfighting investments.⁵⁰⁷

⁵⁰⁶ Wills, *Strategy Shelved*, 212; Haynes, *Toward a New Maritime Strategy*, 102; Bruns, *US Naval Strategy and National Security*, 152; Bruns, 152.

⁵⁰⁷ Haynes, *Toward a New Maritime Strategy*, 102.

Navy Scandals

At the same time all this was happening, the Navy distracted by series of internal scandals throughout the 1990s. This was principally Tailhook but also a turret explosion on *USS Iowa* that killed several sailors, a 1994 cheating scandal as the United States Naval Academy, and finally CNO Admiral Boorda's shocking suicide. While challenges and scandals are non uncommon, this set of scandals throughout the 1990s was particularly severe and the Navy spent considerable attention putting its house in order, instead of thinking about the future.⁵⁰⁸

Tailhook, occurring over the summer of 1991, was the biggest shock to the Navy. Tailhook was an annual conference for Naval aviators and over the course of the event dozens of aviators were sexually assaulted or harassed. More significantly when this story finally broke Navy leadership attempted to unsuccessfully whitewash the entire affair. The scandal was a major distraction for Navy leadership over several years, many of whom, including the SECNAV and CNO, were personally present at the conference. A subsequent DoD-run investigation found that the CNO ADM Kelso and other leaders have manipulated the Navy's internal investigation to attempt to conceal the full nature of the scandal. As a result of this, the CNO ended up retiring early along with many other admirals. In the end the Navy lost a total of 15 percent of its flag leadership between early retirements and administrative punishments.⁵⁰⁹

⁵⁰⁸ Bruns, US Naval Strategy and National Security, 121.

⁵⁰⁹ Haynes, *Toward a New Maritime Strategy*, 94.

While Tailhook was the most severe, negative attention the Navy received over the USS Iowa turret explosion and the Naval Academy cheating scandal only added to the Navy's internal woes. Then in May 1996, the CNO Admiral Boorda took his own life over a controversy related medals that he was wearing without clear proof he had earned the right to wear them. The implications of this series of scandals was also that the Navy had to look internally, further distracting from leaders' ability to institute doctrinal change.⁵¹⁰

The Bottom Up Review

With the end of the Bush Administration, the incoming Clinton Administration began to put its own stamp on the shape of the US military. While Powell as CJCS had pushed the concept of the Base Force that became the Bush Administrations post-Cold War force structure, the Clinton Administration launched its own review to determine the proper force sizing construct. The subsequent Bottom Up Review (BUR) was conducted to reassess all US forces and posture from the ground up, recognizing that the international security structure that underpin previous strategic decisions was no longer relevant. The BUR redefined US strategy around principally in responding to regional conflicts and developed a force sizing construct based on winning in two Major Regional Conflicts (MRCs).⁵¹¹

The BUR called for overall military to shrink by 1/3, as opposed to the 1/4 under the Base Force, and reduced the Navy from the 451 of the Base Force to 346, with 11

⁵¹⁰ Haynes, 115.

⁵¹¹ Les Aspin, "Report on the Bottom-Up Review" (US Department of Defense, October 1993), https://www.hsdl.org/?view&did=448259; Bruns, US Naval Strategy and National Security, 125.

active carriers (plus one in reserve) and only 45-55 SSN. Admiral Owens, new N8, produced the Navy's Force 2001 vision in 1993, in parallel with and anticipating the BUR demands. It did not dramatically alter the fleet's composition, other than reducing SSNs, which may have been an unpleasant surprise for the Marines anticipating an increase in amphibious emphasis.⁵¹²

"Forward...From the Sea"

The next step in the process occurred in June 1994, when the new SECNAV Dalton directed the CNO Boorda to develop a new Navy strategy that was better aligned with President Clinton's national security strategy. As noted by strategist Sam Tangredi, Secretary Dalton wasn't opposed to what was in "...From the Sea" but he was simply tired of defending a strategy to the White House that was signed by a Republican. In addition to reflecting the BUR's regional focus, "Forward…From the Sea" was also a clear shift to forward presence as the Navy's core mission.⁵¹³

"Forward...From the Sea also was driven by bureaucratic and personnel interests. As the time it was felt that the "Air Force and the Army were attempting to overturn the Navy's victory before it gelled into the budget"⁵¹⁴ as they believed the current Navy strategic guidance did not explicitly emphasize forward presence. Forward presence was a key element of the Navy's justification for a 12-carrier fleet, so this apparent lack of a doctrinal requirement for forward presence was a potential weakness. Additionally, the development of this strategy was at least partially driven by Admiral Dur (N51) and CDR

⁵¹² Bruns, US Naval Strategy and National Security, 142; Haynes, Toward a New Maritime Strategy, 90.

⁵¹³ Haynes, *Toward a New Maritime Strategy*, 96–100.

⁵¹⁴ Haynes, 98.

Sestak (513), who were both highly motivated to produce the next capstone strategy document.⁵¹⁵

The final strategy that emerged described a changing strategic landscape and a navy reorienting on regional adversaries. In this environment the strategy declared that "the naval service remains focused on our ability to project power from the sea in the critical littoral regions of the world."⁵¹⁶ This Navy would be organized around the traditional building blocks of Aircraft Carrier Battle Groups and Amphibious Ready Groups, supplemented by surface warships with theater BMD – an expansion of the traditional strategic deterrence mission filled by the SSBN force. While these forces were ever smaller and disaggregated, the strategy does reiterate that in a crisis they can form larger operational units.⁵¹⁷

Everything so far is largely consistent with the doctrine that emerged in the early 1990s. The big change, as noted above, was the emphasis on forward presence, or as it became known combat credible forward presence. As the strategy declared, the "most important role of naval forces in situations short of war is to be engaged in forward areas, with the objective of *preventing* conflict and controlling crises."⁵¹⁸ This was a return to the initial concepts of forward presence that the NFCPE had attempted to make the Navy's top priority, until "…From the Sea" had instead made power projection the Navy's core mission. Although not as ground-breaking as "…From the Sea" which

⁵¹⁵ Haynes, 98.

 ⁵¹⁶ John B Hattendorf, "Forward...From the Sea," in U.S. Naval Strategy in the 1990s, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 157.
 ⁵¹⁷ Hattendorf, 150–54.

⁵¹⁸ Hattendorf, 151.

established the Navy's post-Cold War doctrine, "Forward...From the Sea" is probably the second most important capstone document of the 1990s for its shift to forward presence.

Force Redesign

It was in the changes to the fleet's force design that the real hard decisions had to be made, and ones with lasting consequence. It takes decades to redesign a military, largely due to the lead time associated with sophisticated technology procurement and the time to build complex naval warships. Despite that, the 1990s was filled with ideas for the future Navy architecture, as the Navy tried to figure out how to match the fleet design to the new emphasis on power projection and littoral operations.⁵¹⁹

One such set of ideas came from Admiral Owens, who was the N8 under Kelso and then subsequently the VCJCS. He put a vision for "Force 2021," where the Navy had moved beyond initial steps such as transferring ASW ships to the reserves and embraced a force optimized for littoral warfare and power projection. Entirely new types of vessels, such as a Mobile Sea Base and Littoral Warfare Supremacy Ship, would supplement the legacy fleet. The Mobile Sea Base was not a single vessel but a series of platforms that could be brought together to effectively create an artificial island capable of serving as a sea base and airfield for traditional aircraft. The Littoral Warfare Supremacy Ship would be a hybrid destroyer and amphibious ship, designed to organically be able to defend itself, conduct strike warfare, and support expeditionary forces. Lastly, Owens called for the submarine forces to refocus on ASW operations in the littorals but also on battlefield

⁵¹⁹ Crowe and Chanoff, *The Line of Fire*, 327.

support roles, including strike, ISR and SOF missions – effectively an early predecessor of the SSGN.⁵²⁰

Another new idea that emerged in the late 1990s, was the Arsenal Ship, a ship designed for inexpensive strike warfare. Proposed by the CNO's Executive Panel, the Arsenal Ship was effectively a missile barge, loaded with 500 vertical tubes. Designed to be minimally manned, it was envisioned as a cost-effective way project power, particularly given the Navy's relative control of the sea. The Air Force was reportedly threatened by this very idea, as the Arsenal Ship could undermine case for strategic bombers and Naval aviators similarly viewed it as a threat arguing that it lacked the agility and flexibility of tactical aviation. Submariners, while not as threatened, made the case that while the concept was good, a missile submarine was a better option. In the end, no Arsenal Ship was built but the missile submarine idea did not go away.⁵²¹

The concept of a missile submarine was not new when the Arsenal Ship was being discussed, as it had first been floated during the NFCPE discussions. Admiral Dave Oliver violently rejected the idea of refitting nuclear submarines with conventional cruise missiles, to the extent that he literally bit that bullet off the overhead slide when presented against his warning during the NFCPE. This idea was crazy to an old nuke submariner, but in the end the DoD converted 4 OHIO SSBNs to SSGNs in the 2000s, as the Navy found itself with excess SSBNs following the Nuclear Posture Review. Many of the other

⁵²⁰ Owens, *High Seas*, 164–70.

⁵²¹ Haynes, *Toward a New Maritime Strategy*, 114–15.

force redesign proposals were not adopted, and limited shipbuilding funds were instead used to procure existing designs.⁵²²

Force Structure

Notwithstanding efforts to come up with new, novel force designs, fleet structure continued to evolve during the 1990s. Once promising platforms developed during the Cold War were cancelled, seen as unnecessary expenses for this new era of unipolarity. The fleet size plummeted as shipbuilding was cut and ships were retired, in some cases early. While shrinking across the board, the Navy prioritized keeping its carrier force intact.

Even with falling fleet size, new weapons systems did enter the fleet bringing more capability. A number of systems conceptualized in the 1980s began entering the fleet. The Trident D5 missile was fielded, bringing increased capability to the SSBN force. DDG51 Aegis destroyers began entering the fleet in numbers and new weapons such as the now combat-proven Tomahawk land attack missile and the new AMRAAM missile added significant capability to existing platforms. The new SIPRNET system and other linked C2 systems offered to revolutionize naval command, control, and communications. Yet, many promising systems were cancelled. Four expensive OHIO SSBNs were no longer needed, and only saved by being converted into SSGNs for land attack missions, while on the tactical side only 3 Seawolf SSNs, designed for undersea superiority against Soviet SSNs, were built and submarine shipbuilding plummeted. For naval aviation, the A-12 stealth bomber was cancelled, primarily due to budget overruns.

⁵²² Barnett, *The Pentagon's New Map*, 72.

Early in the next decade, a similar fate would await future surface platforms, including a family of new large surface combatants, generally known as CG21 and DD21.⁵²³

The carrier air wing, a key element of the Navy's force structure, changed significantly, as aging attack platforms were retired without replacement. A-6 long range attack aircraft and S-3 ASW aircraft were retired from the fleet, along with a number of the F-14 long-range interceptors, resulting the carrier air wing shifting sharply towards short-range, light attack aircraft. The Super Hornet program, effectively a stopgap measure to enlarge an existing Hornet fighter giving it more range and payload, would eventually replace all the F-14 platforms, and leave the air wing almost entirely organized around the light attack mission. While appropriately reflecting the type of regional missions that the Navy was likely to face in the near term, it also left the air wing without many of the capabilities that made it valuable in major combat operations.⁵²⁴

Navy shipbuilding dropped significantly, as the Navy's force structure goal was lowered. In the four years at the end of the Cold War through 1991⁵²⁵ the Navy procured 79 ships, as compared to 28 and 21 for the two following four-year periods, as shown in the table below.

⁵²³ "Maritime Strategy for the 1990s," 5; Bruns, US Naval Strategy and National Security, 145–46. ⁵²⁴ Peeks, Aircraft Carrier Requirements and Strategy, 1977-2001, 121.

⁵²⁵ While the Cold War technically ended earlier, budget submissions for FY91 would have been worked well in advance of those developments. 1991 saw less ships procured than the preceding years, but many more than 1992 and on.

Table 17: Navy Ship Procurement, 1988-1999526							
	1988-19	991	1992	2-1995	1996-19	999	
Carrier	2	3%	1	4%	0	0%	
Cruiser	5	6%	0	0%	0	0%	
Destroyer	14	18%	15	54%	13	62%	
Escort	0	0%	0	0%	0	0%	
SSN	7	9%	0	0%	3	14%	
SSBN	4	5%	0	0%	0	0%	
Amphib	6	8%	2	7%	4	19%	
Patrol	13	16%	0	0%	0	0%	
Minesweeper	9	11%	5	18%	0	0%	
Auxiliary	19	24%	5	18%	1	5%	
Total	79		28		21		

The precipitous drop in shipbuilding resulted in the closing of many prized production lines. No cruisers, SSBNs, or patrol craft were procured at all from 1991-1999 and only one carrier and three submarines over this period. For submarines specifically, a third Seawolf SSN was bought in 1992, but subsequently cancelled. This canceled future *USS Jimmy Carter* (SSN 23) would be restored in 1996 and followed by a new class of less expensive *Virginia*-class submarines supposedly focused on littoral and power projection, with two procurements in the late 1990s making up the three SSNs of 1996-1999 period.

⁵²⁶ Polmar, The Ships and Aircraft of the U.S. Fleet.

	198	39	19	994	19	999
Carriers	14	2%	12	3%	12	4%
LSC	112	19%	76	19%	79	24%
SSC	106	18%	58	14%	50	15%
Tactical Submarine	99	17%	88	22%	57	17%
Strategic	36	6%	18	4%	18	5%
Submarine						
Amphibious	61	10%	38	9%	41	12%
Auxiliary	141	24%	98	24%	61	18%
Mine Warfare	23	4%	16	4%	18	5%
Total	592		404		336	

Table 18: Fleet Size and Makeup, 1989-1999⁵²⁷

As the Navy's shipbuilding numbers dropped and existing platforms were retired, in some cases before the end of their service life, overall fleet size continued to drop as well. From a battle force of 592 ships in 1989, just a little lower than the 600-ship Navy goal almost reached in 1986, the fleet fell to 404 in 1994 and 336 in 1999 (and even lower than that into the next decade). While all types were reduced on an absolute basis, some grew as a relative portion of the fleet. Carriers in particular saw reduction of two, principally due to the retirement of aged *Midway*-class and *Forrestal*-class carriers that was only particularly offset by new *Nimitz*-class carriers procured in the 1980s, and of the remaining twelve, one was technically in a reserve status. Despite that, carriers grew from 2% to 4% of the fleet as the Navy prioritized its capital ship over other types. Amphibious ships grew slightly as well, but surprisingly Large Surface Combatants grew from 19% to 24% of the fleet. Auxiliary ships dropped as did Small Surface Combatants,

⁵²⁷ "US Ship Force Levels."

while the rest of the fleet, even the much-reduced submarine force, remained close to the same proportional size.

Doctrinal Evolution Continued

While "...From the Sea" and "Forward...from the Sea" were the Navy's primary strategic documents, strategic capstone documents of various types were still generated throughout the remainder of the decade. First up was the Navy Operational Concept that was tasked by CNO Admiral Johnson to the N5 in response to the a CJCS doctrine, Joint Vision 2010. It was jointly developed by CDR Bouchard, a strategist in N513, and VADM Cebrowski, the N6. Somewhat of an odd pair, the strategist worked with the technologist Cebrowski to harness his visionary ideas and integrate network-centric warfare into the NOC. The NOC, eventually released in 1997, included all the traditional elements of forward presence, but also innovative ideas about the employment of naval forces in a network-centric world.⁵²⁸

The NOC emphasized the importance of forward deployment to signal resolve, operate without large base infrastructure, and prevent fait accompli. This was presented as a key element of the Joint fight, as "initial operations by forward naval forces are critical for enabling the joint campaign."⁵²⁹ Rather than seapower itself being the mission, the Navy would ensure access to the theater for forces surging from the US and take control of the littorals to be able to safely operate in face of adversary threats.⁵³⁰

⁵²⁸ Haynes, *Toward a New Maritime Strategy*, 122.

 ⁵²⁹ John B Hattendorf, "The Navy Operational Concept," in U.S. Naval Strategy in the 1990s, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 166.
 ⁵³⁰ Hattendorf, 164.

The Navy would do this via its proven battle groups, but now they would only train together and disperse once in theater to maintain wide area coverage. Individual units would be able to operate independently but would be link together with modern C2 regardless of distance. These battle groups would provide C2 nodes and be prepared to function as joint force commanders. Submarines found a new life for surprise attacks, blunting enemy defenses and hitting offensive forces first. All this was to enable power projection which was now defined not just as carrier strikes, but also naval fires, Marine expeditionary operations, and Naval Special Warfare forces. As the NOC noted, sometime a sniper is the best precision weapon. This was a far cry from the battle navy of the previous decade.⁵³¹

Unfortunately, the NOC had minimal impact if any. Apparently the powerful N8, myopically focused on budgetary battles, protested that the document's focus areas would undermine other naval budgetary priorities and the CNO didn't want to give the impression he was replacing "Forward...From the Sea". So instead of being rolled out with the typical fanfare it was simply posted to the Internet in January 1997, and when eventually published in May 1997, was sent not to *Proceedings*, as almost all previous strategies had, but to the Navy's League's journal *Sea Power*.⁵³²

Not much later in November 1997, CNO Johnson was convinced to publish a vision, as his leaders saw themselves as under attack from the Air Force, particularly in justifying the new Super Hornet program. Published in *Proceedings*, "Anytime,

⁵³¹ Hattendorf, 162–67.

⁵³² Haynes, *Toward a New Maritime Strategy*, 128.

Anywhere" claimed that the Navy existed to "influence, directly and decisively, events ashore from the sea – anytime, anywhere." It was a relatively simple vision, focused on warfighting, and organized around Admiral Stansfield Turner's four missions. It was popular in the fleet, as it described what sailors did, but it had little impact and was seen as highly parochial. It also seems to indicate the beginnings of a drifting apart of the Navy and Marines, as it emphasized traditional Navy missions with the Marine's role barely mentioned.⁵³³

Then in November 1998 came SECNAV Danzig, who was sworn in at the tail end of the Clinton Administration. He was more of an intellectual than previous SECNAV's and was the most activist SECNAV since Lehman, not content with just minding the shop and interested in driving change. He wanted a strategy statement in place before the next QDR and tasked the development of "A Maritime Strategy for the 21st century." Authored by strategists Sestak and Tangredi, it continued traditional elements of forward presence and power projection but introduced new concepts of globalization and antiaccess. Although drafts were circulated for informal comment, ultimately it never was published – reportedly this was either due to the Marines quietly killing it for the sin of insufficient expeditionary focus or due to Danzig attempting to rewrite it himself, leaving the service chiefs to revolt. The death of the new Maritime Strategy led to Admiral Sestak to look for a new way to guide preparations for the 2001 QDR.⁵³⁴

 ⁵³³ John B Hattendorf, "Anytime, Anywhere: A Navy for the 21st Century," in U.S. Naval Strategy in the 1990s, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 174; Bruns, US Naval Strategy and National Security, 138; Haynes, Toward a New Maritime Strategy, 128.
 ⁵³⁴ Haynes, Toward a New Maritime Strategy, 134–35.

This wasn't the end of the attempt to develop a new maritime strategy, and at the same time CDR Bouchard, N513, was looking for a way to develop a strategic planning process, as opposed to the budgetary-driven programming process that had emerged. This was resisted by the N8, who saw it as a threat to their institutional power, as well as the warfare barons – who enjoyed the freedom they had gained in a post-Kelso world. However, N81, the warfare analysis center, saw value in this approach and the strategist partnered with the systems analysts, a reversal of their Cold War era animosity, to jointly develop strategic planning guidance. In 1999, OPNAV released the first Navy Strategic Planning Guidance. Admiral Sestak would take control of this process and insert the maritime strategy views into the next version, doubling the length of the document in 2000.⁵³⁵

The 2000 Strategic Planning Guidance identified a strategic environment, that although lacking a peer competitor was becoming increasing challenging for the Navy. Regional actors were gaining technologically advanced weapons systems and OPNAV, somewhat presciently, predicted a growth in area denial strategic over the next 15 years. The focus of the Navy would remain on projecting influence ashore, with the fleet organized around the CVBG and ARG formations. As always, forward presence was key – as the document stated "Combat-credible forward presence is an enduring contribution of naval expeditionary forces."⁵³⁶ Most of this was consistent with previous documents,

⁵³⁵ Haynes, 139.

⁵³⁶ John B Hattendorf, "Navy Strategic Planning Guidance with Long Range Planning Guidance," in *U.S. Naval Strategy in the 1990s*, Naval War College Newport Papers 27 (Newport, R.I: Naval War College Press, 2006), 199.

but the increasing emphasis on global access and the rise of anti-access strategies was

new and would prove to be relevant in the future.⁵³⁷

Doctrinal Concepts of the 1990s

	1980s Navy Doctrine	1990s Navy Doctrine
Strategic	Offensive strategy	Power Projection
Concept	 Defeat Soviet forces forward 	 Littoral Operations
	• Exert pressure on Soviet flanks	 Influence events ashore,
	 Threaten Soviet SSBN force 	largely short of war
Employment	Integrated forward operations	Disaggregated presence
Concert	 Multicarrier operations 	 Strike and expeditionary ops
Concept	 EMCON and tactical 	 Traditional building blocks
	deception	(CVBG/ARG) disaggregated
	 Far Forward Anti-SSBN 	 ASW deemphasized
	campaign	•
	 Joint/Reserve/USCG 	
	integration	
Deployment	Combat Credible Forward	Combat Credible Forward
Concept	Presence	Presence
concept	 Third Deployment Hub 	 CENTCOM Deployment
	 Pre Positioning Ships 	Hub becomes primary
	 Forward Presence as a 	 Drawdown in Sixth Fleet
	deterrent mission	 Presence is the mission
Fleet	Balanced fleet	Reduced fleet
Architecture	 Endorsement of large carriers 	 CVN remains dominant
	 Major expansion in fleet size 	 Fleet size shrinks
Concept	• New submarine, amphib and	• Low end platforms first to
	cruiser developments	retire
	 Major additional weapons 	 New littoral programs
	systems (F-14, Tomahawk)	proposed, but not realized

Table 19: 1990s Doctrinal Change Summary

⁵³⁷ Hattendorf, "Navy Strategic Planning Guidance with Long Range Planning Guidance."

Strategic Concept

The 90s were a turbulent era for Navy doctrine, as it struggled to articulate its role in the New World Order. The previous Maritime Strategy based around offensive strikes to eliminate Soviet sea denial forces and Strategic ASW was no longer relevant, something that even its most ardent supporters came to admit, as the US suddenly found itself with effectively guaranteed global access. Over time, the Navy refocused on power projection ashore and in the littorals and that remained the Navy's primary mission across multiple strategic documents.

Even as early as the "Way Ahead" and further enhanced and emphasized in subsequent strategic documents, the Navy (reluctantly) embraced a concept where projecting capability ashore, via a variety of means became the Navy's unique value. The NFCPE debate between Cold Worriers, Transitioners and Big Stickers exemplifies the internal struggle within the Navy. Even though the Cold Worriers eventually lose, the Navy never fully resolves its preferences between the Transitioners and the Big Stickers. Specifically, the Strategic Concept consistently focuses on deterring regional aggression and forward presence but alternates in emphasizing either shaping activities to prevent aggression or supporting major combat operations against regional adversaries.

But although the exact shape of the Strategic Concept, and the balance between peacetime shaping activities and regional warfighting remained up for debate in successive documents, the overall concept moved definitively away from a sea control and peer adversary mission. Instead, the goal became utilizing seapower to deliver effects from the sea, and a convenient tagline for the new strategic documents. This wasn't

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entirely inconsistent with past approaches, as ultimately most Strategic Concepts did aim to eventually have some effect on land, whether via blockade, bombardment, or ensuring flow of vital material and troops, after sea control was established to make such activities safe. What was novel was that the intermediate step of gaining sea control, that was the focus of most previous strategies was gone and the Navy refocused on the use of seapower to influence the broader national campaign.

Employment Concept

As would be expected for such a major change in the Strategic Concept, the 1990s Employment Concept also changed dramatically. The entire ASW mission effectively vanished, although littoral ASW did remain a concern. Navy forces were restructured to provide more flexible employment options, even if the overall unit types remained consistent. The Navy's primary tasks shifted to become strike warfare and expeditionary operations.

The Navy's organization remained focused on the proven building blocks of CVBGs and ARGs, despite the relative lack of a peer naval competitor. Reflecting the lack of a naval threat, escort requirements for these formations were reduced and even as these relatively large formations remained the formal structure of the deploying Navy, they were planned to disaggregate once they were underway allowing them to cover more ground while preserving the required combined training so they could come back together as a large combat formation if needed. Strategists discussed smaller, flexible formations, such as combining an amphibious ship with an escort, and while this likely happened there does not appear to have been an attempt to formalize these structures. So,

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the fleet remained organized around large CVBGs and ARGs, even if they operated differently at sea, despite the changing missions.

The Navy's core missions did change, and new concepts such as expeditionary warfare dominated the employment of forces, in addition to presence, humanitarian assistance and Naval Operations Other than War. The Navy tied itself much closer to the Marines than previously and emphasized a key aspect of its value lay in the partnership with the Marines to deliver expeditionary capabilities. Strike warfare got a boost from technology, as the Tomahawk missile, newly proven in Desert Storm, gave the submarine and surface communities new found capabilities, and expanded strike options beyond a small number of carriers. Submarines, in addition to their newfound strike role, also found new missions including battlefield support and ISR, now that the ASW mission had lost its priority. A few innovative concepts emerged, especially from VADM Cebrowski, and his network centric warfare will inform many of the transformative goals of the next period. But overall, the Navy embraced new force employment methods, even as it stuck with the tried-and-true CVBG and ARG organizational construct.

Deployment Concept

Surprisingly, the Navy's Deployment Concept barely changed. The Navy had embraced its forward rotational deployment model in the post-WWII era instead of returning to its previous homeported model. With the collapse of the threat that motivated this posture in 1947, it might have been reasonable for the Navy to return home once again. Instead, Navy deployments didn't miss a beat and this forward presence almost became the mission itself.

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Deployment and organizational patterns did evolve, principally with the ongoing development of the third deployment hub in the CENTCOM AOR as an equal mission. The Navy had moved in this direction in 1979 and remain engaged in the region throughout the 1980s but it remained somewhat of a backwater deployment hub. This changed after Desert Storm, as the Navy needed to maintain forces to continue deterring Iraqi aggression. The balance of deployments shifted, and Sixth Fleet European deployments slowly shifted CENTCOM deployments, reflecting the reduced threat in Europe. This was formalized when, along with addressing the lessons learned from Desert Storm, the Navy finally had a VADM (3-star) relieve as NAVCENT on 19 Oct 1992 and the Fifth Fleet was established in Bahrain on 1 July 1995. These organizational alignments put NAVCENT's deployment hub on an equal footing with Sixth Fleet, and with Seventh Fleet in the Pacific.⁵³⁸

Fifth Fleet deployments to deter regional aggression weren't the only deployment mission, and the Navy continued providing combat credible forward presence in the Pacific, as North Korea remained a regional challenge. Moreover, in many regions the Navy pivoted to rotational deployments providing shaping value by themselves, and in many ways becoming the goal. Previously, rotational deployments were used to ensure forces were in theater to support warfighting responsiveness against peer adversaries. Now the Navy began to describe a unique contribution by maintaining forward presence for shaping and partnership building activities, in addition to ensure the Navy and Marines remained a credible crisis response organization.

⁵³⁸ Marolda and Schneller, *Shield and Sword*, 350.
Just as important, the Navy's Deployment Concept did not entirely adjust to the changing capabilities of the Navy. At the height of the Cold War, the Navy routinely operated 150 ships forward, with a force structure of almost 600. This was largely based on a desired 4:1 force structure to deployment ratio, which was what the Navy had determined was a sustainable model. However, after the Cold War as the Navy's force structure collapsed, the new demands from regional COCOMs and the Navy's commitment to forward presence resulted in breaking this model. With just over 300 ships at the end of the decade, and numbers dropping even lower in the 2000s, a 4:1 ratio would have only 75 ships routinely deployed. Instead, the Navy shifted to a 3:1 ratio, with 100 ships deployed. As CAPT Hendrix has noted, this will have implications for the Navy's readiness in future decades.⁵³⁹

Fleet Architecture Concept

The Navy remained a carrier heavy force, and to some extent became even more carrier heavy, during this era. This despite the requirements for more peacetime activities where higher end capabilities were not necessarily required. In general, the Navy divested itself of many of its lower end platforms, particularly its smaller ASW frigates. Rather than a wholesale shift in fleet architecture to match the Strategic and Employment Concept, the Navy simply looked like a slightly smaller version of its 1980s self.

Some innovative ideas were proposed, among them the littoral supremacy ship, the arsenal ship, the mobile sea base, and the missile submarine. Many of these would

⁵³⁹ Henry J Hendrix, *To Provide and Maintain a Navy: Why Naval Primacy Is America's First, Best Strategy* (Annapolis, Md: Focsle LLP, 2020), 43.

seem natural fits for the missions envisioned by the strategic documents of the time, but in the end only the missile submarine would emerge. In the case of the SSGN, it was realized by converting existing, excess SSBN hulls, which although technically challenging is far easier than starting development of a new program. Most of the other concepts made it no further than the concept stage, although near the end of the decade a new idea, the Littoral Combat Ship would start to take shape and be realized in the 2000s.

The shrinking fleet size and shipbuilding budget admittedly provided minimal margin for major changes in the fleet, particularly given the long lead time associated with changing fleet architecture. But it is notable that as the future fleet size changed from 600, to 450, to just over 300 ships, the Navy seemed to devote the majority of its focus on successfully defending the number of carriers even as the rest of the fleet was reduced. Thus, the fleet architecture remained based around CVBG and ARGs, even as their employment was revised, in line with the Naval faith in multipurpose combat formations.

Drivers of Change

Balance of Power

The end of the Cold War and the change in the strategic balance of power was clearly one of the primary causes of this doctrinal shift, although it only required a change and did not define what that change would be. The Maritime Strategy of the 1980s, and more generally the doctrine of the entire Cold War period, was principally focused on the nation's primary competitor, the USSR. The end of the Cold War removed this primary threat that US force structure was based on and organized to counter,

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resulting in a sort of institutional whiplash. As President Bush stated, "we're entering a new era: the defense strategy and military structure needed to ensure peace can and must be different."⁵⁴⁰ The underlying logic of the previous doctrine no longer valid, the Navy had to craft a new doctrinal approach that aligned with the challenges of the 1990s.⁵⁴¹

With the communist bloc collapsing, and even the next strongest adversary in China not truly a competitor for several decades, despite the Cold Worriers concern, the US found itself in its unipolar moment. In this geopolitical environment, the primary goal was alternately to deter regional challengers or to ensure the transition to an American led global system. Given this change in the balance of power, it's only logical that the Navy refocused its strategy on regional presence, effectively its only possible remaining mission.

Domestic Politics and Budget

On the domestic front, the peace dividend clearly required doctrinal shift by the Navy. The Maritime Strategy, intertwined with the 600-ship Navy, could not survive the significantly reduced budgets of the 1990s. This was anticipated even before the end of the Cold War by Powell, and the desire to preempt poorly planned budget cuts was the primary motivation behind the Base Force development. The BUR similarly called for significant cuts in overall defense spending. This forced the Navy to lower its doctrinal goals to reflect the reduced size and associated capabilities of the future. For the Navy, this largely meant preserving its carrier forces and ability to maintain some forward

⁵⁴⁰ "Public Papers - George Bush Library and Museum."

⁵⁴¹ Haynes, *Toward a New Maritime Strategy*, 44.

presence, even at the cost of other capabilities. Those choices were largely not decided by domestic or budgetary factors however, and the Navy did have other options – it just elected to prioritize certain elements in its graceful decline from the 1980s-sized Navy.

Bureaucratic Politics

While interservice rivalry was not at the intensity of the immediate post-WWII period and the Revolt of the Admirals, it clearly was a driving factor. The Navy was driven by both the need to validate the Navy's unique value to preserve domestic support for funding but also the need to align with the new Joint structures. From an interservice perspective, Desert Storm and the primary role air and land power played in that conflict seemed to make the Navy less relevant in future conflicts, similar to how strategic bombing called into question the Navy's role in the 1940s. These bureaucratic dynamics led the Navy to advocate for specific capabilities and doctrinal adjustments.

Even early in the decade, a key motivation for the development of "…From the Sea" was that the Navy wanted to "grab the people's attention just like the Air Force's 'Global Reach, Global Power' pamphlet (1990) had."⁵⁴² This competition for declining resources and preeminence didn't subside throughout the decade, although it was likely muted somewhat by defense-wide cuts that hit each service similarly, reflecting the newfound power of OSD. Even later in the decade, Combat Credible Forward Presence not bought by the other services, as the Air Force saw its forces as more robust and the

⁵⁴² Bruns, US Naval Strategy and National Security, 131.

Army saw boots on the ground as only thing that mattered, contributing to the development of the subsequent "Forward…from the sea."⁵⁴³

Intraservice bickering was present as well, as all the branches fought for their particular programs, attempting to reverse Base Force and BUR cuts. The surface community fought to emphasize shaping and expeditionary operations, where its forces were most relevant, along with fighting for a strike role thanks to the new capabilities of the Tomahawk. The submarine force also pivoted away from its previous ASW focus, recharacterizing undersea forces as battlefield support capabilities and shifting future submarine procurements to emphasize littoral capabilities. The Navy's sister service also drove much of the doctrinal development, and even before the end of the Cold War the Marines were already moving beyond Maritime Strategy with 1989 *FMFM1* under Commandant Gray, shifting the USMC focus from amphibious warfare to expeditionary warfare. Expeditionary warfare became the buzzword of the 1990s military, and the Navy found itself following the Marine's lead in many ways. This was both because the Marine's capability rose in priority given the 1990s missions, but also reflected Goldwater Nichols effectively elevating the Marines as an independent service.⁵⁴⁴

The Joint structure of Goldwater Nichols was the true bureaucratic game changer. By providing more direct authority to the Joint Chiefs and the COCOMs at the expense of the services, the Navy lost much of its ability to chart its own future. With the COCOMs "owning" strategy, the Navy instead focused on force development and

⁵⁴³ Bruns, 136.

⁵⁴⁴ Bruns, 136; Wills, *Strategy Shelved*, 187.

budgeting throughout the 1990s, with the few strategic documents primarily based around justifying force structure and weapons procurements as opposed to truly strategic planning. Similarly reflecting the new Joint rules, the Navy focused on selling its forces as Joint elements, for example training CVBGs as Joint Task Force commanders and naval forces as joint enablers with sealift and power projection capabilities.

Civilian Intervention

Civilian intervention, as much as it occurred, was more subtle and primarily budget driven. In the end, the Navy budget was set by civilian leadership and budget cuts were a key element of the doctrinal decisions of the 1990s. Powell was presciently able to preempt possible civilian intervention by proposing a Base Force that reduced the military by 1/4, but even then the subsequent administration would direct a 1/3 reduction in the BUR. The Navy remained aligned with the BUR review and was able to shape the best outcome of the options it had and presented its new strategy in parallel with the BUR's force structure goals. At a strategic level, a series of national strategies provided new guidance for the DoD as a whole, emphasizing missions and requirements ranging from humanitarian and peacekeeping operations to the 2 major combat operation sizing construct. The Navy incorporated these requirements into its strategies as they evolved, likely as much to show how the Navy was supporting national requirements as because the Navy's Strategic Concept was committed to humanitarian operations. But both budgets and civilian strategic guidance were similar in that they provided general guidance but did not explicitly tell the Navy how to structure its doctrine. Within the bounds provided, the Navy appears to have had relative freedom to make its own choices.

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Learning Organization

The Navy continued operating as a learning organization, but its learning organizational capacity was less robust that in the previous decades. To a large extent, the Navy was living off the legacy of learning organizational investments of the previous era. Many of the strategists who star in the 1990s narratives were developed in the 1970s and 1980s and veterans of the OP603 strategic community. However, Goldwater Nichols changed this, and that capacity will diminish going forward as OP603 lost its leading role and strategists rotated through the Joint Staff and COCOMs, which because the locus of strategic thought. For the 1990s however, this community remained intact and many examples of learning and advocacy networks are behind the Navy's successful reorientation.

The NFCPE is a model case of an incubator, as a small group of mid-grade officers worked offsite at CNA to reset Navy doctrine to account for the requirements of the post-Soviet world. This effort led directly to the development of "...From the Sea," one of the more successful documents of the 1990s and one that helped the Navy come to grips with the post-Maritime Strategy world. Even before this doctrinal shift, smaller groups became meeting informally in monthly strategy lunches, hosted by CAPT Jim Stark of CNO staff and unofficial Saturday meetings hosted by CAPT Diamond of OP603. The ideas developed as part of these efforts were incorporate into the "Way Ahead" which helped start the shift towards the new doctrine of the 1990s.⁵⁴⁵

⁵⁴⁵ Wills, "Replacing the Maritime Strategy: The Change in Naval Strategy from 1989-1994," 191.

Even as the strategist community remained an effective, if diminished, incubator, many of the other elements of learning organization were missing. Key contributors such as the Naval War College and the Strategic Studies Group appear absent, and the SSG was refocused to look at innovation vice strategy. The Navy also made inconsistent use of advocacy networks, and even when it did was primarily the traditional, if now overused, publications in *Proceedings*. The strategist community, and its informal lunches that would eventually become the Strategy Discussion Group of the modern era, were effective in keeping strategic thought alive. The Navy's "big" strategic shifts, such as "...From the Sea" were effectively communicated, with not just publication in Proceedings but also with hundreds of thousands of glossy pamphlets. On other cases, the Navy intentionally chose to not utilize these methods, and the example of the Naval Operational Concept, quietly posted to a website instead of published, shows the impact of advocacy networks as the NOC had minimal impact. So as a general statement, when the Navy was able to drive a true strategic change as it did in the early 1990s, it effectively used its learning organization, but as that atrophied it seemed less capable of major, lasting change.

Culture, Norms, and Ideas

Culturally, the Navy appeared challenged to adapt to the dynamics of the post-Soviet world and one without a peer naval competitor. As historian Ed Marolda noted, "Naval leaders were steeped in Mahanian operational concepts that envisioned flag officers directing grand fleet actions at sea, as they had in the cataclysmic World War II

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battles of Midway, Philippine Sea, and Leyte Gulf."⁵⁴⁶ This vision of naval warfare was entirely misaligned with demands of the 1990s, where the US Navy had almost guaranteed global access and no apparent threat to sea control. As a result, it took time for the Navy to adjust to its new reality and it never shifted its force structure to entirely align with the new demands.

Furthermore, as historian Steve Wills concluded Navy culture was traditionally more independent than Army, as the Navy had no historical civil function that required extensive civilian control. It also viewed strategy as a global affair, reflecting its inherent mobility, in some ways like the strategic elements of the Air Force. On the other hand, the Army and the tactical side of the air force viewed strategy through a theater construct. With the Goldwater Nichols giving more authority to the regional COCOMs, the Navy's global view became unhelpful, and the Navy had to figure out how to adjust its thinking to reflect this new regional dynamic.⁵⁴⁷

The Navy remained culturally predisposed to forward presence, global operations as sailor-statesmen and the preeminent role of carriers based on their success in the Pacific. As a result, the Navy appears not to have seriously considered alternatives to the choices of the 1990s. The Navy did not return to a homeported status now that the war was won nor did it shift its force structure away from large carriers and towards smaller ships, since the lack of any real threat didn't seem to justify the overwhelming capability of the US supercarriers. Instead, the Navy continued maintaining rotational forward

⁵⁴⁶ Marolda and Schneller, *Shield and Sword*, 359.

⁵⁴⁷ Wills, "Replacing the Maritime Strategy: The Change in Naval Strategy from 1989-1994," 154.

presence, even as the fleet size dropped, and remained organized around CVBGs, even as supporting elements were reduced. While there may have been good reasons that the Navy continued these doctrinal choices, such as the Cold Worriers fear of the reemergence of a great power competitor, the fact that these choices align with existing cultural predisposition strongly suggests that cultural ideas were one of the key drivers behind the doctrinal developments of the 1990s.

Conclusion

As shown below, the Navy's doctrinal changed because of balance of power, budgetary pressure, and bureaucratic considerations. The exact result of the emerging doctrine was shaped by the remnant of a learning organization and long-standing cultural predispositions.

	Retutive	Impuci		
	Significance			
H ₀ : Balance of Power	Major	Collapse of USSR eliminated the		
		pacing threat and force sizing construct		
<i>H</i> ₁ : <i>Domestic Politics</i>	Constraint	Budget cuts and domestic factors		
and Budget		reduced Navy's decision space		
<i>H</i> ₂ : <i>Civilian Intervention</i>	Minor	Little evidence of direct direction to		
		the Navy on doctrinal issues		
<i>H</i> ₃ : <i>Bureaucratic</i>	Major	Traditional interservice rivalry now		
Competition		replaced by Service-Joint dynamics		
<i>H</i> ₄ : Learning	Major, but	Legacy learning organizational		
Organization	declining	capacity helped shape post-Cold War		
		options		
<i>H</i> ₅ : Service Culture and	Major	Culturally, the Navy did take		
Ideas		possible options for smaller ships or		
		less forward presence		

Table 20: 1990s Doctrinal Change Hypotheses

Relative Impact

More generally, the Navy was challenged in this era and while not as dramatic as the 1940s, the Navy found itself under attack on multiple fronts. It largely lacked a coherent approach, with at times different groups working on strategic and doctrinal elements at the same time. Overall, the Navy "misjudged the persuasive power in the face of geostrategic shifts, public expectations toward post-Cold War peace and serenity, its own lackluster ability to innovate and change institutionally, and two successive administrations which shied away from verbalizing strategic visions."⁵⁴⁸ It appears that the Navy was entirely caught by surprise by the full impact of Goldwater Nichols and in many ways could not keep up with Army and Air Force strategic thought, as Desert Storm, a conflict where the Navy was clearly a supporting element, seemed to be the model for the future.⁵⁴⁹

The Navy's struggle with defining its doctrine in a way that was relevant to the strategic situation of the 1990s is evident in the number of documents produced. While the 1980s saw the Maritime Strategy as effectively the only doctrinal statement, even if it was revised over successive years, over the 1990s at least 9 service-level documents were promulgated with doctrinal elements, as each of them successively proved not quite right. With so many documents being produced over a short period, their impact became muted as they would be replaced before they had much impact and more importantly, they were consistently "hamstrung by the lack of a long-term follow-up plan, which might tread on the command prerogatives of the next CNO."⁵⁵⁰

In the end, the Navy did effectively reorient itself towards a doctrine that described the Navy's unique value to the Joint force and described how seapower would influence events ashore in the new era of naval superiority. While the reasons for this doctrinal shift are relatively obvious, given the collapse of the USSR, reduced budgets resulting in a smaller fleet, and the need to compete under the new joint rules, the manner

⁵⁴⁸ Bruns, US Naval Strategy and National Security, 127.

⁵⁴⁹ Bruns, 141.

⁵⁵⁰ Haynes, *Toward a New Maritime Strategy*, 143.

in which the shift happens still shows the utility of a functioning learning organization and the power of ideas in shaping choices.

CHAPTER EIGHT: CONFUSED SEAS, THE NAVY IN THE 21ST CENTURY

The 21st Century brought entirely new and unanticipated challenges for the Navy. The Navy entered the 2000s with a vision of itself as a power projection force focused on forward presence and regional conflicts. That would be upended by the twin pressures of "transformation" and the systemic shock of the Global War on Terror, and by the slow rise of China as a peer competitor, foreshadowing today's much-discussed Great Power Competition. While primarily a slow evolution over the first two decades of the 21st Century, it can be broken apart into three primary periods: the early 2000s, dominated by the response to terrorism and a drive for transformation; the late 2000s, where the Navy embraced the global system as its reason for being; and the early 2010s, with attempts to shift to the Pacific. Constant throughout all these periods were the underlying pressures of ongoing ground campaigns in the Middle East, significant budgetary pressure, and troubled shipbuilding programs. As a result, the Navy appears pulled in multiple doctrinal directions and while doctrinal shifts do occur, they do not appear to have much lasting impact even as new innovative concepts for the use of seapower in support of the national security are proposed.

Transformation and Terror

The early 2000s was dominated by the attacks of 9/11 and the US response, but also by the top-down drive for "transformation" occurring throughout this period. The result of these combined pressures would be a doctrinal shift embracing a more

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distributed force, moving away from traditional employment, deployment, and fleet architecture concepts to provide both constant presence and surge capability.

Entering the new Bush Administration, transformation was the clear priority and the 2001 QDR explicitly called for force-wide transformation. Specifically, President Bush and Secretary of Defense Rumsfeld wanted a force less defined by size but instead by mobility, stealth, and swiftness. At the same time, tax cuts meant a relatively smaller defense budget, so this transformation needed to occur by deferring or divesting other investments. For the Navy, this meant a deliberate movement away from "legacy" manned platforms, focusing on unmanned systems and network-centric effects.⁵⁵¹

Even as the Bush Administration moved forward with its plans for force transformation, the attacks of 9/11 resulted in an urgent strategic shift towards irregular warfare. The US response to 9/11 seemed to validate Rumsfeld goals for transformation, as a small force of US special forces combined with precision strike quickly overthrew the Taliban government in Afghanistan. Carriers played a vital role in Operation Enduring Freedom, providing the majority of the air support as there were no friendly airbases were in range. Unlike Desert Storm where the Air Force's centralized planning model reduced the Navy's role, the time sensitive nature of the strikes played to the Navy's flexible operating model. As a result of these pressures, the US Navy

⁵⁵¹ "Fact Sheet: Making America More Secure by Transforming Our Military," accessed January 30, 2022, https://georgewbush-whitehouse.archives.gov/news/releases/2004/08/20040816-5.html; Haynes, *Toward a New Maritime Strategy*, 149.

simultaneously developed new doctrine for irregular warfare to support the ongoing campaigns, but also embarked on a drive for defense-wide transformation.⁵⁵²

Irregular Warfare

The conflict of course did not end with the US victory over the Taliban, as it expanded to include Iraq and was rebranded as the "Global War on Terror." The global nature of the challenge would require significant shifts in how the Navy operated, as simply projecting power in regional conflicts, such as Iraq and Afghanistan, was no longer sufficient. The Navy would instead need to provide more shaping forces and not simply project power from the sea, but operate ashore.

The Navy began shifting towards irregular operations, albeit slowly, as the demands of the Global War on Terror began to make itself felt. On 13 January 2006, the Navy established Navy Expeditionary Combatant Command as a new Type Commander for irregular forces, including Seabees and the recently reestablished riverine forces. A significant portion of this new organization's force structure remained in the reserves, but this was still notable as it was the first type commander created in many years.⁵⁵³

The Navy envisioned using its forces, both the new NECC but also SOF and general-purpose forces, to focus on preventive security and building partner capacity to confront irregular challenges. A whole new set of missions was created for Naval forces including foreign internal defense, security force assistance and stability operations as the Navy sought to remain relevant. Importantly, major naval combatants did not appear to

⁵⁵² Haynes, *Toward a New Maritime Strategy*, 151.

⁵⁵³ Angus Anderson, "The Establishment of NECC," The Sextant, May 6, 2021,

http://usnhistory.navylive.dodlive.mil/Recent/Article/2687083/the-establishment-of-necc/.

have much utility for many of these missions, as smaller elements were better able to integrate with smaller partner Navies. In addition to these new missions, the Navy also began providing thousands of "Individual Augmentees" as sailors were assigned to provisional units on the ground in Iraq, Afghanistan, and other parts of the theater. Throughout the 2000s and into the upcoming Obama Administration which maintained similar mission requirements, these missions would be a significant addition to the Navy's operations.⁵⁵⁴

Sea Power 21

Confronting these demands of transformation and terror required a shift away from the Navy's 1990s doctrine. Admiral Stavridis, a familiar name, returned to Pentagon in 2002 and was tasked by Clark with determining alternate approach to naval doctrine. He was one of the original members of Deep Blue, along with another familiar actor of the past decade Admiral Sestak. Deep Blue was an organization established to help the Navy shift its doctrine to reflect the new, unanticipated demands of the war on terror. The Navy's eventual response was eventually codified in Sea Power 21.⁵⁵⁵

Sea Power 21 was released by CNO Admiral Clark in June 2002. It laid out three primary elements of naval power, Sea Strike, Sea Shield, and Sea Base, tied together by Forcenet. It was relatively influential, unlike some earlier doctrinal documents. Sea Power 21 had a simple, understandable construct, had organized and sustained rollout,

⁵⁵⁴ A Fritz, A Freedman, and P Haussmann, "The Navy Role in Confronting Irregular Challenges," CNA Report (Arlington, VA: Center for Naval Analysis, March 2011), 1–13.

⁵⁵⁵ Joe Sestak, "The U.S. Navy's Loss of Command of the Seas to China and How to Regain It," *Texas National Security Review* 4, no. 1 (November 17, 2020): 153.

and was repeated constantly. In some ways however, it was also seen as parochial and largely a repackaging of existing ideas. A subsequent Naval Operations Concept followed later in 2006, and while reflecting different dynamics than Sea Power 21 does continue many of the trends started by Sea Power 21.⁵⁵⁶

Strategic Concept

The Navy's new Strategic Concept was focused not just on traditional power projection, but also explicitly on homeland defense and expeditionary operations. Sea Power 21 identified that the Navy would continue evolution from its previous blue water focus to the littorals and further into a "broadened strategy in which naval forces are fully integrated into global joint operations."⁵⁵⁷ Beyond these overarching strategic statements, Sea Power 21 explicitly described the three primary roles of the Navy in its Sea Strike, Sea Shield and Sea Basing constructs:

- "Sea Strike—expanded power projection that employs networked sensors, combat systems, and warriors to amplify the offensive impact of sea-based forces;
- Sea Shield—global defensive assurance' produced by extended homeland defense, sustained access to littorals, and the projection of defensive power deep overland;
- Sea Basing—enhanced operational independence and support for joint forces provided by networked, mobile, and secure sovereign platforms operating in the maritime domain."⁵⁵⁸

These concepts were a dramatic shift, in particular the Sea Shield and Sea Basing roles,

which put homeland defense and expeditionary basing on equal footing with power

⁵⁵⁶ Haynes, *Toward a New Maritime Strategy*, 157–59.

⁵⁵⁷ Vern Clark, "Sea Power 21: Projecting Decisive Joint Capabilities," *U.S. Naval Institute* 128, no. 10 (October 2002), https://www.usni.org/magazines/proceedings/2002/october/sea-power-21-projecting-decisive-joint-capabilities.

⁵⁵⁸ Clark.

projection (Sea Strike). This new Strategic Concept was fully integrated into the joint domain and advocated for new employment and force concepts in particular networked forces.⁵⁵⁹

Employment Concept

The Navy Employment Concept also shifted in this period, as the Navy had to wrestle with both new technologies but more importantly how to maintain the global presence required for shaping operations with a smaller force. This meant embracing joint operations in the littorals as the Navy's primary mission, as well as shifting to network centric warfare, expanding the role of unmanned vehicles, and building the capability to conduct expeditionary operations directly from sea bases. In practice, this meant that the Navy officially would move away from the long-standing CVBG construct, moving down the path it had started in the 1990s as it reduced CVBG size.⁵⁶⁰

This force repackaging was one of the most dramatic elements of Sea Power 21. CVBGs became Carrier Strike Groups, with reduced escorts, and ARGs became Expeditionary Strike Groups(ESG) by adding surface combatants and submarines to the previously amphibious-only formations. The full details of this organizational construction is discussed below.

• "Carrier Strike Groups that provide the full range of operational capabilities. Carrier Strike Groups will remain the core of our Navy's warfighting strength. No other force package will come close to matching their sustained power projection ability, extended situational awareness, and combat survivability.

⁵⁵⁹ Clark.

⁵⁶⁰ Ronald O'Rourke, "Naval Transformation: Background and Issues for Congress" (Washington, D.C: Congressional Research Service, February 10, 2005), 3.

- Expeditionary Strike Groups consisting of amphibious ready groups augmented with strike-capable surface warships and submarines. These groups will prosecute Sea Strike missions in lesser-threat environments. As our operational concepts evolve, and new systems like Joint Strike Fighter deliver to the fleet, it will be advantageous to maximize this increased aviation capability. New platforms being developed for Expeditionary Strike Groups should be designed to realize this warfighting potential.
- Missile-defense Surface Action Groups will increase international stability by providing security to allies and joint forces ashore.
- Specially modified Trident submarines will provide covert striking power from cruise missiles and the insertion of Special Operations Forces."⁵⁶¹

This reorientation meant that the Navy would dramatically increase its strike options, moving towards 12 CSGs, 12 ESG, 4 Surface Action Groups (SAG) and 4 Trident SSGNs. This employment model was intended to provide more presence, as its limited number of CSGs could not be everywhere, and by utilizing new capability such as improved Tomahawk missiles and a much more capable Joint Strike Fighter for the Navy's amphibious ships, it could provide lower end, but still capable, options more globally.⁵⁶²

Deployment Concept

The Navy remained committed to its long-standing rotational forward presence doctrine but restructured it slightly to allow for greater distributed presence and more combat surge capacity. As carrier strike gained visibility thanks to the ongoing combat operations in the Middle East and the Navy struggled to surge large formations for the operations in Afghanistan, OSD began pressing for changes to the Navy's operating pattern. Deep Blue subsequently developed a plan in 2002 to increase availability of

⁵⁶¹ Clark, "Sea Power 21."

⁵⁶² O'Rourke, "Naval Transformation: Background and Issues for Congress," 5.

carrier strike groups, something that would allow the Navy to employ six carriers more easily as it did in Operation Iraqi Freedom albeit at the cost of forward presence. The Navy also investigated more forward basing and rotational crewing options to allow it to provide more presence by smaller ships, all significant shifts over the previous deployment patterns⁵⁶³

For many years deployment cycles were covered by the Inter-Deployment Training Cycle (IDTC). This was 24-month cycle where the carrier and its associated elements transitioned through multiple stages of readiness, until ending with a six-month deployment. However, this phased readiness model did not provide for any surge capability, as the majority of the Navy's carriers were not ready for operations until just before their deployment. The demands of OIF required the Navy to surge a large amphibious task force and six CSGs to the CENTCOM AOR, something that seriously stressed the Navy.⁵⁶⁴

Partially because of these operational lessons, OPNAV N81 (the operations research directorate) created a new Global Concept of Operations for the fleet to address mismatch between required and available forces. Part of this was reducing carrier escorts and redistributing into ARGs, resulting in the CSG/ESG discussed in the Employment Concept. Another part was the Fleet Response Plan, that deemphasized, but not eliminated, the need for forward presence and instead called for ability to surge some

⁵⁶³ Haynes, *Toward a New Maritime Strategy*, 165.

⁵⁶⁴ Haynes, 167; Roland J. Yardley et al., "Impacts of the Fleet Response Plan on Surface Combatant Maintenance" (RAND Corporation, May 17, 2006), 1,

https://www.rand.org/pubs/technical_reports/TR358.html.

forces. Promulgated in 2003, the Fleet Response Plan replaced the IDTC with the goal of maintaining units at a high level of readiness so that they can deploy on short notice. The FRP promised that the Navy could surge six CSGs within 30 days and two more within 90 days.⁵⁶⁵

Deep Blue also drove the Navy to think innovatively about other options. The Navy seriously considering basing a CSG in Guam. In theory this would provide the same day-to-day presence that the Navy achieved with five rotating CSGs, or so it's advocates claimed. The Navy also began the Sea Swap trial, where ships would remain forward deployed and entire crews would rotate on and off. This allowed for significantly higher presence from the capital-intensive assets of DDG and other platforms, as deployment times were at least partially driven by the limit of personnel tempo. The Navy had done this for many years with its SSBN crews, so it was not an entirely outside the box concept but was new to expand it outside the relatively predictable and welldefined SSBN cycle. While the Sea Swap experiments were carried out for several years, in the end they did not last.⁵⁶⁶

Fleet Architecture Concept

The impact of these changes in naval doctrine are apparent in some of the decisions about fleet architecture, which both remained committed to traditional legacy forces but also explored new innovative concepts during this time. The Navy's Global

⁵⁶⁵ Yardley et al., "Impacts of the Fleet Response Plan on Surface Combatant Maintenance," 2; Haynes, *Toward a New Maritime Strategy*, 165.

⁵⁶⁶ Sestak, "The U.S. Navy's Loss of Command of the Seas to China and How to Regain It," 154–56; O'Rourke, "Naval Transformation: Background and Issues for Congress," 5.

Concept of Operations set a required force structure of 375 ships, including 12 CSG, 12 ESG, 4 SAG and 4 Trident SSGN submarines. Much of this was repackaging existing forces and did not dramatically change the vision for future platforms. At the same time, the Navy's force structure continued to drop, ship procurement remained effectively at an all-time low, and the Navy embraced some new transformational systems.

The fleet numbered 316 ships in 2001 but would fall to 279 by 2007 as Cold War era platforms were retired without replacement. The fleet makeup did not change appreciably, other than some escorts being retired and replaced by larger destroyers, as the Oliver Hazard Perry frigates aged out without replacement. Ship procurement, shown below, remained low at less than 10 per year. Force procurement was primarily SSN, Destroyers and Amphibious ships in the early 2000s, likely reflecting the production lines that were in service as much as the true need, as these platforms don't appear ideally aligned to the doctrinal needs of irregular warfare.⁵⁶⁷

⁵⁶⁷ "US Ship Force Levels."

Table 21: Navy Shipbuilding, 2001-2005 ⁵⁶⁸						
	2001	2002	2003	2004	2005	
SSN	1	1	1	1	1	
SSBN						
Carrier	1					
Cruiser						
Destroyer	3	3	2	3	3	
Escort					1	
Amphib		1	1	1	1	
Patrol						
Auxiliary	1		1	2	2	
Total	6	5	5	7	8	

While the Navy force structure largely indicated continuity with legacy platforms, the Navy was moving ahead with developing, albeit not yet fielded or procured in numbers, a number of transformative programs. The centerpiece of the Navy, the large nuclear-powered carrier was up for replacement, as the Nimitz-class design was now decades old. This planning began in the previous decade, and the Navy had opted for an evolutionary approach, introducing some new technologies onto the last Nimitz, the CVN77. The next carrier (CVN78) would be a new design, but still evolutionary as only some of the new systems would be introduced and not until the second carrier, the CVN79, would the full transformation be realized. This cautious approach was rejected by the transformation-hungry Bush Administration, and the evolutionary approach was scrapped in favor of a new "CVN-21" concept that would introduce all these new

⁵⁶⁸ Polmar, *The Ships and Aircraft of the U.S. Fleet*.

capabilities at once. Importantly, these were significant technical and tactical innovations, but did not alter the strategic role of the carrier.⁵⁶⁹

Similar fates awaited the Navy's other shipbuilding programs. The Navy had embarked on a "SC-21" program to recapitalize the retiring cruisers, destroyers, and frigates. While throughout the 1990s a series of smaller warships were proposed, including concepts for the "streetfighter" littoral ships and more standard multi-purpose small combatants, the Navy remained committed to larger combatants for a more traditional land attack role. This ended in the Bush Administration, as "OSD quietly told Navy leaders it would not support their prized DD-21 program unless they included a small combatant in their future plans."⁵⁷⁰ Under this mandate, the Navy moved out on a new concept, quickly dubbed the Surface Combatant Family of Systems. While it included the desired DD-X/DD-21 land attack destroyer, this family of systems also included a new Littoral Combat Ship.⁵⁷¹

This new ship, the Littoral Combat Ship (LCS) was envisioned as a transformation system, but in the end one the Navy would come to regret accepting. The concept was to procure small, non-traditional ships with minimal manning, rotational crews, and most of their combat capability maintained in swappable "mission modules." In theory, this would allow an LCS to rapidly reconfigure from an ASW mission to a Mine mission, eliminating the need for specialized platforms. Unfortunately, this

⁵⁶⁹ Peeks, Aircraft Carrier Requirements and Strategy, 1977-2001, 154–55.

⁵⁷⁰ Robert Work, "The Littoral Combat Ship: How We Got Here, and Why" (2014), 3, https://apps.dtic.mil/sti/pdfs/ADA594372.pdf.

⁵⁷¹ Work, 2–3; Hone and Curtis, "History of the Office of the Chief of Naval Operations, 1915-2015," 451.

constituted an "analytic virgin birth" and any number of problems would undermine this program in the future, but principally that the ship was bought both with an incomplete design and an undefined mission.⁵⁷²

Conclusion

The Navy continued its transformation from a power-projection force to a joint littoral force throughout the 2000s, driven by the twin demands of the Global War on Terror and OSD-directed force transformation. The result was a new doctrine expressed in Sea Power 21, where sea basing and defense were peers with the strike mission (and sea control barely mentioned). With budgetary pressure, domestic interest in counterterrorism and direct intervention in force planning by OSD, the Navy revised its deployment posture, rebuilt its major formations to emphasize distributed capability, and started down the path of procuring new transformative platforms. Despite this the Navy remained a maritime force supporting two land wars, and still struggled to express its value to current challenges. The next step would be an outward facing strategic shift, to mirror the internal doctrinal developments of the early 2000s.

A Global Force for Good

While Sea Power 21 laid out a doctrinal approach, it was primarily a pre-9/11 approach and with the US now involved in two ground wars, some Navy leaders began to realize they needed a better approach to "sell" the Navy's role or risk becoming irrelevant. Slowly key players with new ideas began taking leadership positions and

⁵⁷² Work, "The Littoral Combat Ship: How We Got Here, and Why"; "Lessons from the Littoral Combat Ship - War on the Rocks," accessed February 7, 2022, https://warontherocks.com/2021/11/lessons-from-the-littoral-combat-ship/.

implementing their vision. In 2004, VADM Morgan became N3/N5, uniquely not an upwardly mobile officer due to not having served as a fleet commander but with strong connection to the SECNAV that would serve him well. Morgan would start the process of creating a strategic perspective for the Navy, albeit initially with little top cover. Clark "gave no orders to Morgan, but gave him considerable latitude, perhaps because of Morgan's prior association with England."⁵⁷³ Together with Rear Admiral Martoglio (N51), Morgan developed a new strategic approach, known as the 3/1 strategy or the "Bear's Paw."⁵⁷⁴



Figure 9: The "Bear's Paw"

Morgan was opposed by Admiral Nathman at Fleet Forces Command, who was implementing carrier strike warfare daily. He didn't like the 3/1 strategy as he thought it

⁵⁷³ Haynes, *Toward a New Maritime Strategy*, 180.

⁵⁷⁴ Haynes, 180–85.

seemed to deemphasize the very Navy role that was proving to be a value in the current joint fight. He thought that OPNAV was effectively pandering to the Bush Administration policies for irregular warfare, something he believed was a dangerous approach. Unlike Morgan and others at OPNAV, Nathman was a believer in major combat ops and anticipated that a blue water navy would be needed long term. Thus, he was not supportive of attempts to divert any funding towards irregular warfare programs. While Nathman was successful in stopping 3/1 for the near term, but the debate was far from over.⁵⁷⁵

A New CNO

In July 2005 Admiral Mike Mullen relieved as the CNO and made a splash at OPNAV, firing Admiral Sestak within a week of taking the job and tasking the development of a Navy Strategic Plan. Mullen also became known for his concept of a "1000 ship Navy," calling for an international force to supplement the increasingly smaller US Navy. He championed a very internationalist view, where international naval forces would protect ports and sea lanes and fight terrorism and other transnational threats. He also would go on to promote the idea of the Global Fleet Station, which was a new employment concept with a large amphib serving as a mothership for small craft, Seabees, engineers, divers, and medical forces.⁵⁷⁶

Despite the CNO's advocacy, the next year was an ongoing battle between Mullen and Morgan's soft power approach, and the hard power views of Nathman and

⁵⁷⁵ Haynes, 192.

⁵⁷⁶ Haynes, 196–97.

others. Mullen didn't see the carrier force being directly threatened politically, so was he was ok talking about other capabilities while Fleet Forces was concerned about potential threats to carrier force numbers. Fortunately, from the OPNAV perspective, the 2006 QDR significantly emphasized irregular warfare, giving top cover for the desired shift.⁵⁷⁷

This QDR directly led into the update to the Naval Operations Concept, also promulgated in 2006. The NOC aligned with National Strategy for Maritime Security in that the Navy existed to preserve freedom of the seas, facilitate commerce and movement of goods and people. As a result, the Navy embraced new missions such as Maritime Security Operations (MSO), Civil-Military Operations (CMO), information operations, and counter-proliferation in addition long-standing missions such as presence, crisis response, sea control and deterrence. The NOC also formalized the idea of Global Fleet Stations and elevated the Navy's constabulary role.⁵⁷⁸

A New Maritime Strategy

In June 2006, Mullen called for the development of a new Maritime Strategy at a Naval War College forum. In doing so, he invoked Mahan, but rather than the traditional focus on Mahanian decisive battle instead focused on the influence part of Mahan's writing. Viewing globalization as the challenge of the day, he argued the Navy needed a strategy to guide it through this period, just as the Maritime Strategy guided it through the 1980s.⁵⁷⁹

⁵⁷⁷ Haynes, 200–202; Hone, *Learning War*: *The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945,* 474.

⁵⁷⁸ "Naval Operations Concept 2006," *Inside the Navy* 19, no. 36 (2006): 7–8.

⁵⁷⁹ Haynes, *Toward a New Maritime Strategy*, 213.

To create this strategy, Morgan and Mullen built a comprehensive plan for strategy development, including key stakeholders such as NWC, NPS, CNA, industry, and academia. It also included bimonthly discussions with OSD, warfighter talks with the other services, and uniquely "Conversations with the Country." The centerpiece of this effort was the Strategic Foundations War Game at NWC under strategist Barney Rubel, which tested 4 possible strategic concepts. This game produced the big idea that "protection of the existing global system of trade and security" was the mission.⁵⁸⁰

Unlike any previous strategic development processes, this process was conducted in a way to actively solicit feedback, via what was known as "Conversations with the Country." These "conversations" were a set of seven large symposia of ~175 attendees, and three smaller seminars for senior executives. With these the strategist sought to effectively sought to make the case that sea power was important to nation's prosperity and security and include public participation in the development of the strategy.⁵⁸¹

As the strategy took form, the main debate involved Navy leadership trying to reach a consensus on which of three competing strategic concepts was best. Aviators with Pacific backgrounds were focused on threats from China and DPRK, while SWOs from Atlantic/European theaters took other side. What emerged instead was a blended concept focusing on the need to protect the system, while deterring regional conflicts in Persian Gulf and Western Pacific and ensuring sea control and collective security.⁵⁸²

⁵⁸⁰ Haynes, 216–17.

⁵⁸¹ Haynes, 223.

⁵⁸² Haynes, 225.

Strategy Resolved

The strategy development was somewhat upended by the surprise promotion of Mullen to CJCS, requiring a new CNO, ADM Roughead, to take the reins in 2007. Roughead wanted to emphasize the navy's combat mission more than the document did and created a new Venn diagram balancing "regionally Concentrated, Credible Combat Power" with "Globally Distributed, Mission Tailored Maritime Forces." This new constructed, balancing traditional navy missions with the new global mission was reflected in the final document, even if the Venn diagram itself was not.⁵⁸³



Figure 10: Roughead's Venn Diagram

In October 2007, "A Cooperative Strategy for 21st Century Seapower" was signed by the CNO and the Commandants of the Marine Corps and Coast Guard. It connected the role of the sea services explicitly to the global trade the US relied on and to

⁵⁸³ Haynes, 229.

promoting "greater collective security, stability and trust."⁵⁸⁴ While the strategy reflects traditional missions in many ways and does not shy away from sea control and power projection, it also includes as equals forward presence, deterrence, maritime security, and humanitarian assistance and disaster relief. Furthermore, the strategy declared that "preventing wars is as important as winning wars,"⁵⁸⁵ reflecting the earlier finding that the global system itself was the center of these gravity. To accomplish these various missions, the sea services would use globally distributed forces, of the Navy, Marines and Coast Guard, as well as rely on the Global Maritime Partnership (the "1000-ship Navy" concept).⁵⁸⁶

Reflecting the aftermath of 9/11 and the resulting conflicts in Iraq and Afghanistan, *Cooperative Strategy* emphasized the humanitarian and disaster response roles of the Navy, over the traditional sea control and power projection roles. The strategic thinking when CS21 was developed had "posited a liberal post-Cold War international order, in which the 'global maritime commons' was policed by a U.S.-led coalition of maritime partners willing and able to confront piracy and other threats."⁵⁸⁷ This was further solidified by the 2010 Navy Operational Concept (NOC), further deemphasizing the Navy's open ocean role. At the same time, the Navy debuted its "Global Force for Good" slogan in 2009, again emphasizing a "softer touch" than typical

⁵⁸⁴ Gary Roughead, James Conway, and Thad Allen, "A Cooperative Strategy for 21st Century Seapower" (October 2007), 4.

⁵⁸⁵ Roughead, Conway, and Allen, 5.

⁵⁸⁶ Roughead, Conway, and Allen, "A Cooperative Strategy for 21st Century Seapower."

⁵⁸⁷ Peter Swartz, William Rosenau, and Hannah Kates, "The Origins and Development of the A Cooperative Strategy for 21st Century Seapower (2015)" (Washington, DC, September 2017), 9.

naval power projection roles. These initiatives were developed under the leadership of Chief of Naval Operations (CNO) Admiral Mike Mullen and Admiral Gary Roughead.⁵⁸⁸ *Doctrinal Concepts*

While not going into detail on the doctrinal shift, this period saw a primarily shift in the Strategic Concept, where the Navy's mission was now explicitly defense of the global system as a whole. The employment and deployment concepts were relatively similar to those of the early 2000s, although a key element became the 1000 ship Navy slogan, proposing greater cooperation with allies. The Global Fleet Station as a new element in employment and deployment concepts, but it was primarily a supporting element within the primary concepts which remained centered on CSG/ESG rotational deployments. The Fleet Architecture would continue evolving, but largely down the path laid previously. Budgetary limitations would prevent the desired fleet growth, and result in the cancellation of the large surface programs with the DDG-1000 (former DD21) program ended early at only 3 ships and no cruiser at all.

Precursor to Great Power Competition

The Pacific Pivot

Speaking to the Australian Parliament in November 2011, then-President Obama stated that "the United States has been, and always will be, a Pacific nation...As President, I have therefore made a deliberate and strategic decision – as a Pacific nation, the United States will play a larger and long-term role in shaping this region and its

⁵⁸⁸ Swartz, Rosenau, and Kates, 10; Roughead, Conway, and Allen, "A Cooperative Strategy for 21st Century Seapower."

future."⁵⁸⁹ Combined with a series of other public statements by his team, this strategic shift became known as the "Pivot to the Pacific."⁵⁹⁰ As the Pacific is predominantly a maritime theater, this should have been welcome news to the US Navy, restoring naval power to a predominant role after playing a supporting role in Iraq and Afghanistan over the last decade.

While commonly associated with the late 2011 announcements by the Administration, many elements of the Pivot predate this strategic shift. The 2010 Quadrennial Defense Review declared that "US has been a pacific power for more than a century" and that the US would "augment and adapt our forward presence."⁵⁹¹ The QDR explicitly called for transforming Guam into a major military hub, improving the resiliency of US forces and facilities in the region, and working towards cooperative basing in Singapore. Thus, although the Pivot was a clearly stated political moment, it represents more of an evolution and restating existing goals than a major strategic shift by civilian leadership.⁵⁹²

The Budget Control Act

Critically, this period was the era of sequestration, or more properly the Budget Control Act (BCA). The BCA called for significant reductions, up to \$1T over the next

⁵⁹¹ "QDR as of 29JAN10 1600.Pdf," 65, accessed June 6, 2021,

⁵⁸⁹ Barack Obama, "Remarks By President Obama to the Australian Parliament," whitehouse.gov, November 17, 2011, 4, https://obamawhitehouse.archives.gov/the-press-office/2011/11/17/remarkspresident-obama-australian-parliament.

⁵⁹⁰ It is worth noting that the "Pivot" was not referred to as such by most of the Obama Administration, and only by then Secretary of State Clinton in a 2011 Foreign Policy article

https://archive.defense.gov/qdr/QDR%20as%20of%2029JAN10%201600.pdf.

⁵⁹² Mark E Manyin et al., "Pivot to the Pacific? The Obama Administration's 'Rebalancing' Toward Asia," n.d., 2; Janine Davidson, "The U.S. 'Pivot to Asia," *American Journal of Chinese Studies* 21 (2014): 80.

10 years. The Budget Control Act of 2011 was the result of preceding debt ceiling fights in Congress and put in place a cap on future budgets as an incentive for Congress to compromise on a long-term solution. While it appeared that leaders envisioned this as a threat to spur action, in the end Congress was unable to reach a deal and the spending caps on future defense budgets would go into effect in 2012. As a result, the defense budget would drop from \$691B in 2010 to \$565B in 2015, in constant year 2021 dollars. In response, the DoD conducted a "Strategic Choices and Management Review" to consider options to comply with the BCA. As CNO Admiral Greenert testified, for the Navy these painful cuts would mean 1-2 fewer CSG and 1-2 few ARG, and a fleet 40 ships smaller than the long-range shipbuilding plan contained in the planned (pre-BCA) budget submission. While some of the impact of the BCA would be mitigated by series of temporary fixes, the BCA would significantly challenge the Navy as it dealt with increased operating cost driven by operations in the Middle East and a need to recapitalize its retiring Cold War era fleet.⁵⁹³

The Third Offset

Even as the Navy fought the budgetary battles of the BCA, an idea was emerging known as the Third Offset that brought a more direct military rebalancing to the Pacific and restored a push for transformation. The Third Offset was the dominant defense concept of the second Obama Administration, and former Undersecretary of the Navy Work was not only author of many ideas, but also pushed aggressively for

⁵⁹³ Admiral Jonathan Greenert, "Statement of Admiral Jonathan Greenert, U.S. Navy Chief Of Naval Operations," § House Armed Services Committee (2013), 2–7.

implementation. As China's modernization efforts picked up steam and appeared specifically designed to mitigate US advantages, Work developed concepts to mitigate these. The idea was that in the US had previously dealt with imbalances in conventional forces by offsetting with new nuclear, the First, and precision, the Second, capabilities. As noted by one of his assistants, "Work learned from the Second Offset that such a profound change had to be a top-down initiative from senior leadership."⁵⁹⁴ Work initiative was to insert new technologies, primarily AI, unmanned systems and hypersonics, to reestablish US access to China's near seas.⁵⁹⁵

The Third Offset was officially announced via SECDEF memo on 15 November 2014 creating the Defense Innovation Initiative, which is what the Third Offset was formally known as for many years. The same day Secretary of Defense Hagel introduced the concept at Reagan National Defense Forum. The Third Offset would dominate the defense debate for the next several years and create new organizations. Among them was Strategic Capabilities Office (SCO), which was charged with rapidly transitioning capabilities into the fleet. One of SCO's most discussed capabilities was modification to the Navy's SM-6 missile, which resulted in giving this anti-air missile an antiship capability and filling an important capability gap.⁵⁹⁶

However, while the Third Offset changed the debate, it is unclear how much it changed force procurements. Anecdotally, the services resisted because they were

⁵⁹⁴ Gian Gentile et al., "A History of the Third Offset, 2014–2018" (RAND Corporation, March 31, 2021), 37, https://www.rand.org/pubs/research_reports/RRA454-1.html.

⁵⁹⁵ Gentile et al., 29–35.

⁵⁹⁶ Gentile et al., 43–59.
focused on force numbers (capacity) and unwilling to make cuts to fund capability. The Navy argued it did not disagree with concept of Third Offset but had to meet global demands and had to work with the fleet it had so unless it was to stop current missions, it would have to trade modernization on the margins. The Navy also was already on a path that "converged" with the Third Offset strategy, with elements such as Air Sea Battle and Distributed Lethality coming to similar conclusions, so it largely was about formalizing some existing processes into the Third Offset taxonomy.⁵⁹⁷

CS21R

Admiral John Greenert, who relieved as CNO in August 2011, recognized the change in the strategic landscape and the emerging Pivot, kicked off a new strategy development effort. In particular, he felt that the Navy needed to emphasize warfighting first, and that role was diluted in the globalization-minded 2007 *Cooperative Strategy*. Since the *Cooperative Strategy* was commonly known as CS21, this effort was quickly (internally) branded CS21R, with the R for replacement. This new strategy took four years to develop, not coming until 2015 at the very end of Greenert's term as CNO. It indicated a gradual shift towards a major combat role for seapower, moving away from the supporting role of the last decade.⁵⁹⁸

As one of the authors of CS21R commented, "the global strategic and domestic budget environments had not unfolded in the manner anticipated in CS21"⁵⁹⁹ as China's

⁵⁹⁷ Gentile et al., 50.

⁵⁹⁸ Swartz, Rosenau, and Kates, "The Origins and Development of the A Cooperative Strategy for 21st Century Seapower (2015)," 2.

⁵⁹⁹ Swartz, Rosenau, and Kates, 10.

maritime power was growing, and A2/AD, first identified in the late 1990s, had come be a major security concern for the US. As such, CS21R refocused the Navy on warfighting, and less on the CS21 emphasis on maintaining the global commons. While it was still a "cooperative" document, CS21R named China as a peer competitor, calling for a fleet of more than 300 ships and proposing a new surface strategy of "distributed lethality."⁶⁰⁰

Employment Concepts

Even before the Pivot and much before the Third Offset, the Navy began developing a new doctrinal concept known as "Air Sea Battle." This was vaguely announced in the 2010 QDR, although few details were public at the time. This initiative, a collaboration between the Air Force and the Navy, and invoking the successful AirLand Battle of the 1980s, was focused on countering Chinese, and to lesser extent Iranian, A2/AD forces. It sought to break the kill chain of Chinese missiles that threatened American access to the Western Pacific by developing new systems and process that would prevent them from localizing and targeting American assets, and by improving air defense systems to be able to defend against Chinese missile if those first efforts were unsuccessful. Air Sea Battle also sought to combine Air Force and Navy power projection capabilities in a mutually supporting role.⁶⁰¹

As CNO Greenert wrote in his 2012 Foreign Policy article, "using the approach described in the Air-Sea Battle concept and in concert with the U.S. Air Force, we will sustain our ability to project power in the face of access challenges such as cruise and

⁶⁰⁰ Bruns, US Naval Strategy and National Security, 235.

⁶⁰¹ Manyin et al., "Pivot to the Pacific? The Obama Administration's 'Rebalancing' Toward Asia," 15; Oliver Thränert et al., "Andreas Wenger Andrea Baumann, Jonas Grätz, Prem Mahadevan," n.d., 53.

ballistic missiles, submarines, and sophisticated anti-air weapons."⁶⁰² This emphasized undersea capabilities such as submarine-launched land attack cruise missiles that were thought able to penetrate A2/AD forces, as well as improving surface fleet air and missile defense capabilities and longer ranged air assets such as the F/A-18 E/F Super Hornet.

This all came together in the ideas of Distributed Lethality and subsequently Distributed Maritime Operations. Strategists proposed countering growing Chinese naval and A2/AD capabilities with multi-domain approaches, including eventually using landbased missiles for sea denial, and a more disaggregated fleet. Rather than previous disaggregation plans, primarily focused on presence, DL/DMO would also disaggregate strike and sea control capabilities to complicate adversary targeting vice relying on a small number of CSGs and ESGs.⁶⁰³

Fleet Architecture

While many of the national defense policies themselves said relatively little about Navy force structure, other than that the Navy would be protected and more systems capable of surviving in A2/AD environments were needed, the 2012 Strategic Review by DoD that was meant to implement the Pivot did have implications for Navy force structure. It somewhat unexpectedly called for a Navy of eleven aircraft carriers, surprising those who expected the Navy to reduce its carrier numbers further. The strategic review also emphasized continued attack submarine production, with new cruise

⁶⁰² Admiral Jonathan Greenert, "Sea Change," *Foreign Policy* (blog), accessed June 5, 2021, https://foreignpolicy.com/2012/11/14/sea-change/.

⁶⁰³ Benjamin Jensen, "Distributed Maritime Operations: Back to the Future?," *War on the Rocks* (blog), April 9, 2015, https://warontherocks.com/2015/04/distributed-maritime-operations-an-emerging-paradigm/.

missile; continued Aegis destroyer procurements combined with smaller procurement of the Littoral Combat Ship (LCS); and plans to sustain amphibious forces even if not getting to the 38 amphibious ships the Marines desired.⁶⁰⁴

Despite this emphasis, actual fleet size dropped slightly from 288 in 2010 to 275 by 2016, the carrier numbers dropped to ten in 2013 where it remains today. Other force structure changes reflect the retirement of the final Oliver Hazard Perry-class frigates by the end of 2014 and the slow entry of the LCS ships. These trends are as much driven by long-standing force development plans, but likely also reflect the budgetary pressures of the later years of the Administration. As part of the force posture adjustments, and reflecting the US Navy's global responsibilities, CNO Greenert announced that "we will shift, as the Defense Strategic Guidance directs, to 'innovative, low-cost approaches,' including JHSV, AFSB, and LCS. In contrast to our approach today, which is to send the destroyers and amphibious ships we have when available, these new ships will be better suited to operations in these regions and will be available full-time thanks to their rotational crews."⁶⁰⁵ Greenert argued that this high-low mix would free up valuable assets such destroyers and amphibious ships for the priority role in the Pacific.⁶⁰⁶

Deployment Concept

The Navy modified its deployment concept yet again. As part of the 2010 QDR, the US emphasized a small footprint, using rotational forces vice large, fixed bases. For the Navy, meant a more flexible basing strategy, a shift of forces to the Pacific, and new

 ⁶⁰⁴ Manyin et al., "Pivot to the Pacific? The Obama Administration's 'Rebalancing' Toward Asia," 12–13.
⁶⁰⁵ Greenert, "Sea Change."

^{606 &}quot;US Ship Force Levels."

deployment sites for maritime forces. While not a shift away from the long-standing rotational presence of large combat formations, there were shifts in how the Navy would execute that presence and the balance of forces between theaters.⁶⁰⁷

As part of this, the Navy rebalanced its force laydown to have 60% of the US Navy homeported in the Pacific. Specifically, CNO Greenert wrote that "to support our increased presence in the Asia-Pacific, we will grow the fraction of ships and aircraft based on the U.S. West Coast and in the Pacific from today's 55 percent to 60 percent by 2020."⁶⁰⁸ This effectively would mean that the Pacific would gain one additional aircraft carrier, six or seven more destroyers and another six submarines, in addition to other supporting assets. While the details of this shift took time to work themselves out, this was a notable shift in priorities.⁶⁰⁹

In additional to repositioning Naval forces, the Navy decided to forward deploy some LCS's out of Singapore. Given the LCS's dual crew concept, this meant having a concept of the ship itself remaining forward while crews, based in the US, would fly forward to swap periodically.⁶¹⁰

Drivers of Change

⁶⁰⁷ Manyin et al., "Pivot to the Pacific? The Obama Administration's 'Rebalancing' Toward Asia," 1. ⁶⁰⁸ Greenert, "Sea Change."

⁶⁰⁹ Thränert et al., "Andreas Wenger Andrea Baumann, Jonas Grätz, Prem Mahadevan," 51.

⁶¹⁰ Davidson, "The U.S. 'Pivot to Asia," 81; Hillary Clinton, "America's Pacific Century," Foreign Policy, 11, accessed June 6, 2021, https://foreignpolicy.com/2011/10/11/americas-pacific-century/; Greenert, "Sea Change."

	Significance			
<i>H</i> ₀ : <i>Balance of Power</i>	Major	Transnational issue and terrorism		
		drove need for different navy		
<i>H</i> ₁ : <i>Domestic Politics</i>	Major	Domestic interest in terrorism and		
		2010s-era BCA major issues for the		
		Navy		
<i>H</i> ₂ : <i>Civilian Intervention</i>	Major	Transformation, Pivot and Third		
		Offset all driven by civilian leaders		
H ₃ : Bureaucratic	Minor Competition wasn't absent, secondary			
Competition		to civilian and budgetary pressure		
H ₄ : Learning	Minor	Reduced learning organizational		
Organization		capacity (except for CS21), ad hoc		
		approach		
<i>H</i> ₅ : Service Culture and	Major	Ongoing alignment with forward		
Ideas		global presence, cultural resistance to		
		irregular warfare		

Table 22: 2000s Doctrinal HypothesesRelativeImpact

Strategic Environment

The strategic environment clearly drove many of these changes, as the Navy found itself heavily engaged in irregular operations it had not planned for. Sea Power 21 noted that the main threats of the strategic environment were transnational issues such as crime, terrorism, and failed states. The NOC similarly identified the primary challenges as not just traditional, but also irregular, catastrophic (e.g. the spread of WMD) and disruptive challenges. These irregular and transnational issues at the strategic level explain many of the Navy's shifts, as irregular global challenges required more constant, but smaller, presence.⁶¹¹

The doctrinal shift of the 2010s reflected the broader trends within geostrategic environment and the slow acceptance of China as a competitor. Between maritime territorial disputes between China and its smaller neighbors and ongoing tensions over the status of Taiwan, the Pacific demanded presented worsening challenges at the same time the Administration was looking to extricate itself from the land wars in Iraq and Afghanistan. In mid-2010, these renewed contentions and conflicting territorial claims in South China Sea led Secretary of State Clinton to publicly affirm American vital interest in freedom of navigation.⁶¹² Many of the transformational goals set by the Navy would not have been required for irregular operations, but the pacing threat of China, even if not openly discussed yet, was a key driver in some of the Navy's force investment decisions.⁶¹³

Domestic Budget and Bureaucratic Politics

Budgetary concerns were a major, if not the, driver of or constraint on doctrinal change. With the 2000s dominated by a ground-centric counter-terrorism campaign, the US Navy was heavily motivated to re-posture to preserve its funding levels. While funding levels rose from their post-Cold War lows, the 2000s didn't see the dramatic shipbuilding surge of previous ramp ups. Much of the Navy's new funding went into

⁶¹¹ Clark, "Sea Power 21," 21.

⁶¹² Kenneth G. Lieberthal, "The American Pivot to Asia" (Brookings, December 21, 2011), 2, https://www.brookings.edu/articles/the-american-pivot-to-asia/; Thränert et al., "Andreas Wenger Andrea Baumann, Jonas Grätz, Prem Mahadevan," 28.

⁶¹³ Sestak, "The U.S. Navy's Loss of Command of the Seas to China and How to Regain It," 154.

current operations, not shipbuilding, and with US heavily engaged in 2 ground wars, the Navy instead had \$9B over the decade transferred to the Army from shipbuilding. The Navy subsequently reduced personnel to free up funds for shipbuilding, but again saw these savings shifted over to the Army and Marine in Iraq. At one point, CNO Clark even proposed "reducing ship-levels goals from 375 to as low as 243 – so long as there were an extensive adaptation of emerging technologies, forward basing and innovating manning concepts."⁶¹⁴ As a result of these ongoing budgetary challenges, the Navy was seriously motivated to demonstrate its unique value to the national security in the current environment in order to obtain some more support and avoid its interservice rivals receiving more of its resources.⁶¹⁵

The second decade of the 2000s was dominated by a damaging debt ceiling fight, and when the Administration was looking to find saving in defense spending. Despite these pressures, President Obama initially stated that "I have directed my national security team to make our presence and mission in the Asia Pacific a top priority. As a result, reduction in U.S. defense spending will not – I repeat, will not – come at the expense of the Asia Pacific."⁶¹⁶ The January 2012 DPG Strategic Guidance largely protected the Navy, even while the rest of DoD saw cuts, particularly the Army.⁶¹⁷

However, the looming budgetary pressures of the just-passed Budget Control Act (commonly known as sequestration) would continue to stress the Navy's ability to meet

⁶¹⁴ Sestak, 154.

⁶¹⁵ "FY21_Green_Book.Pdf," 176.

⁶¹⁶ Obama, "Remarks By President Obama to the Australian Parliament," 5.

⁶¹⁷ Manyin et al., "Pivot to the Pacific? The Obama Administration's 'Rebalancing' Toward Asia," 4.

global demands. Given the dramatic decrease in the defense budget growth because of the BCA, there was little chance that the Navy would emerge unscathed. As shown below, despite the President's commitment to preserve the Navy budget, in the face of the BCA it dropped by over \$30B in CY21\$ the first half of the 2010s.⁶¹⁸



Figure 11: US Naval Budget, 2001-2016⁶¹⁹

Given this budgetary stress on the Navy, even if somewhat less than that on other services such as the Army, the Navy had little capacity to shift to resources towards newer systems, as it tried to preserve existing force structure and meet ongoing

⁶¹⁸ "FY21_Green_Book.Pdf"; Manyin et al., "Pivot to the Pacific? The Obama Administration's 'Rebalancing' Toward Asia," 3.

⁶¹⁹ "FY21_Green_Book.Pdf," 21.

operational demands on the force. Combined with the planned retirement of legacy Oliver Hazard Perry frigates, this reduced budgetary trade space contributed to a reduction in the fleet size throughout this period, and likely reduced ambitions for more aggressive modernization and transformation programs.

Bureaucratic Politics

Bureaucratically, Congress resisted some of the Navy's desired plans, particularly as it came to trading force structure for future capability. This at least partially was driven by a desire to continue building ships in their districts, so the Navy continued building the "legacy" platforms as opposed to pivoting towards truly littoral and irregular platforms, even as some investments in future platforms were made in that direction. There was little evidence of intra-service rivalry, although Sestak (a SWO) viewed surface forces as bill payer for the other communities. In the end, even that wasn't enough, and readiness was cut to pay for force structure across all the tribes.⁶²⁰

Bureaucratically, there was not too much overt internecine warfare, although the Army received more prioritization with the early 2000s ramp up in ground combat and then clearly took a disproportionate share of the budgetary cuts based on the 2012 defense priorities. The most visible form of interservice rivalry was the Army's effort to defang the Air-Sea Battle doctrine, as it left land forces out of the concept. The Army was

⁶²⁰ Sestak, "The U.S. Navy's Loss of Command of the Seas to China and How to Regain It," 157–59.

successful in forcing their way into Air-Sea Battle and eventually causing the initiative to wither bureaucratically.⁶²¹

Overall, the Navy's doctrinal shift did not seem to be driven by intra-service issues but instead by a combination of interservice and domestic political pressures. Specifically, the public was intently focused on the threat of terrorism after 9/11 and the Navy did not have the obvious contribution to the ongoing ground campaigns as the other services. Therefore, it had to revise its doctrine to align with the domestic need for counterterrorism and better compete with the other services.

Civilian Intervention

This period has clear cases of civilian intervention, as civilian leadership repeatedly intervened to direct military action. The Navy Fleet Architecture innovations, particularly the LCS and the move towards a new CVN design, were almost entirely the result of civilian intervention. Rumsfeld came in as Secretary committed to transforming the force, and appointed VADM (ret) Cebrowski, the network-centric warfare advocate of the late 1990s, to head the Office of Force Transformation. Based on a belief that the Navy was moving to slow, OSD directed the Navy to move forward with new ship designs, in the case of LCS dramatically rethinking long-standing practices. This path was not one the Navy had any inclination of going down, without the direct intervention of OSD to empower some mavericks within the Navy. Interestingly, and despite Rumsfeld's penchant for direct intervention in service affairs, there appears to have been

⁶²¹ Donnithorne, *Four Guardians: A Principled Agent View of American Civil-Military Relations*; "Pentagon Drops Air Sea Battle Name, Concept Lives On," *USNI News* (blog), January 20, 2015, https://news.usni.org/2015/01/20/pentagon-drops-air-sea-battle-name-concept-lives.

little direct intervention in other doctrinal aspects outside of fleet design, although of course the Navy was sensitive to the shifting priorities of OSD.⁶²²

The 2010s saw more direct civilian intervention, in the form of the Pivot and the Third Offset. For the Pivot, this was less direct as leadership was primarily focused on the non-military aspects of the Pivot such as multilateral organizations (such as EAS) and joining the Transpacific Partnership (TPP), allowing the military to just rebrand many existing initiatives. For the Third Offset, intervention was far more direct, as Secretary Work laid out a strategic vision and effectively forced the Navy (and the rest of the DoD) to accept it. Admittedly, much of this may have similarly been rebranding of existing ideas, but the Third Offset clearly force the Defense Department to make some adjustments it otherwise would not have.⁶²³

Learning Organizational Capacity

The Navy's learning organizational capacity had degraded significantly, and it appeared unable to make the same lasting doctrinal change as occurred in the 1980s. In the past, strategies and strategic shifts had been driven by various special cells, such as the CNO Strategic Studies Group or the Naval War College CNWS. In most cases during this era, ad hoc bodies such as Deep blue carried out the doctrinal change, and only the case of the Cooperative Strategy shows a deliberate effort to utilize a learning organization.

⁶²² Hone and Curtis, "History of the Office of the Chief of Naval Operations, 1915-2015," 441–59.

⁶²³ Lieberthal, "The American Pivot to Asia," 6; Gentile et al., "A History of the Third Offset, 2014–2018."

The situation in the early 2000s wasn't helpful for the strategist community as CNO Clark didn't believe in the need for a strategy and reportedly said the Navy's POM was its strategy. Increasingly, this de-prioritization of strategy affected detailing, as more junior individuals were sent to the Navy's strategy shops, with the Joint Staff strategy positions being prioritized. The strategy community's decline, that began in the 1990s, accelerated as N513 became a shadow of its former self and education programs were downsized, leaving little organizational capacity for new thought inside the N5 organization.⁶²⁴

To implement his initiatives, CNO Clark did create some ad hoc incubators, including Deep Blue directed by former strategist Admiral Stavridis, as well as a new N00Z Strategic Action Group. Billets for things like N00Z came out of the N5, further weakening the Navy's standing strategy organization, and initiatives that normally would have been undertaken by N5 were moved to these ad hoc organizations. Furthermore, the Navy's input to the QDR, one of the critical strategic documents for the DoD, was run by N8, not N5, as was the development of the new Deployment Concept. As a result "many different Navy and quasi-Navy organizations (the Center for Naval Analyses) believe they have a role in strategy, yet no attempt is made to harness and coordinate the substantia intellectual horsepower in organization like the Naval War College, the Naval Postgraduate School, Deep Blue, N00Z and other organizations."⁶²⁵ With members of

⁶²⁴ Haynes, *Toward a New Maritime Strategy*, 153.

⁶²⁵ James Russell et al., "Navy Strategy Development: Strategy in the 21st Century" (Monterey, CA: Naval Postgraduate School, June 2015), 15.

former strategist community heading five overlapping offices (Deep Blue, N00Z, N00K, N81 and N513), there was a lot of confusion about who had lead.⁶²⁶

The Cooperative Strategy was the exception to this ad hoc process, as a structured and resourced process was established to create a new strategy. As discussed, it was a collaborative effort by all the Navy's incubator organizations, with N5 driving team of strategist, including an early effort by the Naval War College that developed one of the key tenants of protecting globalization. The "Conversations with the Country" served as an important advocacy network, not just receiving stakeholder feedback but explaining the Navy's doctrinal vision, as did deliberate engagements with OSD and other services.

As opposed to the above approach, in replacing the Cooperative Strategy the Navy tried to work primarily through the normal bureaucracy and the Navy's strategic branch, OPNAV N51, was given primary responsibility for this effort. While many external stakeholders were consulted, the rewrite of the Navy strategy, was primarily a top-down effort, driven by the CNO Admiral Greenert and executed by the N51 branch. CS21R lacked the same approach of CS21, where wargaming and outreach were key elements. So there is little evidence of incubators or advocacy networks in this case.⁶²⁷

Despite the overlapping offices and diminishing power of the strategist community, there was evidence of incubators in this period. Deep Blue and N81 were critical in developing new innovative ideas such as Sea Power 21, the new Deployment Concept, and other ideas such as Sea Swap and CSG/ESG formations. However, the ad

⁶²⁶ Russell et al., 12; Haynes, *Toward a New Maritime Strategy*, 152.

⁶²⁷ Swartz, Rosenau, and Kates, "The Origins and Development of the A Cooperative Strategy for 21st Century Seapower (2015)," 28.

hoc, as opposed to institutional nature of these incubators ultimately appears to have limited their impact, as they lacked the staying power and strong advocacy networks to institute a lasting change.

Culture

Navy cultural predispositions as always were a factor in this shift. The Navy's view of itself as sailor-statesmen with a global footprint aligned nicely with the demands of the campaigns of the 2000s. However, the Navy's love of larger ships and its history of naval fleet campaigns, particularly those in the Pacific war, meant that it kept procuring relatively large combatants and did not emphasize the irregular type forces that were directly applicable to the irregular campaigns. While the Navy did create a new organization in NECC, most of NECC's forces remained in the Reserves and it never seems to have achieved the same prominence as the other Type Commanders (and even though it was a Type Commander it was named differently, if that indicates anything). The Navy adopted this irregular mission because it was forced to, but it's not clear how lasting the irregular mission was and as soon as the immediate crisis has lifted, the Navy will shift back to its preferred maritime-centric doctrine.

These tentative steps to return to major combat operations, oriented into the Pacific, aligned well with Navy's cultural predispositions. Certainly the Pivot's emphasis on forward diplomacy fits the Navy's peacetime vision of the sailor-diplomat, or the "Armed Embassy of America."⁶²⁸ As much as there was cultural resistance, it likely would have played out in the Navy's supposed bias towards large capital ships (in this era

⁶²⁸ Donnithorne, Four Guardians: A Principled Agent View of American Civil-Military Relations, 60.

aircraft carriers), but while the Navy continued pushing for 11 aircraft carriers it also embraced the small LCS and the disaggregated missions of DMO and the Third Offset. **Conclusion**

The Navy was pulled in multiple directions during this era, as irregular warfare and ground campaigns waxed and waned. Repeated changes in leadership and the need to constantly react to the latest strategic demand meant that the Navy never really got its footing. Whenever it seemed to have a solid plan, as in the Cooperative Strategy, outside developments rendered it obsolete almost before it could be implemented. With the Navy's learning organizational capacity much reduced, outside of the Cooperative Strategy development the Navy relied on ad hoc organizations and primarily tried to align Navy doctrine with higher level guidance. The Navy's previously robust learning was replaced by civilian intervention, ranging from Rumsfeld's transformation to Work's Third Offset. These leaders sought to direct the Navy down a new path, in order to magically improve their capability but at a lower cost given the reduced budgets of the period. While the Navy, perhaps reluctantly, followed orders, culturally the Navy still dreamt of open ocean conflict and when great power competition returns in the future, the Navy will happily return to a Pacific-centric maritime campaign.

The extent to which the shrinking fleet and the multitude of theater requirements stressed the Navy during this time cannot be understated as an impediment towards implementation of the new doctrine. The Navy faced demands for continuous operations against ISIS and in Europe to deter Russia, as well as intermittent operations like the intervention in Libya. As a result, aircraft carriers (and their associated strike groups)

were routinely deployed for 10 months at a time, a significant increase from the planned six-month deployment cycle. While the Navy sought to revise its operating patterns via a new Fleet Response Training Plan, this plan could only achieve an average eight-month deployment on paper – and in practice that would routinely be exceeded anyway. With the Navy getting pulled in so many directions daily, it obviously would be difficult to remain focused on the long-term goal of a rebalance towards the Pacific.⁶²⁹

Even when Navy doctrine called for a shift away from irregular operations, it was not able to realize that goal. At a high level, the US never really was able to disengage from its legacy conflicts. Afghanistan saw a substantial surge, as the Administration poured more resources into stabilizing that conflict. While the US was able to withdraw from Iraq, that proved to be only temporary as the rise of ISIS in Iraq and Syria eventually drew US forces back in. While these conflicts were primarily land based, they still drew US Naval forces away from the Pacific. Throughout this time, the US Navy sourced thousands of Individual Augmentees (IAs) who deployed on land to support Army and Marine operations. These IAs were drawn not just from the reserves, but from the active component as well, and in both cases this manpower was not available for other Navy missions.⁶³⁰

There were also significant demands on the fleet pulling it away from the Asia Pacific focus. First, during this time "a steadily reduced number of ships resulted in an increasing operational tempo that strained the fleet's resources, even as the Navy

⁶²⁹ Bruns, US Naval Strategy and National Security, 238.

 ⁶³⁰ Bruns, 222–23; Ronald O'Rourke, "Navy Irregular Warfare and Counterterrorism Operations:
Background and Issues for Congress," n.d., 60.

wrestled with a series of innovations failures on new platforms (littoral combat ships, DDG-1000, and railguns)."⁶³¹ The defense budget battles of the Budget Control Act, or sequestration, also dominated the Pentagon, and thus Navy leadership's attention, throughout this time. Lastly, the Navy had to deal with a number of other ongoing issues, among them the "Fat Leonard" corruption affair that implicated many of the Navy's up-and-coming admirals in a corruption scandal. All these forces conspired to make the Navy's doctrinal shift aspirational and only partially executed. As a result, this era doesn't show the evidence of a fully implemented doctrinal shift that is more apparent in the other periods examined.

⁶³¹ Bruns, US Naval Strategy and National Security, 227.

CHAPTER NINE: CONCLUSION

Recap

Throughout this dissertation, I examined case studies focused on the 1940s, the 1970s, 1990s, and post-Cold War periods, along with shorter vignettes on the shifting developments of the early 21st Century. These were critical periods where the Navy wrestled with major doctrinal changes, or at least strategic shifts. Any generalizable findings are obviously limited by the specifics of each case, but some overarching conclusions are still possible. More than anything else, the most interesting finding is that even though there were major shifts in the role of the Navy, effectively the strategic concept, very few fundamental changes to the Navy's operations (Deployment) or types of ships (Fleet Architecture) were implemented despite vastly different strategic environments over the seven decades examined.

Starting after the Second World War, the Navy found itself without an adversary and had to dramatically rethink its role. With the interservice drama of service unification and the Revolt of the Admirals, the Navy seemed to be under attack from all sides. Yet, it persisted in fielding large supercarriers and transformed its submarine force into an ASW-centric force, and eventually developed a new SSBN force giving it a nuclear capability to equal the Air Force. At the same time, the Navy totally revised its operating patterns, shifting to a concept of rotationally deployed combat formations – a new Deployment Concept that remains constant to today. The onset of the Korean War during

this period helped the Navy significantly, as it was able to demonstrate its value in combat and undermine the interservice (i.e., Air Force) arguments against it.

The Navy remained in this posture over the next few decades, assisted by ongoing competition with the Soviets, but eventually in the 1970s the Navy had to accept that it could no longer maintain this posture. A rising Soviet navy, an aging US fleet, and a US public tired of paying for overseas interventions ushered in an era of reduced ambitions. CNO Admiral Zumwalt personified these changes, as he sought to reshape the Navy's culture and force structure, bringing it into the modern era and looking for cost effective replacements for its aging combatants. It also developed a new foundational Employment Concept, centered on the CWC concept, as it could no longer afford single purpose ASW and strike formations. The idea of the Navy as primarily ensuring safe trans-Atlantic transport was a persistent theme that would continue after his departure, and successive administrations would push for a smaller Navy and smaller carriers. At the same time, the Navy began both rebuilding itself technologically, with important programs entering production albeit in small numbers, and investing in the education and development of a strategist community. Both would pay dividends in the next decade.

The 1980s saw the rejection of the limited aims of the previous decade. The Reagan Administration, and its charismatic Secretary of the Navy, came in determined to reverse this decline, pushing for aggressive operations and a large military buildup. The Navy was able to define a new role, in many ways similar to the 1940s strategy, where it would take the fight into the adversary's backyard and by exerting pressure on the flanks (and even against Soviet strategic forces) contribute to the presumed main effort in

Eastern Europe. With this aggressive strategy came a massive buildup as the slow productions lines of the 1970s were expanded, leveraging the platform design efforts of the previous decade. While domestic and geostrategic factors help explain why this shift was needed, the learning organizational capacity of the Navy was critical to this effort as the strategist community and new incubators in the SSG and a revitalized NWC developed and refined many of the concepts of this era.

The end of the Cold War brought a return to the doldrums of the 1940s, as the momentum of the 1980s came to a screeching halt. The total collapse of Soviet power once again left the Navy without an adversary and the US public again looked for a peace dividend. The Navy now found itself as a power projection force and limited to supporting ground campaigns under the new joint structure, as shown in Desert Storm. The Navy leaned into its partnership with the Marine Corps and developed its new strategy of "...From the Sea" which, while revised on multiple occasions, remained fundamentally consistent through the decade. While there were moments of doctrinal brilliance, this largely was a story of survival as the Navy sought any way to remain relevant as its force size plummeted and once promising new platforms were terminated. Interestingly, despite this change in the strategic situation, the Navy did not move away from its legacy posture and continued both rotational deployments and its focus on carrier-centric operations.

The 2000s present a similar story, as the Navy navigated the post-9/11 response, the demands of Transformation, and the slow shift towards Great Power Competition. A series of civilian leaders came in determined to change the military writ large, and as a

result the Navy was forced to make major changes in its Fleet Architecture. Similarly, the response to 9/11 required the Navy to revisit its Deployment Concept as the ability to surge became much more important, even as the Navy's flexibility was showcased in the immediate response. The Navy began developing concepts to shift back to a Pacific warfighting focus, but in many ways was unable to execute many of them due to ongoing demands in the CENTCOM AOR (a sort of doctrinal dissonance) and in many cases this shift, despite being in the cultural interests of the Navy, only gained momentum when civilians intervened to direct it.

Key Findings

Looking across cases, a number of conclusions emerge but chief among them is the value of institutional vision and broad-based coalitions to implement doctrinal change. Top down change rarely seems to last and balance of power considerations, while creating the need for strategic shifts, don't drive doctrinal change by themselves. While doctrinal shifts occurred, or attempted to occur, in response to geostrategic considerations and domestic constraints, these variables don't explain how a certain doctrinal shift occurred, just that there was a need for a change in the Navy's posture in many of these cases. The more interesting question is how that doctrinal shift was implemented in response to the above need. While there is not a consistent answer to that question, it is clear that having an institutional vision backed by a broad coalition and implemented by a functioning learning organization, with both incubators and advocacy networks, is important. The table below summarizes the findings from the cases studied.

Table 23: Summary of Findings							
	Post-WWII	1970s	1980s	1990s	2000s		
H_0 : Balance of	Major	Major	Major	Major	Major		
Power							
H_1 : Domestic	Major	Major	Major	Constraint	Major		
Politics							
H ₂ : Civilian	None	Minor	Enabler/	Minor	Most		
Intervention			Catalyst		Significant		
<i>H₃: Bureaucratic</i>	Most	Minor	Minor	Major	Minor		
Competition	Significant			(but Joint)			
H ₄ : Learning	Minor	Major	Major	Major, but	Minor		
Organization		(when		declining			
		used)					
H ₅ : Service	Minor	Underlying	Minor	Major	Major		
Culture and Ideas							

First, all these doctrinal shifts were highly contingent on the individuals involved and specific circumstances. As discussed further below, leaders that built broad coalitions and supported learning organizational efforts were more likely to be successful in implementing lasting change. The post-WWII period was heavily influenced by figures such as Forrest Sherman and Arleigh Burke, who were key contributors to strategic thought even before they became CNO. The shift towards the SSBN force is hard to imagine without the direction and top cover provided by Burke. Similarly, Zumwalt and Lehman had key roles in creating and putting their personal stamp on preferred doctrines. Just as significantly, other individuals, particularly in the post-Cold War period downplayed the role of strategy and instead focused on near-term budget battles. These decisions contributed just as much to the shape of doctrine as those who openly advocated for a doctrinal shift. Additionally, many of the doctrinal shifts revolve around key geopolitical changes such as the end of the Cold War and the response to 9/11. While these were key turning points, at the same time the geopolitical situation did not change as much as might be expected between the 1970s and 1980s, yet these eras saw a totally different doctrinal approach based on the prevailing personalities and perceptions.

Bureaucratic politics was ever present in these doctrinal moments, but the nature of the bureaucracy changed considerably over the period in question. Interservice squabbling dominated the late 1940s, with the dramatic Revolt of the Admirals, but by the later cases had been largely subsumed new bureaucratic actors. As the DoD centralized decision making, there was less need for services to directly fight each other and instead the game shifted to competing for OSD attention and approval. As the arena of bureaucratic politics changed, particularly following Goldwater Nichols, it became more important to openly align Navy doctrine to Joint concepts – regardless of whether it truly aligned, the Navy just had to claim it did and use similar language as the Joint guidance.

Civilian intervention, in many cases using the newfound OSD power, was relatively unproductive. Lehman was a unique case where the Secretary of the Navy drove doctrinal change, but in many ways he wasn't intervening as much as enabling the Navy to do what it already wanted. There are not many cases of direct civilian intervention in the early cases studied, and when it occurred was less to direct a true doctrinal shift but instead to constrain a choice, by reducing budgets or cancelling a

prized procurement program. Later cases do show direct civilian intervention, but again normally not directly at the service level but more at the grand strategic level. Shifts such as the Pivot and the Third Offset were high-level strategic shifts and allowed the Navy to effectively repackage many of its plans into a new construct using approved language without a substantive change. The early 2000s transformation push is an exception to this rule, as Rumsfeld directly intervened in service force planning and OSD pushed the Navy to create a more surge ready deployment concept. However, in most cases the Navy seems to have been able to do largely what it wanted, within the constraints of available funding. When it was forced to change by senior leaders, in many cases it returned to the previous path as soon as that senior had left – or in some disastrous cases senior leaders forced suboptimal choices on the Navy (e.g., LCS) setting it up for future failure and implying that the Navy may have been better off without civilian intervention.

Relatedly, enduring leadership was critical in creating a lasting doctrinal shift. The 1980s is the epitome of this, as the Maritime Strategy remained consistent, although updated almost annually, through the entire period. By comparison, many other cases saw multiple proposed doctrines throughout similar time periods as new leaders came in with their own visions. These constantly shifting doctrinal documents and inability to settle and execute a plan resulted in an effectively unexecuted plan as the large bureaucracy takes time to shift, and by the time it had begun implementing a new doctrine it was already being replaced. Zumwalt and Clark are good examples of this, as their reforms (particularly in force structure) do not outlast his tenure. By comparison, Lehman's

longevity as Secretary provided doctrinal continuity and prevented the constantly shifting doctrinal approach present in other cases.

In addition to longevity, learning organizational capacity and leadership backing was critical not just to the development of a new doctrine (it was) but also to making this new doctrine sticky. Incubators and advocacy networks were invaluable in building a broad base of support and "buy-in" throughout the service. Leaders serve an important role in creating and enabling these incubators and advocacy networks. Instead of a solely top-down approach, where the bureaucracy only had to outlast the senior leader championing a doctrine, learning approaches pulled mid-level leadership into the doctrinal development and refinement. The understanding and ownership this resulted in prevented a doctrinal shift from evaporating as soon as leadership changed, as did a conscious advocacy effort. This is at least part of why the Maritime Strategy remains so potent in the Navy's corporate memory today, while the post-WWII strategy is largely forgotten and Zumwalt's Project Sixty didn't last. For a variety of reasons, already discussed in the 1990s and 2000s cases, the Navy's learning organizational capacity has been significantly degraded in recent years and it seems to have largely lived off a legacy of the investments of the 1970s and 1980s. This learning organizational capacity required careful tending and a series of personnel policy decisions in the post-Goldwater Nichols era left the Navy without a robust capability.

Cultural factors are ever present throughout the narrative, but largely in an underlying manner. Similarly present are intraservice politics between the three tribes of the Navy, and in many ways these community (intraservice) differences became so deep

seated that probably they appear as cultural factors. Despite direction from senior leadership to shift, the Navy remained committed to large multi-mission ships, centered on the supercarrier but also fast nuclear submarines and large surface combatants – catering to each of the three tribes. The Navy also dedicated itself to global presence, even in the face of shrinking fleet size, and the independence of command at sea. While perhaps this was the "right" answer, particularly given the return of great power competition, undoubtedly underlying cultural and bureaucratic factors led to the decisions to prioritize CVNs, DDGs, and SSNs over other options, particularly smaller combatants, and expeditionary ships. Although the exact causal relationship is hard to quantify, the counterfactual of what might have happened without the legacy of Mahan and the open ocean warfare of the Pacific certainly implies that culture played an important role and likely biased the Navy towards certain doctrinal choices.

Circling back to the beginning, the ability to build a broad-based institutional vision appears to be derived from leaders enabling advocacy networks and seeking buy in vice solely top-down change, as well as balancing cultural and bureaucratic considerations. These cultural and bureaucratic actors don't necessarily drive the doctrinal change, but are agents with their own desires that have to be satisfied and thus may influence the shape of the doctrine. Cases where the Navy did that are the ones where doctrinal change was enduring.

Areas for future research

Several areas for future research were identified during this study. Chief among them is expanding the scope of the study to consider the entirety of the post-World War II era. Although the major doctrinal moments are covered within the study, treating it more as a chronological history would better help show the continuity and the evolution over time. Additionally, fleshing out the role of technological change (e.g. nuclear submarines and ballistic missiles) which this study acknowledged but did not focus on may better reveal the mechanisms of military change and potential commonality between technological and doctrinal change.

More importantly, archival research to determine what leaders were thinking at the time of these doctrinal shifts should be an important element of future research. Both due to the scope of the case studies included in this dissertation and the fact that it was almost entirely completed during the COVID-19 pandemic, with its associated restrictions, my initial plans to include archival research as a core element had to be reconsidered. Instead, this study relied primarily on published primary source documents and after-the-fact personal histories to create a picture of what happened and identify elements of the explanatory variables. This approach was suited for the broad overview of doctrinal shifts, but more detailed archival studies of the contemporary perspectives of leaders present in internal correspondence would likely contribute to a better understanding of what factors leaders were considering while implementing these doctrinal shifts.

Lastly, this study was intentionally focused on US naval doctrine in the post-WWII period. While that focus was by design, there would be value in considering other modern Navies, such as the French, British, Russian, or Chinese, if language and access make that possible. Additionally, while focused on the Navy, these doctrinal hypotheses

are general and could be tested against other services. Even if the organizations are different, the mechanisms of doctrinal change should be similar, and any differences would help understand to what extent doctrinal choices are contingent upon certain national or service differences.

Policy Implications

The so-called return of great power competition and the prospects of a conflict across the wide expanse of the Pacific has reinvigorated Naval doctrine, after decades of playing a supporting role in irregular and regional conflicts. These dynamics leave many navalists hoping of a restoration of the Navy. Implementing this doctrinal change, particularly after years of jointness and land campaigns, will be challenging, but there are some lessons that can be learned from the successes of the past. To do so, the Navy needs to support the development of an integrated vision for the future of the Navy, build elements of a learning organization (particularly the link between incubators and advocacy networks), and lay the foundation for the Navy it wants to build by developing the systems, even in small numbers, to support its strategy.

As Representative Luria recently called for, the Navy needs to develop and communicate a doctrine, or as she described the "maritime strategy of the 1980s articulated a clear vision for the Navy's purpose and how Navy leaders planned to achieve it. The nation would be well-served by the Navy's developing such a strategy again."⁶³² This doctrine, although called a strategy, would help the Navy communicate its

⁶³² "Look to the 1980s to Inform the Fleet of Today," War on the Rocks, June 14, 2021, https://warontherocks.com/2021/06/look-to-the-1980s-to-inform-the-fleet-of-today/.

purpose and define what changes the Navy needs to make in this new era. The Navy was successful in commencing reorientations in the past, not just in the case of the Maritime Strategy, but through all the case studies examined here, albeit with mixed results. An institutional vision supported by a broad coalition is important to enabling lasting change.

The biggest factors in driving success in doctrinal change throughout this study are consistency, from institutional "buy in", and learning organizational capacity. A lasting doctrinal shift likely can't be imposed only from the top and in this study there were no cases showing a successful top-down imposition of doctrine. An effective learning organization was successful in implementing past doctrinal shifts, and making them last, as was building an enduring plan that didn't constantly change as leaders rotated every couple of years. Learning organizational capacity underlies all that as it helps maintain continuity even as leaders change. Unfortunately, learning organizational capacity can't appear overnight and needs to be carefully and intentionally cultivated, as it was in the 1970s.

Building learning organization capacity requires investing in certain soft skill sets, providing promotion pathways for those that are at the core of the learning organization, and ensuring that the incubators are connected to effective advocacy networks. The skills required to think about the future doctrine of the Navy and how to achieve that are likely different than the tactical and seamanship skills that Navy promotion processes value. During the 1970s, the Navy invested in a career path for strategists, sending scores of officers to get advanced degrees and rotating them through the Navy's strategy office – these were the officers that staffed and wrote the Maritime Strategy. The Navy has

recently reestablished its "strategist" designator, but it remains unclear how that will be implemented. Similarly, incubators like the SSG were effective because the officers serving in them were upwardly mobile. Today the SSG is no more, and anecdotally service in the strategist "shops" or the Navy War College do not lend themselves to promotion. Fixing both these issues is important to developing the skill sets to think through the complex problems of great power competition and technological change.

By themselves, incubators are only part of the answer, and they need an effective advocacy network to have an impact. Without the ability to generate broad-based acceptance for the concepts developed by incubators, these organizations are just talking to an echo chamber. The Navy War College previously functioned as a key element of the Navy's transformation, but at least on the surface it does not seem to be connected to the Navy's current efforts to develop new doctrinal concepts. In this way, it is an example of an incubator without an advocacy network. The Navy should reinvigorate its internal networks, building upon what the creation of a CNO N7 (Doctrine) organization attempted to do. There isn't one answer, but a combination of informal discussion groups, fleet exposure and testing of incubator concepts, and senior leadership meetings with incubator meetings are all elements that worked effectively in the past. Lastly, the Navy shouldn't be surprised if these incubators and networks get stale and need to be periodically refreshed. That is part of the cycle, and senior leaders should not be afraid of a little creative destruction within learning organizational elements.

Looking to the past provides good examples of how the Navy was able to prepare for doctrinal shifts, even as it took a long time to realize the final form. The transition

from the 1970s into the 1980s is telling for today, as the Navy appears to have had the same overall goals (even if forced to accept more limited ones) and faced a similar geopolitical situation during both eras. What changed was the domestic political environment, available funding levels, understanding of adversary and the emergence of a charismatic advocate in Lehman, allowing for the eventual Maritime Strategy. But even in the 1970s, the Navy was not passively waiting for guidance. The Navy intentionally invested in developing a strategist community, testing concepts in fleet exercises and wargames, and advancing its platform capabilities within limited budgets. When the Navy's moment emerged in the 1980s, it had institutionally already answered the question and was able to execute its desired doctrinal shift immediately. Contrast that to more recently, where the Navy took years to develop its strategic capstone documents (e.g., CS21R) to reflect the changing direction from OSD.

Doctrinal shifts occur in response to domestic politics and funding, geostrategic considerations and even the personalities involved. But they are effective and lasting if implemented by a learning organization, one that avoids a top-down change that is too closely associated with a leader but instead builds a lasting, broad-based coalition of support. Today the question for the Navy often seems to be whether it is in a situation closer to the 1970s or the 1980s, which is contingent upon factors outside of its control in any case. What the Navy can do that is inside its control is invest in learning organizational capacity and build the institutional vision (and underlying analysis) for its desired doctrine, so that it can implement a new doctrine when the opportunity presents itself, whether that is in this decade or the next.

APPENDIX: NAVAL WARFARE AND FORCE STRUCTURE BACKGROUND

A baseline understanding of naval strategy and platforms, something that is admittedly a relatively niche field, helps to provide the context in the following chapters. While some readers may have an existing understanding of these issues and wish to skip this chapter, the following pages seek to provide a basic description of naval organization, platforms, and force structure to provide some baseline knowledge about the at times technical details that follow in the individual case studies.

Understanding Navy Organization

Navy organization is continually changing, and the change is one of the key elements this study considers. Despite that, there are some general constants of organization, particularly in the post-World War II era, that are worth familiarizing the reader with before proceeding.

The US Navy is led by the Secretary of the Navy (SECNAV) and the Chief of Naval Operations (CNO), as the senior civilian and uniformed leader, respectively. The National Security Act of 1947 effectively demoted the SECNAV to sub-cabinet level, as status the position has retained since, with various levels of actual influence depending on specific individual SECNAV and broader DoD personalities. The CNO, an office that came into existence during the First World War, is supported by the OPNAV staff, an organization that has been continually reinvented over the time period in question. In general, while the CNO remains the overall head of the US Navy, operational authority has been successively stripped away from the CNO and OPNAV staff and transferred to

regional Combatant Commanders (COCOMs).⁶³³ While the CNO retains overall responsibility for defining Navy strategy, the OPNAV staff is increasingly focused on programmatic and building the Navy's budget inputs in keep with its Title 10 "organize, train and equip" responsibilities.

Generally speaking, the Navy's operating forces are organized with multiple organizational lines known as "Operational Control" and "Administrative Control." This means that individual units are assigned to a squadron of similar units that trains and certifies them, and up to the TYCOM. However, a ship or other unit can be operationally assigned to a number of fleets and task forces as it deploys, whether due to specific mission needs or geographic span of control. As the unit "chops" from one operational commander to another, it still maintains a tie back to its "home" squadron where it will eventually return post-deployment.

The operating forces are divided into named theater Fleets led by four-star Admirals, most typically Atlantic Fleet and Pacific Fleet. In the Goldwater-Nichols era, these theater fleets became known as the Naval Component Commander, serving as COCOM chief naval officer. The Fleets have overall responsibility for maintaining, training, certifying, and employing the naval forces in their theater. The Fleets are further subdivided into Type Commanders (TYCOMs) and Numbered Fleets.

Type Commanders are the Administrative Control organizations responsible for the readiness of a specific type of naval platform. Common type commanders are

⁶³³ As Steve Wills of CAN has written extensively, the Goldwater-Nichols Act of 1988 took all operational responsibility away from the CNO and OPNAV, and with it the lead for strategy development.

Commander, Submarine Forces Atlantic Fleet (COMSUBLANT) and Commander, Naval Surface Forces Atlantic Fleet (COMNAVSURFLANT). The exact number and type of type commanders has obviously evolved over time, but the concept of a shore-based command that generates specific types of forces for the fleets to employ has been in existence since developed during World War II.

Numbered Fleets are the force employer for these forces. Generally headed by a three-star Vice Admiral, these Fleets are the operational arm of the Atlantic and Pacific Fleets. While multiple numbered fleets existed during World War II, only a handful operate in the modern era. They were generally designed as seagoing capable command organizations and are themselves subdivided into functional Task Forces. For example, Sixth Fleet (C6F) is divided in CTF60 - CTF69, with each Task Force responsible for a different aspect of naval warfare, ranging from carrier operations and amphibious operations to maritime surveillance and special operations. The graphic below shows the detailed Sixth Fleet organization, which is generally copied (albeit with theater specific naming) for each numbered fleet.⁶³⁴

⁶³⁴https://www.globalsecurity.org/jhtml/jframe.html#https://www.globalsecurity.org/military/agen cy/navy/images/tf-6-fleet.gif



Figure 12: Example Naval Fleet Organization⁶³⁵

Lastly, these Task Forces are themselves composed of individual ships or operating groups. Some units may operate independently, particularly submarines or maritime patrol aircraft, but in general the basic building block of the Fleet is the Task Group. For most of the Cold War the primary Task Groups were Carrier Battle Groups

⁶³⁵https://www.globalsecurity.org/jhtml/jframe.html#https://www.globalsecurity.org/military/agen cy/navy/images/tf-6-fleet.gif
(CVBGs) and Amphibious Ready Groups (ARGs), although Surface Action Groups (SAGs) also existed as a more ad-hoc formation. CVBGs generally consist of an aircraft carrier, its air wing, an escort screen of surface warships and supporting logistics vessels. ARGs consist of a number of amphibious warships, at times with escorts, and were paired with a Marine Expeditionary Unit (MEU) to provide a landing force.

Understanding Navy Platforms

As noted early, the Navy is a platform-centric organization. Its members are largely assigned to ships that are not just combat units, they are self-propelled cities that serve as homes and work sites for assigned personnel. The Navy generates combat power by utilizing and combining different types of ships to achieve some end. Understanding what each ship, or type of ship is, and why changes in ship procurement affect the Navy's ability to do carry out certain times of missions is important and thus discussed briefly below.

Aircraft carriers are the obvious naval platform everyone is familiar with, and for the time period covered by this research project, are the Navy's capital ship. They form the centerpiece of the CVBG and the main striking arm of the Navy. Coming out of World War II, the Navy had a large number of Essex-class carriers and a few larger Midway-class carriers. The immediate post-World War II period would be dominated by the Navy's desire to build a supercarrier. These were classified as Attack Carriers (CVA). Other smaller carriers existed as well, such as Light Carriers (CVL), Escort Carriers (CVE) and Anti-Submarine Carriers (CVS). In later years, the Navy's moves away from specialized carriers into the multipurpose Aircraft Carrier (CV).

Submarines play an increasingly important role in the Navy during this era. The development of nuclear propulsion gave submarines the long range, speed, and endurance necessary for extended forward deployments. Tactical submarines were always effective as sea denial platforms, and improved sensor and weapons systems made them effective against adversary submarines, giving them an important defensive/sea control role as well. While the US left World War II with a large diesel submarine (SSK) force, it quickly built a large nuclear submarine (SSN) force, effectively ceasing construction of diesel submarines in the 1950s. At the same time, an entirely new type of submarine, the ballistic missile submarine (SSBN) emerged to give the Navy a nuclear strike capability, eventually becoming part of the nuclear "triad."

Surface combatant developments during the post-World War II period are relatively confusing due to changing nomenclature. Battleships are pretty much the only constant, as the four Iowa-class battleships (BB) serve intermittently throughout the entire Cold War, but no more battleships are procured after World War II. The remaining surface combatants were characterized by an increasing focus on missiles over guns, initially for air defense and eventually as ant-shipping and land attack cruise missiles provided an offensive punch. The immediate post-World War II ships were primarily classified as Heavy Cruiser (CA), Light Cruiser (CL), Frigates (DLG), Destroyer (DD), Destroyer Escort (DE), and some assorted small patrol craft. These multiple categories became less meaningful as ship types merged and were eventually reclassified as Cruiser

(CG/CGN), Destroyer (DD/DDG), and Frigate (FF/FFG).⁶³⁶ Guided missile variants are annotated with a "G" while nuclear propelled ships have a "N."

Large Surface Combatants consisted of Cruisers and Destroyers of both types, which are the multipurpose primary component of the surface force. Cruisers are generally larger than Destroyers but in most cases don't have significantly more capability, instead different due to more capacity and the ability to serve as afloat command centers. Both ships primarily serve as escorts for carriers, with a primary mission of task force air defense and secondary missions of surface warfare, antisubmarine warfare, and naval gunfire support to landing operations.

Small Surface Combatants by comparison are primarily Frigates, although they include a smaller number of patrol boats, hydrofoils, and new types such as the Littoral Combat Ship (LCS). What generally separates Small Surface Combatants from Large, other than size, is their specialization. Many SSCs are primarily ASW frigates, designed to provide a relatively inexpensive escort capability to task forces and convoys. Other SSCs may have littoral or close-in surface capability or other specialized functions. While even SSCs may have multipurpose capabilities (e.g. the Oliver Hazard Perry had limited anti-air missiles), their small size tend to force them to focus on one dedicated capability.

Amphibious warfare ships are another part of the surface community that serve the sole purpose of delivering landing forces to a hostile shore. While they may have

⁶³⁶ Somewhat confusingly, the old Frigates became Cruisers under the new scheme while Destroyer Escorts became Frigates.

some limited self-defense capability, they are not combatants and their value comes from the relatively specialized functions of amphibious assault. Over this time period amphibious ships evolve from the smaller WWII era ships to much more capable platforms capable of long-range operations, generally hosting a variety of landing craft in a floodable "well deck" to facilitate landing operations. The largest amphibious ships (alternately classified as LPH, LHA and LHD) are effectively small aircraft carriers, although they lack the catapult and landing gear for standard jet aircraft.

Mine warfare ships are a unique specialty within the surface fleet, serving the single mission of sweeping or hunting enemy mines. Mines are a particularly difficult challenge to naval forces in littoral waters, and a relatively inexpensive way for weaker states to defend themselves against naval attack. Normal surface combatants don't tend to conduct mine warfare, both due to the risk to expensive platforms but also the unique equipment required for mine warfare (some minehunters even have wooden hulls to minimize their magnetic signature). These are unglamorous platforms, but vital to defeating anti-access threats.

Auxiliary ships are the last category, and largely consists of everything even less glamorous than minesweepers. The majority of this category is service craft, the vital atsea refueling and resupply ships that allow the US Navy to maintain its global presence without the need for frequent port visits. The auxiliary category also includes assorted other vessels such as oceanographic survey vessels, repair tenders that enable forward basing in austere locations, command ships, submarine rescue vessels, and SURTASS vessels that tow massive sonar arrays to assist in submarine hunting, among many others.

Understanding the differences between these platforms is important to understanding how force posture changes. Even though most naval ships are multipurpose to some extent, different strategies require different capabilities and may shift the balance from strike-centric platforms, to undersea or escort capabilities.

US Navy Force Structure: 1946-2016

Force structure is an important indicator of what the Navy prioritizes. While each case study will address the changes in force structure individually, due to the length of time ships stay in the fleet and difficulty changing complex ship procurement decisions, it can take a long time for decisions to have an observable impact. Therefore, this analysis considers changes in force structure across the entire time period in question to better trace the major changes that will be discussed in more detail in each case.

Force structure is important because while it is easy to say some capability or platform is important, but force structure reflects decisions made in a resource constrained environment, where tradeoffs have to be made. As such, it can serve as a quantifiable measure of priorities and in an ideal world force structure should change to reflect the doctrinal shifts in the Navy. A doctrine of defensive sea control, antisubmarine warfare, and convoy operations should lead to a different set of platforms than does a forward power projection doctrine. Understanding how Navy force structure has changed over time should provide a first order assessment of broader changes in the role of the Navy.

Force structure is more than just fleet size, or the number of ships in the Navy. While that is one measure of force structure, looking at fleet size by itself can be

misleading. For one, fleet size has largely declined since the Korean War with some moderate increases in fleet size that were relatively quickly reversed, as discussed more below. Additionally, fleet size is largely a function of budgetary considerations, and although the Navy can advocate for more ships, in the end the Navy has relatively little control over its shipbuilding topline. By itself fleet size is interesting, but not that informative.

Rather than solely looking at fleet size, the force mix of platforms that make up the fleet can be more informative. The Navy has somewhat more control over what ships it procures, living within the budget it is allowed. That allows the Navy to make trades between platforms, trading an amphibious ship for a destroyer, or attack submarines for ballistic missile submarines. While Congress still has the final say in ship authorization, the Navy has more maneuver space here and changes in the force mix can show the platforms that the Navy prioritizes. In an ideal world, this prioritization reflects strategic and doctrinal choices.

Methods and Sources

This analysis relies almost entirely on the Naval History and Heritage Command's (NHHC) publication of "US Ship Force Levels" from 1886 to present. This data is sorted by year, showing total number of ships as well as the breakdown by class every year. To ensure consistency, it already includes Military Sealift Command (MSC) fleet support ships as appropriate (specifically to compare to the Auxiliary Force Ships of the pre-MSC era) and has backwards classified pre-1975 surface combatants to reflect the

modern nomenclature.⁶³⁷ This existing data, with some modifications discussed below, was sorted, and graphed to allow for easier analysis.

As discussed above, the NHHC data is broken down by ship type. While this is consistent with how ships were named and counted, it does create an analytic problem as there are over 17 ship types through the period in question. Starting in 2011, the NHHC data is broken down even further by ship class (e.g. DDG51, DDG1000). This shifting number of platforms (some of which are retired altogether at times) mask trends. By aggregating the ship classes down to only 8 categories, this problem is eliminated to some extent and more consistently sorts vessels by purpose and capability, rather than classification.

Amphibious ships, mine warfare ships, and strategic submarines are the only platforms that did not require any aggregation, as they are categories within the NHHC data that work without modification, with the exception of referring to SSBNs as strategic submarines. Similarly, carriers and auxiliaries are two categories that require only minimal changes. For carriers, the two sub-classes of fleet carrier and escort carrier were combined into a carrier category. Auxiliaries require even less aggregation since the existing NHHC auxiliary category includes the majority of auxiliary platforms, except for some periods of time where command ships were counted separately. For consistency, in these cases command ships added back to the auxiliary total.

⁶³⁷ Specifically, guided-missile frigates (DLG) class ships were reclassified as Cruisers or Destroyers on 30 June 1975, to reflect their role as a major surface combatant. This analysis counts them as a Cruiser or Destroyer in the pre-1975 period, instead of their contemporary DLG classification, to ensure consistency.

Tactical submarine is a new category created that includes both traditional submarines, whether diesel or nuclear, as well as the converted strategic submarines that became the guided-missile submarine (SSGN). Even if the SSGN has different capabilities than an SSN, it serves a tactical purpose and with only 4 converted to that status by itself would not be statistically significant, but aggregated into the tactical submarine category it may be more representative of the fleet mix.

Surface combatants is an area that required more attention, due to the variety of platforms within the surface fleet. Rather than track the shifts in platform nomenclature, I chose to aggregate by two categories: Large Surface Combatant (LSC) and Small Surface Combatant (SSC). These categories are consistent with the current US shipbuilding plan, which is platform agnostic, instead referring to LSC and SSC. This aggregation allows the confusing mix of surface platforms to be collapsed into simpler categories and more easily analyzed. Large Surface Combatant consists of Battleships, Cruisers and Destroyers, the larger, premier surface ships. Small Surface Combatant consists of Frigates, Littoral Combat Ships, and Patrol Craft. This appears to make sense, as the LSCs are the major platforms that conduct fleet warfare, while the SSCs are primarily ASW escorts, patrol craft, and littoral platforms.

The table below shows this categorization discussed above:

Force Structure	Table 24: Ship Type Classification Ship Type					
Category						
Carrier	Fleet Carrier	Escort Carrier				

Large Surface	Battleship	Cruiser	Destroyer
Combatant			
Small Surface	Frigate	LCS	Patrol
Combatant			
Tactical Submarine	Submarine	SSN	SSGN
Strategic Submarine	SSBN		
Amphibious	Amphibious		
Auxiliary	Auxiliary	Command Ship	
Mine Warfare	Mine		

Navy Force Structure

Overall fleet size, broken down by these categories, is shown from 1946 to 2016 in the below graph.



Figure 13: Fleet Size by Type, 1946-2016

This force structure picture is consistent with what is generally known about the size of the Navy. Looking at overall fleet size, it shows the post-WWII demobilization and subsequent reactivation of ships for the Korean War, the 1970s block obsolescence of the WWII-era platforms, and the 1980s buildup to the "600-ship Navy" peaking at 594 in 1987, before falling again after the end of the Cold War.

Looking not just at fleet size, but the mix reveals more details. While the absolute number of platforms varies considerably as fleet size goes up and down as one would expect, a few details do stand out. At first glance it appears that the carrier and tactical submarine forces has consistently maintained their numbers, even as other forces ebbed and flowed. We additionally see the creation of the SSBN force reflected in the emergence of an entirely new platform in the 1950s. Also of interest is the increase in numbers of SSCs in the 1980s and their subsequent elimination from the US fleet in the 2000s. To better display these details, the ship type as a percentage of overall fleet size is graphed annually below.



Figure 14: Type as a Percentage of Fleet, 1946-2016

This graph confirms a few things already noted, including the growth of SSC in the 1980s and the emergence of the SSBN force with the Cold War development of the 41-for-freedom. Looking at it as a percentage also highlights the relative growth of the tactical submarine force that grew in the early Cold War and maintained its proportion of fleet, even during the post-Cold War drawdown. To highlight the actual change, the chart below shows the number of platforms and proportion of the fleet by category for every decade during this time period.

	1946	1956	1966	1976	1986	1996	2006	2016
Carrier	2% (25)	2% (24)	3% (23)	2% (13)	2% (14)	3% (12)	4% (10)	4% (10)
LSC	15% (191)	28% (269)	27% (246)	23% (125)	18% (104)	22% (82)	26% (72)	31% (84)
SSC	12% (154)	8% (81)	5% (42)	14% (77)	20% (119)	15% (56)	11% (30)	2% (8)
Tactical Sub	7% (85)	11% (108)	11% (104)	14% (74)	17% (101)	21% (79)	21% (58)	21% (56)
Strategic Sub	0% (0)	0% (2)	4% (37)	8% (41)	7% (39)	5% (17)	5% (14)	5% (14)
Amphibious	22% (275)	14% (139)	17% (159)	12% (65)	10% (58)	11% (40)	12% (25)	11% (31)
Auxiliary	33% (406)	24% (237)	24% (214)	22% (116)	22% (127)	19% (71)	16% (45)	22% (61)
Mine	9% (112)	12% (113)	9% (84)	5% (25)	4% (21)	5% (18)	6% (16)	4% (11)

Table 25: Fleet mix by type, as percentage of total fleet and by total number⁶³⁸

638 "US Ship Force Levels."

From this analysis, a couple of interesting conclusions emerge. Aircraft carriers, long the capital warship of the fleet, still remained a relatively small part of the overall fleet although they have doubled from 2% to 4% of the fleet. Amphibious and auxiliary ships have largely not changed as a percentage of the fleet, ignoring the one anomalous data point from 1946 which is likely skewed by WWII drawdown, even though the absolute number of platforms is significantly reduced. Mine warfare also remains relatively consistent, only entering double digits in the 1950s, possibly due to the reactivation of mine warfare vessels in the Korean War, and remaining between 4-6% of the fleet from 1976 on, after the retirement of the WWII-era platforms. Having analyzed the platforms that largely didn't change much, submarine and surface combatants present a far more interesting story.

Looking at surface combatants, overall they have made up around 30-40% of the fleet for most of the period in question (again with the exception of the 1946 data point). However, there is a clear tension between small and large surface combatants. SSCs have declined significantly during the post-WWII and post-Cold War draw downs, as the balance of the surface fleet shifted towards LSCs. On the other hand, when the fleet is growing, as in the 1976-1986 period, we see the proportion of SSC growing, while LSC portion shrinks, both within the surface forces and the overall fleet.

Submarines on the other hand, largely show nothing but a picture of growth. Tactical submarines grew from 7% of the 1946 fleet to 21% of the fleet from 1996-2016. At the same time, an entirely new platform, the SSBN, that didn't exist in 1946 and

barely existed in 1956, was rapidly fielded and grew to 8% of the fleet, until dropping to 5% with the transition from the 41-for-freedom boats to the smaller class of OHIO SSBNs. In both cases, the submarine force is a clear case of growth, generally at the expense of other platforms since their proportion of the fleet grew even in the face of a declining fleet.

1986 as the Ideal

An alternate way to analyze how fleet structure changed as compared to some notional ideal force. While any force structure, both size and mix, is specific to the strategic and technological circumstances of that specific moment in time, looking at force structure this way can at least highlight changes that may not be as easily observable. To do this, the 1986 fleet size was selected as the notional "ideal" force mix to compare the rest of the 1946-2016 period to. 1986 reflects the doctrine and goals of the "Maritime Strategy" and the reconstituted fleet that replaced the retiring WWII-era platforms. As such, it shows a fleet that was deliberately designed, as opposed to the earlier fleets that were left with ships largely built in WWII until their block obsolescence of these platforms in the 1960s and 1970s. This isn't to say the 1986 fleet is what the US should be today, but rather as a baseline to compare fleet mix to.



Figure 15: Change in proportion of fleet, compare to 1986 ideal

This graph, comparing the change in a ship type percentages of the fleet mix as compared to the 1986 fleet mix, further highlights a few changes already noted. The growth in SSC leading up to the 1970s and 1980s in particularly clear, as is their subsequent decline as the frigates were retired. Additionally, the post-Cold War growth in LSC and Carriers as a proportion of the force mix is further emphasized, although these changes are not unprecedented as LSC made up a larger proportion of the fleet in the post-WWII period as well. Additionally, the reduction of amphibious shipping and mine warfare vessels is apparent, particularly given that not only did the proportion shrink, but did it at the time the overall fleet was shrinking. One interesting conclusion emerges looking at more recent shifts, post-Cold War. Given that the 1986 fleet should have been optimized for the Maritime Strategy, a doctrine of offensive sea control and taking the maritime fight into Soviet bastions, one might have expected the post-Cold War fleet to have shifted towards a lighter or more expeditionary force structure. Instead, we observe the Carriers and Large Surface Combatants growing at the expense of other platforms, by 51% and 71% respectively. At the same time, strategic submarines did shrink by 24%, which appears consistent with shift in naval priorities. Other platform types grew in small numbers (1-13%) which is not nearly as dramatic as the Carrier and LSC growth. At first glance, this growth in large platforms following the collapse of the Navy's only maritime threat is interesting and worthy of further research.

Limitations

There are admittedly several limitations to this approach. First, as noted earlier, changes in force structure are not entirely within the Navy's control. Procurement decisions emerge from a multi-player bureaucratic process and while the Navy gets to propose its plan, after working through internal deliberations and prioritizing its desires, organizations such as the Office of the Secretary of Defense (OSD) and the Office of Management and Budget (OMB) get final say on what is presented to Congress. In the end, it is Congress and not the Navy or OSD that ultimately decides what and how many ships are authorized for construction and appropriates funds.

Furthermore, ship procurement is a lengthy process, and it takes years to even design a new ship, much less build and field the individual platform. Since most naval

ships have lifespans measured in decades, it can take a long time to affect the overall force mix. As an example, consider a very basic look at 2016's force mix and the SSC. With a fleet size of almost 300 ships, the navy would have to build 3 SSCs per year to grow the proportion of SSCs by just 1% a year. Thus, after 10 years if all other platforms were held constant, the percentage of SSCs would have only grown from 3% to 13%. While that is a definitive increase, SSCs would still make a relatively small portion of the fleet and even that modest relative increase could be reduced if fleet size was also increased due to other ship procurements. So, while analyzing force structure and mix numbers over the long term do reveal trends, the size of the fleet can mask smaller changes and more importantly, it likely significantly lags a change in procurement strategy.

Lastly, counting ships is one metric, and certainly how Naval strength has been measured since at least the Reagan-era, but may not adequately capture capability or size changes over this time period. This has a number of implications to consider.

For one, ships of all types have grown in size, and this analysis did not consider tonnage per platform or any other similar metric. The 1970s and 1980s Oliver Hazard Perry class frigate displaced over 4,000 tons, almost double the destroyer escorts of the 1950s, and thus it is closer to what we might have considered a WWII destroyer. Nuclear submarines and aircraft carriers have grown tremendously in size, and if a tonnage analysis was conducted, it may indicate a greater percentage of the fleet tonnage is taken up by these platforms than is shown by counting numbers of hulls.

Similarly, capability changes make comparing ship numbers by themselves difficult. Nimitz-class aircraft carriers and Arleigh Burke-class destroyers are more capable than their 1946 counterparts by an order of magnitude, and nuclear submarines have capabilities far beyond the wildest dreams of 1946 submariners. Amphibious ships present a particularly stark contrast, and although amphibious ships are significantly reduced in number from the post-WWII high, with 275 in service in 1946, those 275 vessels had nothing approaching the capability of modern amphibious ships with large well decks, helicopter decks, and air cushion landing craft – not to mention the aircraft carrier-like capability of the largest LHA/LHD amphibious assault ships. So, from a capability perspective, going from 275 amphibious ships making up 22% of the fleet, to only 31 ships making up 11% of the fleet, may not represent a measurable decrease in capability at all.

Conclusions

From this analysis, a couple of conclusions stand out. First, while the basic structure of the Navy has not been revolutionized in that similar platforms still exist, the Navy of 1986 or of 2016 does not resemble the post-WWII navy. Secondly, submarines have taken on newer roles, ships have grown larger, and most dramatically the fleet size has consistently been reduced. Specifically, there are 21 years where the fleet grew between 1946 and 2016, and only two periods of 5 years of sustained growth.

The balance between SSC and LSC is one of the more volatile aspects of Navy force structure. It appears the SSC are the first programs to be retired, but also the largest contributor to growth in fleet size. More recently, in the post-Cold War era, the Navy

preserved Carrier and LSC strength, which actually grew significantly as a proportion of the fleet, while other platforms declined, particularly SSC. Possible explanations for this include the lack of need for traditional ocean escorts following the collapse of adversary navies and a focused on power projection via carrier airpower and LSC strike capabilities, but it also could indicate a decision to prioritize prized major combatants at the expense of the less glamorous platforms.

The importance of submarines to the fleet has increased dramatically. SSBNs took on an entirely new mission in the 1950s, leading to the dramatic procurement of the "41 for Freedom," a procurement that presumably came at the expense of other naval platforms. At the same time, tactical submarines grew to a larger percentage of the fleet, largely preserving their numbers even as the rest of the fleet shed platforms, likely due to the lethality associated with nuclear attack submarines in the Cold War.

Presumably, these changes in force structure, even if slowly emerging over time, can be tied to doctrinal changes. As the Navy's concepts of employment change, there should be a corresponding change in the need for certain platforms. There seems to be a clear body of evidence for the changing needs of the Navy increasing the importance of the submarine force, specifically the role of the SSBN. On the other hand, the trade-offs in amphibious and small surface combatants has not been as clearly examined and connected back to a doctrinal evolution.

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