

# **A Deep Legacy: Smaller-Scale Contingencies and the Forces That Shape the Navy**

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**Center for Naval Analyses**

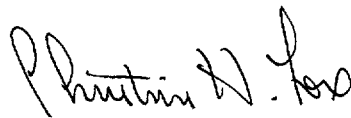
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A handwritten signature in black ink, appearing to read "Christine H. Fox". The signature is written in a cursive style with a large initial "C".

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## Summary

The basic method used in this paper is simple: we look at the past—and not just the recent past—to help us understand the decisions the Navy must make about the future.

The results are also simple: there is no one fundamental principle of Naval force other than *flexibility*. Naval forces adapt to their technological, political, and international environments. When the environment changes, so does the Navy.

The U.S. Navy today often sees itself almost exclusively as an extension of the Navy of the Cold War. This is understandable: the Cold War lasted for over four decades. That long period saw the formative experience of the current generation of naval officers and their civilian colleagues. Not only that, it also was the predominant experience of the generation that served *before* them, and that educated and trained today's Navy.

The Cold War, however, was a *unique period*, with a set of special characteristics that may or may not apply to current and future environments. Also, the Cold War is not the *only* legacy the current and future U.S. Navy has. The Navy had been many places and done many things before 1945—indeed, before 1845. To the extent the Navy looks to past experience as one input to guide future decisions, it may well be able to draw on its earlier history—what we call its “Deep Legacy”—as much as if not more than its more recent Cold War experience.

This paper demonstrates that the Navy has almost always been involved in smaller-scale contingencies (SSC) and operations other than war (OOTW). For long stretches these operations were *all* that the Navy did. More commonly, however, they shared the Navy's list of missions with various forms of high-intensity and mid-intensity warfighting and the preparation for same.

Already the environment the Navy must operate in, the technology available to it, and the culture and attitudes that drive its decisions are beginning to differ from what they were in the Cold War. It is reasonable to assume that they will continue to evolve.

## Environment

Throughout its history the United States Navy has had to adapt to its *environment*. The Navy has reacted to its environment in many different ways. After looking at the Navy's history we have identified *patterns* in how the Navy reacted in the past that can be used to shape and direct future debates about how naval forces could operate. Specifically we see that the Navy has adapted to its environment by changing its:

- Procurement, or what types of ships made up the fleet. For procurement we found:
  - The only times when ships designed *exclusively* for warfighting were procured have been during times of war or impending war.
  - Ships designed for SSC and OOTW were driven by two factors: *sustainment* and *cost*.
- Organization, or how the fleets were organized to accomplish the Navy's missions and how the Navy related to external organizations. In examining the Navy's organization we found:
  - The Navy's organization mirrors its fleet; if there is a warfighting and SSC fleet, then the Navy's organization is also split.
  - The Navy's external relationships have been varied and largely *ad-hoc*.
- Deployment, or how naval forces were stationed and the missions they were assigned. For deployment we found:
  - The Navy has usually preferred to station its forces *forward*. This is always true for *contingency* forces.



- Before World War II, the Navy kept the main fleet near the United States.
- Only with the Cold War did the Navy develop “general purpose” fleets that combined both contingency and war-fighting capabilities into single, forward-deployed units.
- Employment, or what the Navy was used for.
  - Employment patterns reinforce our observation about the Navy’s *flexibility*.
  - At one time or another, naval forces have done almost every imaginable mission.

From examining the history of U.S. naval forces we conclude that *there is no one unifying vector driving the progress of their development*. At one time or another, the U.S. Navy has tried almost every possible way of procuring, organizing, deploying, and employing ships and aircraft.

For nearly 100 years during the 19th century naval forces were deployed and used primarily in support of SSC operations and OOTW missions. Forces were normally procured and organized to specifically support these missions. Likewise, during the Civil War and World War II, naval forces were organized and equipped exclusively for warfighting, doing little or no contingency operations.

Today, the Navy retains essentially the same procurement, organization, deployment, and employment structure that it has had for most of the Cold War. Looking from a historical perspective, it becomes clear that this is because the Navy *chooses* to retain those patterns in response to its *environment* and the availability of *technology*. It is not because of some underlying attribute of naval forces that they *must* be employed that way. While the environment and technology have certainly changed since the Cold War, they apparently have not changed so much as to drive the Navy to begin thinking about significant changes in the way that it operates. . . yet.

In fact the most significant common theme we have found for naval forces is their *flexibility*—that is, flexibility both in the way that they are organized and in the wide range of ways they are deployed and used. This flexibility is reflected in each of the four variables we considered

in this study: procurement, organization, deployment, and employment.

## Technology

Many of the changes that have driven change in the Navy have come from the introduction of new technologies. We identify in particular three areas of technology that affect SSC operations and OOTW: ship-to-shore movement, sustainment, and communications. If the history of technological change in these three areas is laid out, it becomes clear that the most rapid, and dramatic, changes are occurring in communications.

Of course both ship-to-shore movement and sustainment have undergone significant changes (e.g., Operational Maneuver From the Sea and nuclear power). Communications, with the introduction of SATCOM and now high-bandwidth networked and video communications, have changed, and are still changing, dramatically. If these changes are as significant as the introduction of the radio, which led to a dramatic set of changes in the autonomy and missions for forward naval commanders doing SSC and OOTW, then there may be dramatic changes in the way naval forces deploy and operate.

## Culture and attitudes

In addition to adapting to the environment, and developing new technologies, the Navy often chooses one course of action over the other. To understand these choices, we must understand what drives them: the Navy's culture and attitudes. Culture and attitudes affect the types of missions the Navy decides to pursue, whether SSC or warfighting, and the intensity with which it pursues them.

The U.S. Navy evolved out of a high-intensity warfighting force. It was born in the war against Britain and was abolished soon after the Revolutionary War was over. It was reborn only when new, mid- and high-intensity threats emerged. Many potential smaller missions arose during the intervening years, and a smaller, contingency force—the Revenue Cutter Service—was created to deal with some of those,

almost a decade before the Navy was created. (The modern Coast Guard evolved from that service.)

The fundamental focus of the Cold War Navy, high-intensity warfighting, has often led to SSC and OOTW being seen as lesser cases of the Navy's warfighting mission (or sometimes as Coast Guard responsibilities).

## Conclusion

Again, what we have sought to demonstrate in this paper is that before World War II and the Cold War there were times when *different* environments and technology required *different* Navy policy paradigms. The overwhelming power of *recent history*—i.e., of the post-World War II paradigm—has focused the Navy on what it is *doing now*, as an extension of what it *recently did*, at the expense of what it *could do*. We hope that this paper can begin putting the various models of both deep and recent history in the proper perspective, to the benefit of Navy planning for the future.

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# Introduction

This paper looks at the history of U.S. Navy forces and their involvement in smaller-scale contingency operations. Our goal is to use history to develop new and different perspectives on naval involvement in these operations.<sup>1</sup>

Historical analysis can help do this. A prominent U.S. military officer has pointed out how the study and analysis of military history provides U.S. military and naval officers with a *laboratory, intellectual training, and discipline*, and can help in *developing and placing into context professional concepts*.<sup>2</sup> In the same vein, a leading U.S. naval historian has shown that such study and analysis can *inspire, inform, and empower* military and naval professionals of all ranks.<sup>3</sup>

Our goal in this paper is to organize the history of naval involvement in SSC and, to a lesser extent, in operations other than war, to help *identify the spectrum of policy options available to today's naval planners when they are thinking about SSC*.

- 
1. Examining the experiences of *other* navies, especially the Royal Navy, could also be useful. Such an examination, however, is well beyond the scope of this paper. On the Royal Navy experience, see CAPT Richard Wright USN, "Past as Prologue: The 19th Century Royal Navy," *Surface Warfare* (March/April 1998), 20-23; and Andrew Lambert, "The Royal Navy in the Last Long Peace: 1815-1914," in Eric Grove and CAPT Peter Hore, RN (eds), *Dimensions of Sea Power: Strategic Choice in the Modern World* (Hull, UK: University of Hull Press, 1998), 145-150.
  2. BGen Paul K. Van Riper, USMC, "The Use of Military History in the Professional Education of Officers," in Donald F. Bittner, *Selected Papers from the 1992 (59th Annual) Meeting of the Society for Military History* (Quantico, VA: US Marine Corps Command and Staff College, May 1994), 33-65.
  3. David A. Rosenberg (Admiral Harry W. Hill Professor of Maritime Strategy, National War College, Washington, DC) letter to Master Chief Petty Officer of the Navy ETCM (SW) John Hagan, USN, 6 January 1997).

## Background

This paper is part of a larger effort, sponsored by CINCPACFLT N-5, examining the role of afloat naval forces in SSC operations. The project examines current naval capabilities, analyzes the requirements for SSC operation support, and attempts to develop new ways of matching capabilities to requirements.

## Concepts

Following usage common in the 1990s, this paper posits three types of operations by military forces:

- High- and mid-intensity war, including general global war and major theater warfare<sup>4</sup>
- Operations Other Than War<sup>5</sup>
  - SSC operations<sup>6</sup>
  - Other OOTW.

This paper is principally about the second of the two major categories, which encompasses both SSC operations and other OOTW.

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4. We believe the terms “high-intensity warfare” and “mid-intensity warfare” suit our purposes here. For a discussion of problems inherent in classifying operations in terms of “intensity,” however, see Christopher Bellamy, “If You Can’t Stand the Heat: . . . New Concepts of Conflict Intensity,” *RUSI Journal* (February 1998), 25-31.
  5. The breakdown of “war” and “Operations Other Than War” is in accordance with joint and Navy doctrine promulgated during the early and mid-1990s.
  6. The term “Smaller-Scale Contingencies” originated with the *Quadrennial Defense Review’s* (QDR’s) look at military missions and capabilities in May 1997. It has since become *de rigueur* in defense policy documents.

## SSC operations and other OOTW

Table 1 lists SSC operations, as derived from the two latest (1997) basic national security and military strategy documents.<sup>7</sup>

Table 1. Contemporary smaller-scale contingency operations

- Shows of force
- Limited strikes
- Opposed interventions
- No-fly zone and sanctions enforcement
- Interposition or observation
- Peace operations
- Humanitarian assistance
- Noncombatant evacuation
- Counter-terrorism
- Counter-drug operations

We note that these operations had certain historical precedents and variants, such as armed landings, bombarding of forts, punitive raids, Prohibition enforcement, missionary and merchant protection, and anti-slavery patrols.

Other OOTW include such operations, past and present, as are depicted in table 2.

Table 2. Other OOTW (examples)

- Assertions of sovereignty
- Treaty-making and negotiation
- Law enforcement
- Environmental monitoring
- Exploration
- Civil and military government

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7. GEN John M. Shalikashvili, USA, *National Military Strategy of the United States of America* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, 1997), 16-17. See also William J. Clinton, *A National Security Strategy for a New Century* (Washington, DC: The White House, May 1997), 11-12.

## War

What this paper is *not* about, except by way of contrast, is high- or mid-intensity war—general or theater. In this paper, we posit that the U.S. Navy’s various types of high- and mid-intensity warfighting operations have included:

- Blockade, blockade-breaking, commerce-raiding, and anti-raider operations
- Fleet, squadron, and ship engagements against like forces
- Large-scale aviation strike, shore bombardment, and amphibious assault or landing operations
- Coastal defense of the U.S. homeland, its possessions, or an ally.

Much of the historical analysis of U.S. Navy operations and strategies has been in the form of debates between proponents of one form of high- or mid-intensity warfighting over another, i.e., between partisans of commerce-raiding and fleet engagements, or between advocates of coastal defense and forward squadron or fleet operations.<sup>8</sup> This paper is *not* about these concepts or debates. It is about the U.S. Navy experience with SSCs and other OOTW.

## Perspective

Good Heavens! For more than forty years I have been speaking prose without knowing it.<sup>9</sup>

Over 300 years ago, Moliere’s fictional *bourgeois gentilhomme* was astounded to discover that he’d been speaking prose all his life. In similar fashion, contemporary U.S. Navy officers are often surprised to discover that their service has been preparing for and conducting SSC operations and OOTW throughout its history. Indeed, for large stretches of that history those were the only operations the U.S. Navy prepared for and/or conducted.

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8. See, for example, the discussion in Lawrence Carroll Allin, “The Navy and *la Guerre de Cote*,” *Periodical: The Journal of the Council on America’s Military Past* (March 1981), 3-16.

9. Moliere, *Le Bourgeois Gentilhomme* [1670]. Act II, Scene 4.



SSC operations are nothing new. The U.S. military—especially the U.S. Navy—has been engaged in SSC operations since its beginnings. During some eras these types of operations dominated what the military did. In others, such as the recent Cold War period, these operations co-existed with larger strategic concerns. While SSC operations occurred throughout the Cold War, they often had only a small effect on strategic planning and system procurement due to the predominant influence of the direct Soviet threat.

Now that there is no overwhelming direct strategic threat, it may be useful to examine the past to look at what happened before the Cold War, and to see whether there are any lessons or concepts worth dusting off and trying again.<sup>10</sup>

In doing this, we are not asserting that history is the only—or even the central—factor the Navy should take into account in making decisions. We demonstrate, however, that it is certainly one of the factors that must be weighed.

## Historical legacy

The Navy has not always operated like it does today. During its earliest history it did almost all warfighting. At other times, such as between the Civil War and the Spanish-American War, the Navy was almost exclusively an SSC and OOTW navy. The Navy has adapted throughout history. With recent changes in the world, it is possible that the Navy may be at the threshold of another era in which adaptation will occur.

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10. A good start was made by CAPT Kenneth J. Hagan, USNR (Ret.), "What Goes Around . . .," U.S. Naval Institute *Proceedings/Naval Review* 1992 (May 1992), 88-91. This paper elaborates on his theme. For a preliminary and brief analytical effort along these lines, see Lester Gibson, LCDR Kevin Lynch, USN, and Peter Swartz, *Incorporating Operations Other than War into Naval Doctrine: Baseline Report*, October 1995 (CNA Research Memorandum 94-148), 31-39. See also Peter M. Swartz, "Comment and Discussion: 'Reflections on a Naval Career,'" U.S. Naval Institute *Proceedings* (November 1995), 18-21.

What has caused change in naval operations in the past? The Navy has had to adapt because of changes in:

- **The environment.** The world environment often demands adaptation. Examples include the changes that occurred during the early stages of World War II and in response to the onset of the Cold War. The environment includes:
  - The threat
  - Allies
  - National goals
  - Other services.
- **Technology.** Technological change has had a dramatic effect on the history of naval forces. The introduction of different energy sources for propulsion, the effects of changes in communications technology, and the development of ship-to-shore capabilities have radically changed the way naval forces operate.

The forces that induce change work together with institutional values to produce an operational, procurement, and organizational structure for naval forces. Institutional values, in turn, are often the products of how the Navy has evolved.

This paper seeks to use the historical record to discuss these two broad questions:

- How has the Navy adapted to changes in its environment?
- How has recent history (post-World War II) influenced current naval thinking and how can “deep history” (pre-World War II) help illuminate the current environment the Navy finds itself in?

## Methodology

Our approach is to look at historical change in response to the environment and technology available to the Navy at the time. We do

not seek here to develop a comprehensive history of the Navy.<sup>11</sup> Nor do we wish to provide a comprehensive history or bibliography of Navy SSC operations and OOTW.<sup>12</sup> Instead we will dwell on circumstances and incidents that illustrate the different ways naval forces have adapted to their historical environment and available technologies in carrying out SSC operations and selected OOTW, especially before the Cold War.<sup>13</sup>

## Analysis by policy area

How do naval forces adapt? They do so by developing and implementing *policies*.

There are several ways that the Navy, and the nation, demonstrate their naval policy response to their environment and to technology. Analysts have characterized various types of policy response as:

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11. Many such histories exist. Among the most detailed is Robert W. Love, Jr., *History of the U.S. Navy* (2 vols) (Harrisburg, PA: Stackpole Books, 1992).
  12. Those interested in such histories can start with: Adam B. Siegel, *The Use of Naval Forces in the Post-War Era: U.S. Navy and U.S. Marine Corps Crisis Response Activity, 1946-1990*, February 1991 (CNA Research Memorandum 90-246) and Stephen J. Guerra, *Responses to Harm's-Way and Humanitarian Situations by Naval Forces, 1990-1996*, November 1997 (CNA Research Memorandum 97-100). Regarding bibliographies, Adam Siegel has written two useful but unpublished reviews of the literature on SSC operations and OOTW: "America's Small Wars in the Twentieth Century" (December 1992); and "The U.S. Military and Humanitarian Assistance Operations" (1993). See also Alan R. Millett with J. T. Young, "The United States Marine Corps and the Small Wars of the 20th Century," in Bittner, Donald F., *Selected Papers from the 1992 (59th Annual) Meeting of the Society for Military History* (Quantico, VA: US Marine Corps Command and Staff College, May 1994), 1-20.
  13. Footnotes in this paper will highlight only the most important places to look for additional analyses of only the most particularly significant operations. They are only illustrative, and do not pretend to be comprehensive.

- *Declaratory policy*—what the Navy says it is for
- *Budget policy*—how much of the national treasure the country allocates to its Navy
- *Procurement policy*—what the Navy buys with the money it gets
- *Personnel policy*—what people the Navy recruits, educates, trains, promotes, and assigns
- *Organizational policy*—how the Navy divides up its tasks internally and works with others externally
- *Deployment policy*—how and where the Navy concentrates or disperses on the globe
- *Planned Employment policy*—What the Navy *intends* to do in future contingencies
- *Actual Employment policy*—what the Navy actually sets out to do in practice.<sup>14</sup>

In an ideal world, all of these policies dovetail. In practice they often do not, for a variety of political, bureaucratic, and technical reasons.

### Focus on four policy areas

Our purpose here, however, is not to discuss consistency or inconsistency among naval policies. Rather, we will break down past U.S. naval policy into certain constituent policy strands to allow us clearer analyses and to help identify key insights for the future.

This study is bounded by constraints of available time and analytical effort. Accordingly, we did not attempt to address every possible policy area. Rather, we narrowed our field down. We focus on *four policy areas* we consider to be of particular interest to Navy staff officers

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14. The list is derived from a number of analyses breaking down policies by type, including Paul H. Nitze, "Atoms, Strategy and Policy," *Foreign Affairs*, 34 (January 1956), 187-188; Desmond Ball, "U.S. Strategic Forces: How Would They be Used?" *International Security*, 7 (Winter 1982/1983), 32-33; and David A. Rosenberg, "U.S. Nuclear Strategy: Theory vs. Practice," *Bulletin of the Atomic Scientists* (March 1987), 20.

responsible for planning and executing contemporary and future Navy SSC operations and other OOTW:

- *Deployment policy*—how the United States has concentrated or dispersed its Navy on the globe to conduct SSC operations and other OOTW, and why
- *Organizational policy*—how the fleet has been organized for SSC operations and other OOTW, and why
- *Procurement policy*—what the United States has purchased for its Navy to conduct SSC operations and other OOTW, and why
- *Employment policy*— what kinds of SSC operations and other OOTW did the fleet actually go to conduct, and why.

We lead off with deployment policy because of the enormous influence that post-World War II fleet deployment patterns exert on contemporary U.S. Navy organizational, procurement, and employment policies.

We chose these four because they were areas in which CNA had already gathered considerable data and done some preliminary analyses. Our choice is therefore meant to be illustrative, and should *not* be interpreted as prioritizing in any way.<sup>15</sup> That having been said, we believe our choice nevertheless to be meaningful, and to allow significant analyses to be made and useful insights to be drawn.

## Models

Many histories of the U.S. Navy examine the Navy's policies in terms of changing models applicable to a particular policy area. For example, histories of the Navy that focus on procurement policy often focus on modes of propulsion or hull construction materials, contrasting an Age of Sail with an Age of Steam, or a Wooden Navy with a Steel Navy. Likewise, histories that emphasize organizational policy

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15. Had we done so, even a cursory analysis would probably have indicated that declaratory policy would have been important, as it is a variable that shapes and reflects culture and attitude, two important concepts in this paper.

contrast unilinear models of organization with a bilinear model, and histories that center on combat operations contrast commerce-raiding with fleet engagement models.

We too employ a series of models in order to draw out insights. Our models, however, are brand new, and will differ from the conventional models just discussed.<sup>16</sup> This is because we are interested in how the U.S. Navy has operated, at the strategic and operational levels of war, throughout history. Operations are a complex mix of what the Navy does, and how it is equipped, organized, and trained. They are also larger than tactics, or how the Navy engaged its enemies.

Taking a strategic and operational, instead of a tactical, perspective means that we cannot have any one particular perspective. Instead, we need to look at historical trends in terms of how they influenced what the Navy *did*, not what it was, what it had, or how it engaged the enemy.

Along with an operational perspective we will focus on one question throughout this paper: *why*? We want to understand not only *what* the Navy did, but *why* it did it.

## Scope and sources

We cannot provide in detail here the complete context for each policy action we describe. Such an approach would be more comprehensive, but is well beyond the scope of a short paper.<sup>17</sup> As discussed above, there are many good histories of the Navy already written that can provide this context, however, and many analyses of rationales behind the specific actions we describe. Much of the detailed support for our “whys” must be found there, outside the bounds of this paper.

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16. For an exception, however, see Hagan, “What Goes Around . . .”

17. For the basic analysis of everything that historians of the U.S. Navy must take into account in order to deal comprehensively—and therefore accurately—with their subjects, see David A. Rosenberg, “Process: The Realities of Formulating Modern Naval Strategy,” in James Goldrick and John B. Hattendorf (eds.), *Mahan is Not Enough: The Proceedings of a Conference on the Works of Sir Julian Corbett and Admiral Sir Herbert Richmond* (Newport, RI: Naval War College Press, 1993).

The historical research for this paper made use of a wide variety of these secondary sources. These are listed in the bibliography. We also deliberately identify our sources in extensive footnotes. We do this to:

- Ensure that the reader understands the origins of the data
- Ensure that the reader knows where to go for detailed context
- Provide a guide to an extensive literature on the Navy's past SSC operations and OOTW that might otherwise go unnoticed and therefore unused by practitioners and students of Navy policy-making.

Most of these works are well known to academic naval historians. They also warrant discovery—and use—by military and civilian U.S. Navy policy specialists and analysts.

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## Historical models

In this section we briefly describe the historical models we developed to describe the process of change in how afloat U.S. naval forces were deployed, organized, equipped, and employed for SSC operations.

These models reinforce the main points of this paper:

- The key characteristic of U.S. naval forces throughout history, and in particular for SSC and OOTW operations, is their *flexibility*.
- The U.S. Navy has met the requirements imposed by the environment, organizational relationships, and technology, by using a wide range of different deployment, organization, and procurement models.
- These *historical* models form the scope of what is possible in terms of organizing, deploying, and equipping fleets for war-fighting and SSC. They can become the basis for “out of the box” thinking about alternative *future* U.S. navies and how they would look and what they would do.

## Deployment models

### Models

If you look at the history of the U.S. Navy you find that the fleet has deployed according to five major models.

#### **Model I: Combat surge**

During the time this model applied, ships and squadrons were held in peacetime near the continental United States (CONUS). The fleet was ready to surge forward against enemy ships and installations while few or no SSC operations and OOTW were performed.

### **Model II: Combat forward**

This model has U.S. naval forces operating forward where their primary focus is on defeating an enemy fleet in high-intensity or mid-intensity war. During these eras there were few or no SSC operations or OOTW.

### **Model III: Contingency forward**

In this model, ships and squadrons are permanently stationed forward where their primary foci are SSC operations and OOTW. In contrasting with Model II, there is little or no focus on high-intensity or mid-intensity warfare.

### **Model IV: Multi-mission and multi-area, separate fleets**

Small contingency squadrons are deployed forward, while big combat fleets are held back at CONUS. During these eras, colonial-type SSC and OOTW missions dominated for forward forces while the CONUS forces focused on preparation for high-intensity fleet actions. During peacetime CONUS forces seldom surge.

### **Model V: Multi-mission and multi-area, mixed fleets**

This is how the U.S. Navy has operated since the beginning of the Cold War. The battle fleets are both forward and in CONUS while all fleets are regarded as capable of doing any mission, whether contingency or warfighting.

## **Analysis**

Table 3 shows the various models and their attributes. We can abstract these models into the types of mission: high- or mid-intensity warfighting or SSC/OOTW, and the types of deployment: forward or CONUS. Table 4 shows how these missions can be abstracted, and where our five models fit in.

The tables show that the U.S. Navy:

- Has seldom been a navy exclusively designed to surge from CONUS. The only case of an exclusively surge navy was brief and very early in our history, and it was a mid- or high-intensity warfighting surge capability. Contingency capabilities are

seldom held near CONUS and surged in response to events. In most cases, contingency capabilities have been stationed forward.

- Has stationed mid- and high-intensity warfighting capability forward as often as it stations its main fighting fleet near CONUS, and much less often than it stations SSC/OOTW capabilities forward.
- Has only relatively recently (since World War II) developed the concept of a “mixed” fleet, one that does both SSC operations/OOTW as well as mid- and high-intensity warfighting.

Appendix A discusses these models in more detail.

Table 3. Deployment models and their attributes

Model	Era	Fleet location	Mid or high-intensity warfighting missions done by	SSC/ OOTW/ missions done by
I. Combat surge	1798-1806	CONUS	CONUS squadrons surging	(Little or none)
II. Combat forward	Civil War, WWII	Forward deployed	Forward squadrons/ fleets	(Little or none)
III. Contingency forward	Nineteenth century	Forward deployed	Little or none	Forward squadrons
IV. Multi-mission and multi-area: Separate fleets	1806-1815 Pre-World War I Interwar	CONUS, and some forward deployed	CONUS fleet surging	Forward squadrons
V. Multi-mission and multi-area: Mixed fleets	Cold War Post-Cold War	Forward deployed and CONUS	Forward fleets and CONUS surge fleets	Forward fleets and CONUS surge fleets

Table 4. Deployment location and mission alternatives

	Mid- or High-intensity warfighting	SSC operations/OOTW	Both
CONUS	Combat surge		
Forward	Combat forward	Contingency forward	
Both	Separate fleets (CONUS)	Separate fleets (Forward)	Mixed fleets

## Organizational models

We divide the Navy's organizational issues into *internal* organizational policy and *external* organizational policy. While the Navy has considerable control over its internal organization, this has not been the case for its external relationships. In connecting with other organizations, the Navy has had to respond to a range of variables that are well beyond what the Navy would otherwise have to consider.

In this section we discuss both the internal and external policies. We begin with the internal organizational models, then briefly discuss the Navy's external relationships and how they have evolved. Greater detail on both the models and the relationships is provided in appendix B.

### Internal organization

The Navy has historically been organized according to three distinct models.

#### **Model I: Washington in command of squadrons**

During the 19th century, each overseas station in the Navy had its own squadron. The squadron commanders in turn reported directly to the Secretary of the Navy. The Secretary was a civilian, cabinet-rank, political appointee.

#### **Model II: Washington in command of fleets and squadrons**

Starting in 1915, a Chief of Naval Operations was designated to assist the Secretary of the Navy in directing fleet operations. This was

needed in order to better manage the growing fleet, and perhaps as important, the growing interrelationships between different fleet maneuver elements. During this period, both the U.S. Fleet, as well as the smaller squadrons, still reported directly to the Secretary of the Navy, with the CNO occupying an ambiguous position between the fleets and the Secretary.

**Model III: Washington runs FLTCINCs who run fleets**

During World War II the fleet had many ships distributed all over the world. To deal with this complexity, additional layers of command were added. Additionally, during this period the division between operational and administrative chains of command became institutionalized.

**Summary**

Table 5 shows the three internal organizational models, their time periods, internal organizing principles, and important characteristics.

Table 5. Internal organizational models<sup>a</sup>

Model	Era	Internal organizing principle	Important characteristics
Model I. Flat (Navy Dept & squadrons)	19th century: Pre- and post- Civil War	Operational elements organized by geographic region.	Short command chain, flat operational organization (help compensate for poor communications).
Model II. Mixed (Navy Dept & fleet/squadron mix)	20th century: Interwar	Separation of high-intensity warfighting fleet from SSC/OOTW squadrons. Fleet organized by function. Squadrons organized by function, geography.	Layered command structure for battle fleet (necessitated by tactical complexity; facilitated by better communications).
Model III. Multi-Layered (Navy Dept, Fleet CINCs & numbered fleets)	20th century: Mid-World War II to present	Operational elements organized by geographical region.	Mostly homogeneous layered command structure throughout (integrated into larger joint structures).

a. For a timeline of the various eras, see figure 2.

## External relationships

There have been five primary ways in which the Navy has interacted with outside organizations for SSC and OOTW operations:

### **Autonomous operations**

From 1798 until 1947 the Navy was an independent government department, co-equal in status and autonomy with the departments of War and State, and other departments. This left the Navy to interact as an equal in the *interagency* process of the time with the President providing centralized command. In fact joint, inter-service coordinated plans and operations were common, and the Navy and War departments cooperated closely. For SSCs, however, jointness was the exception rather than the rule.

### **Operations with the State Department**

When the Navy was an autonomous department of government it often had a closer relationship with the State Department than it had with the War Department. In some SSC and OOTW operations the Navy in fact operated as a direct agent of the State Department.

### **Operations within a joint structure**

Starting with World War II and the National Security Act of 1947, the Navy has become increasingly embedded in a joint command and operational structure. The record of Navy participation in SSCs and OOTW for the first 30 years or so after World War II—while nominally embedded in a joint structure and processes—was in reality a series of autonomous Navy-only or near-Navy only operations. In the 1990s, however, SSCs and OOTW have been typically commanded by a joint task force (JTF) commander, with supporting service or functional components.

### **Operations with non-national security and non-governmental organizations**

The Navy's relationships with non-government, or interagency, organizations go back to very early in its history. Most of these relationships were necessitated by the requirements of two types of operations: exploration and humanitarian assistance. However, these

relationships—while frequent—have mostly been ad-hoc and sporadic. There have been few if any *permanent* relationships established.

### Operations with foreign navies

Operations with foreign counterparts have been the rule rather than the exception for the U.S. Navy. This is because of the unique nature of operations at sea. Shying away from formal alliances for much of its history, the U.S. Government still used the Navy in informal combined interventions with European powers in Third World areas. Such ad-hoc coalitions have had both political and military uses. Coalitions are also easier to build at sea, where everyone can come and go at will and interactions are relatively straightforward.

### Summary

Table 6 shows the five external relationships models we describe here and discuss in detail in appendix B.

Table 6. Navy SSC/OOTW historical external organizational models<sup>a</sup>

Model	Era	Characteristics
Model I: Autonomous	Through WW II	Independent SSCs and OOTW
Model II: With State Dept.	To WW II	Close, even subordinate working relationship
Model III: Within joint structures	WW II to present	Initially independent SSCs & OOTW Increasingly joint in 1990s
Model IV: With non-national security agencies & NGOs	All	Neither permanent nor intimate
Model V: With foreign navies	All	Ad hoc, then formal & continuous Easy & useful politically

a. For a timeline of eras, see figure 2.

## Procurement models

The Navy has tended to buy ships according to its need for high-intensity warfighting forces. When it gets involved in SSC operations,

it naturally uses what it has, which coincidentally happen to be high-intensity warfighting platforms. Even with this dual use of warfighting platforms, however, the Navy has often had to supplement its SSC forces with ships optimized for SSC.

Appendix C contains a detailed discussion of Navy procurement policy as it relates to SSC operations and OOTW. Here we describe the procurement models we derived.

## **Models**

We identify four different types of procurement models the Navy has used at one time or another. These are:

### **Model I: Specialized construction; general use**

In this model, most of the ships are designed for warfighting, with some special SSC/OOTW ships built. This model applies to the Navy in the post-revolutionary period, in the Cold War, and today.

### **Model II: Specialized construction; specialized (separate) use**

In this model, a main battle fleet stays near the United States, and smaller, special purpose, squadrons occupy forward-deployed stations. In this case ships are earmarked for a mission: fleet ships are almost exclusively built and equipped for high-intensity warfighting, while forward ships are designed exclusively to support the SSC/OOTW missions. This model characterized the 20th-century interwar Navy.

### **Model III: Specialized construction; specialized use (SSC/OOTW)**

This was the post-Civil War Navy. The Navy deliberately chose to focus on SSC/OOTW at the expense of warfighting (of which there was little expectation). Platforms, technology, and procurement were focused on low cost solutions to overseas presence and SSC operations problems. The classical example of this is the opting for sail over steam, even after steam was shown to be tactically superior for warfighting.



#### **Model IV: Specialized construction; specialized use (warfighting)**

Total war, including the Civil War and World War II, has meant a total warfighting fleet for the Navy. During times of total war, the Navy's need to fight enemy fleets has overwhelmed any other requirements and resulted in almost all fleet ships being converted to warfighting or discarded.

### **Analysis**

The Navy has been made up of ships and equipment whose procurement was based on a number of different models for how it operates.

Table 7 shows the various procurement models compared by fleet mission, the types of ships in the fleet, and how the ships were used.

Table 7. Procurement models

Model	Built for	Used for	Era
Model I: Specialized construction; General use	Warfighting	Warfighting & SSCs/OOTW	Post-Revolutionary Cold War Post-Cold War
Model II: Specialized construction (separate); Specialized use (separate)	Warfighting SSCs/OOTW	Warfighting SSCs/OOTW	Interwar
Model III: Specialized construction; Specialized use (Low end)	SSCs/OOTW	SSCs/OOTW	Pre/Post Civil War
Model IV: Specialized construction; Specialized use (high end)	Warfighting	Warfighting	Civil War World War II

At one time or another the U.S. Navy has employed just about the entire range of sensible<sup>18</sup> models for how to configure and use ships.

Both the operational environment and the available technology can demand change in the fleet. Figure 1 shows the sequence of

technological changes the Navy has faced in the three variables that are among the most significant for SSC and OOTW operations: communications, sustainability, and ship-to-shore movement. These variables, and the entries in the timeline, are discussed in detail in appendix C.

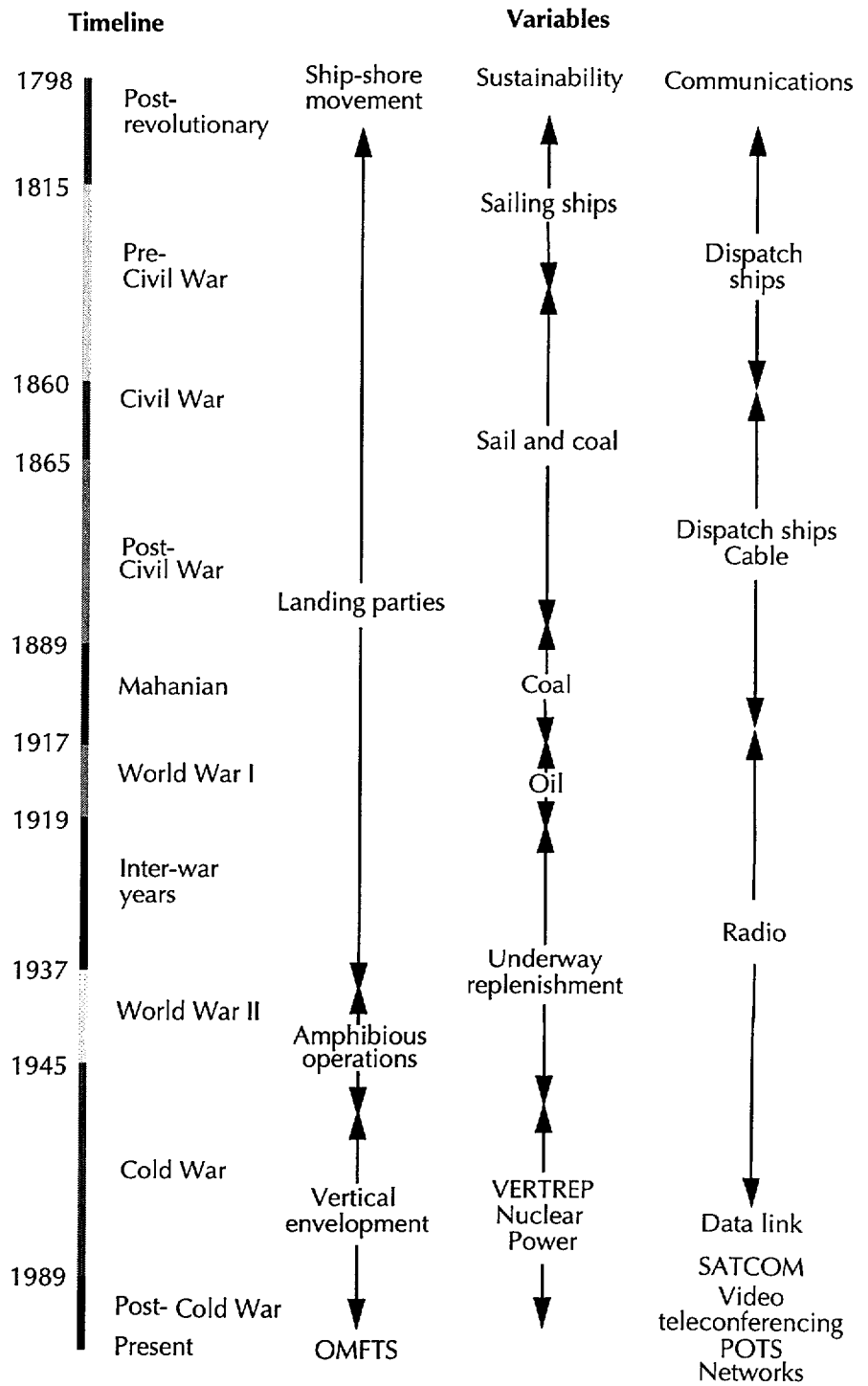
As we can see in the figure, the principal variable where accelerating change has recently occurred is in communications. Change is also occurring in ship-to-shore maneuver (OMFTS) and sustainment (electric drive) but these are service-driven changes. No corresponding drive for change is occurring in these areas in the civilian world. The civilian world is driving a near-exponential growth and change in communications technology. With the implementation of initiatives such as IT-21, the Navy is attempting to hang on to the current revolution in communications and information technology.

The revolution in communications is where change is occurring most quickly; therefore, it has the greatest potential to change the way the Navy does business. In the same way that radio redefined the responsibilities and relationships of commanders at sea, high bandwidth communications can also change the way commanders relate to forces back in the United States as well as ashore.

This gives the afloat commander the ability to affect a much larger set of organizations and areas than he was able to in the past. The afloat commander is now able to remain afloat and—through the use of communications technology, as well as helicopter movement—maintain close ties to forces ashore and in the rear.

- 
18. The only model not deliberately employed was a fleet composed of ships configured for SSC/OOTW that also did significant warfighting missions. Even this model was, however, used once: the SSC-only Asiatic Fleet was ordered to do battle with the Imperial Japanese Navy at the outbreak of World War II. The result was the debacle of the Java Sea in 1942.

Figure 1. Technology variables and change<sup>a</sup>



a. SATCOM: satellite communications. POTS: Plain Old Telephone Service. Networks: Internet, SIPRNET, JDISS, etc.

Figure 2 suggests that organizational models have evolved linearly as a function of time. In other words: organizational models tend to flow from pressures and capabilities that are largely independent from either technology or deployment patterns. Changing communications technology may in turn change this historical trend, with commercial technology putting increasing pressure on existing ways of organizing and deploying forces.

## Employment policy

We did not develop specific models for how Navy forces have been employed in SSC and OOTW operations. That is because they have been employed in *every* type of SSC or OOTW operation—so many that they are not productively organized into a few specific categories or types. This alone gives evidence for our argument that flexibility has been the defining characteristic in how naval forces have been used in historical contingencies. Appendix D gives additional detail, and discusses employment policies and how they have changed, as well as specific SSC missions.

## Functional relationships

Based on the analysis above and in the appendices, our contention is that naval forces have responded flexibly in adapting to changes in the environment and technology, and their relationships with other organizations. We have used the above models to illustrate how naval forces have been deployed, organized, and procured in the past.

A look at all of these models suggests two distinct sets of interrelationships:

- *The models are correlated.* If nothing else, the same environmental and technological influences were working on the Navy at the same time in history. It is also likely that some deployment models directly imply certain organizational or procurement models.
- *The models define all of the permutations for “the box.”* This is the box within which Navy planners and policy makers operate when

thinking about future Navies. Since the Navy has experimented with just about every combination of deployment, procurement, organizational, and employment policy in its past, these past excursions give the terrain of what is possible in the future.

In the rest of this section, we will discuss the first of these observations.

## Correlations among models

Figure 2 shows all the models, combined with the historical eras within which they occurred. This figure serves as the key for the following discussion of correlations. In the figure we assign each era and model a number. We can use these numbers to see whether there are any correlations between a particular deployment, organizational, or procurement model and the other historical models.

In table 8 we plot the organizational models against the deployment models. For each cell in the table we list the historical eras where both that organizational model and the particular deployment model applied. For example, during the post-revolutionary era, era 1, the organizational model was “flat” and the deployment model was “combat surge.” In table 9, we do the same for organizational and procurement models. We do the same in table 10, but in that case we correlated the procurement models with the deployment models.

Remember, our goal is to see whether there are any correlations between a particular deployment, organizational, or procurement model and the other historical models. These correlations will allow us to determine how different ways of deploying, procuring, or organizing the fleet are related to each other. For example, has the Navy always adopted the same deployment and procurement patterns when confronted with a major war? The models we described in the previous sections and the appendices give us one way to aggregate history into manageable chunks. This is a way to aggregate our still-large number of models into even more abstract groups.

Figure 2. Historical relationships of models

Eras	Internal organizational Model	Deployment Model	Procurement Model
1 1798 Post-revolutionary 1815	I. Flat	I. Combat surge, (then multi-separate)	I. Specialized construction, general use
2 Pre-Civil War	I. Flat	III. Contingency forward	III. Specialized construction; specialized use (SSC/OOTW)
3 1860 Civil War 1865	I. Flat	II. Combat forward	IV. Specialized construction; specialized use (warfighting)
4 Post-Civil War	I. Flat	III. Contingency forward	III. Specialized construction; specialized use (SSC/OOTW)
5 1889 Mahanian	I. Flat	IV. Multi-separate	(Transitional period that is difficult to characterize)
6 1917 World War I 1919	II. Mixed	IV. Multi-separate	I. Specialized construction, general use
7 Inter-war years	II. Mixed	IV. Multi-separate	II. Specialized construction; specialized use (separate)
8 1937 World War II 1945	III. Multi-layered	II. Combat forward	IV. Specialized construction; specialized use (warfighting)
9 Cold War	III. Multi-layered	V. Multi-mixed	I. Specialized construction, general use
10 1989 Post-Cold War Present	III. Multi-layered	V. Multi-mixed	I. Specialized construction, general use

Table 8. Correlation between organizational models, deployment models, and eras<sup>a</sup>

Deployment model	Internal organizational model		
	Flat	Mixed	Multilayered
Combat surge	1		
Combat forward	3		8
Contingency forward	2,4		
Multi-separate	5	6,7	
Multi-mixed			9,10

a. Numbers correspond to eras. They are associated with the era names in figure 2.

Table 9. Correlation between procurement models, organizational models, and eras<sup>a</sup>

Internal organizational model	Procurement model			
	I	II	III	IV
Flat	1		2,4	3
Mixed	6	7		
Multi-layered	9,10			8

a. Numbers correspond to eras. They are associated with the era names in figure 2. Era 5 is not shown as it is too hard to disentangle procurement for the entire era.

Table 10. Correlation between procurement models, deployment models, and eras<sup>a</sup>

Deployment model	Procurement model			
	I	II	III	IV
Combat surge	1			
Combat forward				3
Contingency forward			2,4	
Multi-separate	6	7		8
Multi-mixed	9,10			

a. Numbers correspond to eras. They are associated with the era names in figure 2. Era 5 is not shown as it is too hard to disentangle procurement for the entire era.

A look at the tables suggests that our organizational models correlate poorly with the deployment and procurement models (tables 8 and 9). This is partly the result of the organizational models being strongly correlated with time and/or size of the Navy. Looking at figure 2 we can see organization changes in a regular and linear fashion across the eras, while both the deployment and procurement models are less clearly correlated with time. It is also partly the result of the Navy responding flexibly to its environment, an environment that has required a lot of different ways of doing things over the years.

Looking at table 10 we see that our procurement models are not closely correlated with our deployment models either. So, in addition to each of these models being poorly correlated with time, they are poorly correlated with each other.

In the tables, however, certain eras are correlated. Eras 1, 3, 5, 6, 7, and 8 stand alone (in the case of table 8, era 5 stands alone because it is a composite of many different models), while eras 2 and 4 and 9 and 10 are always associated with each other.<sup>19</sup> Eras 9 and 10 are the post-Cold War periods. Eras 2 and 4 are the pre- and post- Civil War eras (essentially one continuous era interrupted by the Civil War).

One era does change: For deployment and organization World War I (era 6) looks a lot like the interwar years (era 7). However, changes in procurement during the interwar years separate the two eras in tables 10 and 9.

## Conclusions

These tables lead us to our fundamental conclusion: *there is no one model that has tracked throughout the Navy's history*. The Navy has responded *flexibly* to its environment with a range of procurement, deployment, and organizational models. While organization has changed at an even, linear, pace over time, this is not the case for procurement or deployment. The Navy has reacted differently to most of the circumstances it has faced, with different types of procurement and deployment patterns, particularly for SSC and OOTW missions.

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19. Numbers are associated with eras and times in figure 2.



There are two exceptions: the era surrounding the Civil War, and the post-Cold War era. In our correlations there is little to distinguish between the pre- and post- Civil War eras, or between the pre- and post- Cold War eras. In the case of the Civil War, both periods were characterized by long periods of relative peace. They were eras dominated by SSC and OOTW operations. In the case of the pre- and post-Cold War eras, the Navy has not changed either the type of fleet it procures, its organization, or how it deploys the fleet.

This suggests:

- If the environment has really not changed much since the Cold War, then the extension of the Cold War deployment and procurement policy models through today makes sense.
- If things have changed significantly, however, the Navy may be missing an opportunity to change its policy models—as it has so often changed them in the past—to adapt to the new circumstances.

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## Culture and attitudes

In this section we will discuss:

- The origins of the Navy, and their effect on Navy attitudes toward SSC operations and OOTW
- Differences between forces performing OOTW on land and sea
- SSCs and national experience.

### Origins and attitudes

Why are we interested in things such as attitudes that are remarkably hard to define and agree on? Because, ultimately, much of the impact of history ties in with current attitudes and their origins.

To understand that, we will briefly look at the origins and development of the U.S. Navy, and its relation to the SSC mission. Where the Navy comes from can say a lot about where it is and where it is going. Current attitudes about what the Navy can or will do are a complex product of tradition, politics, and culture. Tradition comes from the Navy's historical roots. Thus it can be worthwhile investigating those roots, to look at the way the Navy has evolved.

A navy can be created from one of three starting points:

- OOTW
- High-intensity warfare
- Both.

How a navy is created may color its outlook toward the various missions it confronts. A navy that originates as primarily an OOTW force will look much like a coast guard (as many second-tier navies do today) while a navy that originated from the tradition of a warfighting

battle force will have an orientation that is very much directed toward warfighting.

When you narrow the focus from OOTW to smaller-scale contingencies, the historical influences become more complex. Navies that participate in the entire spectrum of OOTW operations can become involved in maritime law enforcement and other operations that have significant civil components. A significant number of SSC missions can involve the use of military force, or require security operations.

In this section we discuss both OOTW and SSC and the relationship between the U.S. Navy's origins and its involvement in these operations.

## Origins: U.S. OOTW at sea

### Navy origins and Coast Guard origins

The U.S. Navy of today shows a clear preference for the conduct of mid- and high-intensity warfare at and from the sea, and for the higher-intensity end of the spectrum of SSC operations.

Why is that? One reason is the U.S. Navy's emphasis on its *tradition* of high-intensity warfighting, despite an equally significant *history* of OOTW and SSCs. This emphasis has its roots in the very origins of the Navy.

The U.S. Navy evolved out of a high-intensity warfighting force. While not designed for fleet actions, it was designed and employed in single-ship commerce-raiding, coastal defense, and amphibious operations against the world's dominant naval power. The Continental and other early American navies were born in the midst of the Revolutionary War against Britain. Once that war was over, they were abolished—despite the existence of a number of potential low-intensity maritime threats to the new nation (e.g., smugglers, coastal and riverine Indian tribes, escaped slaves, and pirates).

A Revenue Cutter Service was established in 1790 to deal with smugglers, but it was clearly not a navy, and worked for the Department of the Treasury, not the Department of War. The U.S. Coast

Guard, not the U.S. Navy, would evolve out of this early maritime OOTW force.

The Navy was reborn only when new major mid- and high-intensity naval threats emerged: Revolutionary France, the Barbary States, and Britain again. And it was created by the War Department, from which it eventually spun off as an independent government department: The Department of the Navy. Its functions this time were anti-commerce-raider operations, protection of shipping, raids, blockades, and ground force support. Thus it was, from the start, basically a warfighting navy, with OOTW later added on, once New Orleans was acquired.

Meanwhile the Revenue Cutter Service evolved into a multi-functional civil maritime organization. Along the way it amalgamated with the Lifesaving Service in 1915 to form the Coast Guard. The Lighthouse Service joined the Coast Guard in 1939. The service's present organization was completed with the permanent amalgamation of the Bureau of Marine Inspection and Navigation in 1946.

## Complementarity

Over the years the two services have worked out mutually supportive relationships for both wartime and OOTW contingencies. During time of formally declared high-intensity war, the Coast Guard becomes an actual part of the Navy Department, as it did during World Wars I and II. In time of undeclared high-intensity war at sea or from the sea, significant numbers of Coast Guard units can deploy as part of Navy task forces, participating in the lower ends of the spectrum of fighting. This happened during the Quasi-War with France at sea in the Caribbean (1798-1800), the War of 1812, the Civil and Spanish-American Wars, and the Vietnam War.<sup>20</sup>

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20. For a brief recounting of the Coast Guard's extensive wartime participation alongside or under the Navy through the Cold War, see Robert L. Scheina, *Coast Guard at War*, Commandant's Bulletin 4-87 (February 13, 1987). The Coast Guard did not participate in the joint "Earnest Will" operations in the Gulf in the 1980s, however, and Coast Guard participation in the 1990-1991 Gulf War MTW was not extensive.

On the other hand, Navy units not otherwise challenged by high-intensity warfare or SSCs have been ordered to participate in Coast Guard-like activities. For example, President Jefferson's very first Navy gunboats were assigned revenue, quarantine, and anti-smuggler duties between Savannah and Charleston in 1804.<sup>21</sup> Navy warships assisting the Treasury Department conducted anti-smuggling operations off the coast of Maine to enforce the Embargo of 1807.<sup>22</sup> Navy warships likewise performed law-enforcement functions during the early days of American rule in Alaska, in the late 19th century.<sup>23</sup> More recently, Navy warships have supplemented Coast Guard operations in the Caribbean to counter drug smuggling and illegal migration.<sup>24</sup>

Why have the Navy and Coast Guard supported one another? In both sets of situations, the rationale has been a need for at-sea platforms and trained manpower that overwhelmed a single service. The Navy needed more combat-capable patrol vessels than it had in its inventory in the Quasi-War, World War II, and Vietnam. Likewise, the Coast Guard needed more armed patrol-capable vessels than it had in its inventory to counter smuggling of contraband in the 19th century and drugs and illegal migrants in the 20th.

Where the Navy and Coast Guard appear not to have had much operational synergy is at the higher end of the OOTW spectrum—the SSCs. When the U.S. Navy has conducted shows of force, limited strikes, opposed interventions, no-fly zone and sanctions enforcement operations, and non-combatant evacuations, it has

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21. Gene A. Smith, *"For the Purposes of Defense": The Politics of the Jeffersonian Gunboat Program* (Newark, DE: University of Delaware Press, 1995), 94-5.

22. Joshua M. Smith, "'So Far Distant from the Eye of Authority': The Embargo of 1807 and the U.S. Navy, 1807-1809," in William B. Cogar (ed.), *New Interpretations in Naval History: Selected Papers from the Twelfth Naval History Symposium* (Annapolis, MD: Naval Institute Press, 1997), 123-138.

23. Mel Crain, "When the Navy Ruled Alaska," *U.S. Naval Institute Proceedings* LXXXI (February 1955), 198-203.

24. See, for example, Charles M. Fuss, Jr., *Sea of Grass: The Maritime Drug War, 1970-1990* (Annapolis, MD: Naval Institute Press, 1996).

usually—but not always—done so without help from the Coast Guard.<sup>25</sup>

What has been the rationale for that? These are generally narrow and limited combat or potential-combat operations where neither Coast Guard specialized capabilities nor Coast Guard force structure are needed to supplement Navy inventories. A Navy sized for high-intensity warfare and SSCs or for just SSCs alone can handle SSCs by itself.<sup>26</sup>

There are, however, times when one service or the other is in fact preferred for a high-end SSC mission. That service is usually the Navy, but is occasionally the Coast Guard.<sup>27</sup>

## Land and sea OOTW forces

Today, in the post-Cold War environment, the nation has evolved three maritime armed services: the Navy, the Marine Corps, and the Coast Guard.<sup>28</sup> The first two are part of the Department of the Navy

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25. An exception that helps prove the rule was the reluctant participation of the captain of the cutter *Cayuga* in the initial humanitarian assistance operations off Spain in the 1930s, earning him the rebuke of the Commandant. See Siegel, "The Tip of the Spear," 11. When 40-T was disbanded in 1940, it was replaced by a high-endurance Coast Guard cutter. A more pertinent exception, however, was the choice of a Coast Guard cutter as the inshore search unit for the remains of the KAL 007 airliner shot down by the Soviets off Kamchatka in 1983.

26. On differences between Navies and Coast Guards, see Henry H. Gaffney, Jr., *Relations With Russian Counterparts; Coast Guards and Navies*, December 1996 (CNA Information Memorandum 491); and CAPT Patrick H. Roth, USN (Ret.) and Richard D. Kohout, *U.S. Coast Guard: Purpose, Characteristics, Contributions, and Worth to the Nation*, May 1997 (CNA Research Memorandum 97-17).

27. An example of the latter case is the President's deliberate use of the Coast Guard vice the Navy for operations in and around Danish Greenland just prior to U.S. formal participation in World War II.

28. Although the U.S. Army has often operated large military transport fleets, and deployed harbor mine-planters during the first half of the 20th century.

within the Department of Defense. The last has been part of the Department of Transportation since 1967. For the Navy, OOTW has evolved as a set of collateral functions alongside its main function, which is high-intensity warfighting. Meanwhile, the Coast Guard has evolved into a multi-functional, operational maritime service with major domestic civil and humanitarian responsibilities. If performed by the Navy or other Defense Department service, many of these responsibilities would fall in the category of OOTW (e.g., search and rescue, humanitarian assistance, counter-drug operations, and coastal surveillance and patrol).<sup>29</sup>

Because it has developed these responsibilities for domestic and off-shore contingencies, the U.S. Coast Guard is available to operate with the other U.S. armed forces in OOTW roles forward, if required.

Other developed countries have evolved a similar organizational matrix. But their matrices tend to be based around ground, vice naval, forces. In these cases a National Constabulary takes on internal shore-based OOTW roles and the Army takes on mostly warfighting responsibilities.

This has not been the case in the United States. Why? In the United States, domestic political sentiment has always militated against establishment of a para-military national police force. Thus the regular Army, the militia (the National Guard), and the Marine Corps have been forced to take on OOTW roles overseas *ashore* that for other countries—and for the U.S. *at sea*—could be conducted by other national services and agencies.<sup>30</sup>

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29. On the Coast Guard's OOTW missions, see especially, Roth and Kohout, *U.S. Coast Guard: Purpose, Characteristics, Contributions, and Worth to the Nation*.

30. For an argument that a ground counterpart to the Coast Guard should be created in the U.S., see "Getting the Military out of Humanitarian Relief," *The Defense Monitor* XXVI (October 1997).



## SSC operations and national experience

### The problem

The U.S. Navy has been involved in carrying out a wide variety of SSCs and OOTW in most parts of the world for two centuries. No other American institution comes close to the Navy's record in this regard. From this experience, it acquired both technical skills and regional political expertise. Yet the Navy of today does not often tap into the myriad lessons learned from this experience. In U.S. Navy thinking, "Southern Hemisphere" SSCs and OOTW have taken a back seat to high-intensity warfighting in the "Northern Hemisphere" for over a hundred years.

### Yesterday

In part the Navy's focus on high-intensity warfighting was due to the triumph of "Mahanian" ideology and the intensification of Great Power conflict beginning at the end of the 19th century. Mahan and others of his era sought to focus the Navy and the nation on the importance of battle fleets and high-intensity naval warfare, not SSCs and OOTW.<sup>31</sup> The histories Mahan wrote looked askance at such activities and downplayed their importance in American naval history.<sup>32</sup> Generations of naval historians ever since have keyed off Mahan and his contemporaries; and generations of U.S. naval officers have grown up as ignorant of the forward squadrons and the "Banana" and "China" fleets as they have been knowledgeable of the battles of Manila Bay and Midway.<sup>33</sup>

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31. For the Mahanian-era change in Navy attitudes towards the Pacific and its peoples and cultures, see Mark Russell Shulman, *Navalism and the Emergence of American Sea Power: 1882-1893* (Annapolis, MD: Naval Institute Press, 1995).

32. For the most recent study of the essence of Mahan's thinking, see Jon Tetsuro Sumida, *Inventing Grand Strategy and Teaching Command: The Classic Works of Alfred Thayer Mahan Reconsidered*. (Washington, DC: The Woodrow Wilson Center Press, 1997). In all of his "reconsideration," Sumida makes no mention of any Mahanian views on SSCs and OOTW.

But the downgrading of SSCs and OOTW in what came to be known as the third world was also due to the spread of the European colonial empires that preceded the battle fleet era. European—and later Japanese—colonial rule was imposed in a number of regions where American naval officers had acquired expertise in regional and local matters: Africa, the Middle East, the South Pacific, and Korea.

The abolition of petty states and the eradication of piracy that came with colonialism gave American naval officers little to do in these areas. The exceptions to this rule were the Caribbean and certain Pacific Islands—where the U.S. developed its own imperial and colonial pretensions; the China coast; and periodic breakdowns of government on the European littoral (e.g., Turkey, Yugoslavia, Spain, and North Russia).

As a result, U.S. naval officers focused their attention on understanding the political-military relationships among the Great Powers, with which it would fight against or alongside: Japan, Germany, Russia, Britain, and maybe France. They also developed a certain amount of expertise in Chinese, Pacific Island, and Caribbean affairs. And they developed the skills needed for colonial or protectorate government in the Caribbean and the Pacific. (Naval officers *were* the colonial civil government of Guam and Samoa for almost 60 years, of the Virgin Islands for almost 20, and of Micronesia for a half dozen years after World War II. Navy and Marine Corps officers formed the government of the Dominican Republic from 1916 through 1926.)

With the advent of the Cold War, the Navy's interest in political-military and social aspects of the nations of the world shifted again: toward a heavy focus on the Soviet Union, a somewhat lesser focus on East Asia and Western Europe, and still less focus on the Persian Gulf and the Caribbean. Little attention was focused on Africa, on much of Latin America, and on Southern Asia. High- and mid-intensity warfighting skills were prized above all others: SSCs and other OOTW were considered lesser-included cases. In any event, most SSCs and OOTW operations were seen through the lens of the Cold War and as artifacts of the Soviet-American confrontation.

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33. This paper is meant to contribute to compensating for these effects.

The Cold War era, however, also saw the demise of the European (and American) colonial empires. Large portions of Asia and the Caribbean—as well as almost all of Africa and the Pacific Islands—were returned to independence. Many of these areas were places where the U.S. Navy had once focused its attentions but had not done so in decades—indeed for over a century.

There was a certain flurry of interest in the newly emerging states of the third world in the 1960s and 1970s. The UNITAS deployment and the West Africa Training Cruise (WATC) blossomed. Some naval officers went to graduate schools and became area specialists. But in a celebrated move beginning in 1972, VADM Stansfield Turner turned the Naval War College curriculum away from examination of contemporary politico-military problems and back to the study of military and naval strategy. While this led to a flowering of studies on “naval presence” in the abstract, it also led to a decline in the interest—and capability—of the officer corps regarding specific area expertise.

## Today

Even during the Cold War, many of the areas where U.S. military forces intervened for humanitarian or security reasons were still dealing with the legacy of European colonialism. This is also true now, after the Cold War. For example, many of the security problems in Africa (Sierra Leone, Somalia, Rwanda, etc.) can be traced to decisions and forces set in place during the European colonial era and before.

The United States now becomes involved in many of the disputes that arise from the previous colonial and earlier experiences. The lack of recent U.S. Navy experience with the historical record in the countries can color Navy experiences and planning for involvement in these operations. Since many of the solutions are inherently *political* as opposed to humanitarian, these solutions require insight that comes from institutional and national memory and understanding of the politics of the regions where the intervention is occurring.

To see what can happen during SSCs when we do have experience with a country that dates far back in history, look at the intervention in Haiti. While many factors went into the apparent success of the

U.S.-led intervention in Haiti, an understanding of U.S. involvement in the country played some role. An understanding of the historical involvement by the U.S. in the country by the troops and commanders allowed decisions to be made that worked with, instead of against, the local culture. Examples include the Marines' use of force, civil reconstruction in the Cap Haitien area, and the U.S. Army Special Forces involvement in the countryside.<sup>34</sup>

## Conclusion and recommendations

The Navy is in a unique position in the American military culture to participate in SSCs that arise in part from colonial influences. Its historical experience with colonial governance, its humanitarian interventions, and its traditionally forward deployed posture form important bases for naval officers to have unique insights into local culture and politics.

The needed change is for the Navy to develop and disseminate its historical memory of these operations: in its declaratory policy statements, at the Naval War College and other academic institutions, on the pages of *Proceedings* and other journals, in war games, in its contingency plans, and at sea and from the sea in exercises and real-world operations.

Also, the Navy has recently created a new Foreign Area Officer Specialist (FAO) program. We hope that this paper will give them some insight as to what such specialization might entail.

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34. See, for example, A. Siegel, *The Intervention of Haiti*, August 1996 (Professional Paper 539); E. McGrady, *Uphold Democracy: An Operation Just Short of War* (U), Secret, June 1996 (CNA Research Memorandum 96-64); E. McGrady and K. Smith, *Haiti and the Future of Warfare*, August 1996 (CNA Research Memorandum 96-126).

## A deep legacy

We call this concluding section—like the entire paper—a “deep legacy.” That is because our work illustrates that much of current thinking about the way naval forces train, deploy, and procure is derived from concepts and ideas originating in World War II and refined at the start of the Cold War.

There are other ways naval forces can operate, however. Looking back into “deep” history (that is, history prior to World War II), we see that naval forces have been organized and operated in a wide variety of ways. It is recent history that is driving our current perceptions of naval operations, and deep history that provides some alternatives.

History—recent or deep—can drive our perception of current and future reality by forming the basis of our core perceptions and ideas about what fleets and afloat forces do and how they do it.

## Naval forces and their operational environments

To examine current policy, you have to ask: What has changed naval paradigms in the past? In this paper we have focused on how the Navy has used changes in its

- Deployments
- Organization
- Procurement
- Employment

to account for the effects of *environment* and *technology*. These changes serve to illustrate the *flexibility* inherent in naval forces, and they also emphasize the *broad range* of missions and operations naval forces have resourced for, and executed.

## Policies

### Deployment

Where forces are based has been intimately tied to both the threat environment and the concept of what navies do. We have described two types of navy: warfighting and SSC/OOTW, and two places to deploy them: forward and near CONUS. Except for an exclusive CONUS-based SSC/OOTW capability, the U.S. Navy has used every possible combination of deployment pattern: warfighting both forward and near CONUS, contingency forward, and multi-mission, multi-area fleets.<sup>35</sup>

Both the environment, particularly the threat and allies, and technology have affected our deployment policy. Wooden sailing ships were preserved in the fleet inventory long after steam and iron became more effective for combat because of their long endurance and ease of maintenance. The technology of wood and sail allowed forward stationing of contingency forces, even during times of comparatively limited budgets.

### Organization

In this paper we have explored the Navy's internal and external relationships. Naval forces have always had to work with other government and non-government organizations. Within the government, the Navy has had close and continuing interagency relationships with the State Department during times when naval power was seen as intimately tied with diplomacy. More recently the Navy has moved from *participating* separately in joint operations, to *integrating* into continuing joint command organizations.

Externally the Navy has always had relationships with non-government organizations. But, because of the distances involved, and the degree of responsibility visited on naval officers as on-scene

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35. Of course, while the *Navy* has not deployed an exclusive CONUS-based SSC/OOTW capability, the *nation* has—in the form of the U.S. Revenue Marine and its successor, the U.S. Coast Guard.

commanders, these relationships have tended to be *ad hoc* and informal, rather than continuing and formal.

### **Procurement**

It is within the realm of procurement—that is, what kind of ships the Navy buys—that technology has had its greatest impact. We developed four models for the types of Navy the nation has bought. These models show that the Navy has procured and sailed fleets ranging from pure warfighting to pure SSC/OOTW, and combinations of the two. In fact the Navy has procured just about every combination of Navy fleet type possible during its history, with the notable exception of an SSC/OOTW Navy fleet to be used in warfighting.<sup>36</sup>

While much of the technology has been focused on warfighting, three kinds of technology have been particularly important to the SSC/OOTW mission: ship-to-shore movement, sustainability, and communications. Sustainability and communications have always played a major role in determining what type of SSC/OOTW platform was procured and how it was used.

During the Navy's early years, lack of communications empowered on-scene commanders with nearly sovereign decision-making power. Similarly, important procurement decisions about propulsion (sail vs. steam) and hulls (iron vs. wood) were made based on the sustainability of ships engaged in SSC/OOTW missions.

Recently, the development of vertical lift and amphibious assault changed the nature of ship-to-shore movement. Helicopters and landing craft can deliver more troops and equipment, farther inland, more quickly than any previous technology.

### **Employment**

The Navy has done nearly everything when it comes to SSC/OOTW missions. Notable missions that have come and gone (and may come again) include diplomacy (including treaty signing and coercion),

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36. Of course, the nation has bought Revenue Service and Coast Guard fleets, optimized for OOTW, and then used them for SSCs and warfighting.

nation building, and colonial administration. While, at first glance, these missions might be considered inappropriate and beyond the pale for modern military forces, in fact many of the individual skills and concepts buried within them may have relevance for modern-day SSC missions. These include:

- Shipboard diplomacy, now carried out by Joint Task Force Commanders and interagency teams instead of ships' captains
- Nation building and administration of failed states, or states where the government has collapsed for one reason or another. Once again, in today's world these activities would be carried out by joint, interagency, or international, teams and facilitated by the presence of naval ships.

## **Environment and technology**

Three aspects of the environment stand out as important gauges of how U.S. naval forces have operated: the threat, allies, and technology.

### **The threat**

When the threat of high-intensity naval warfare against first- or second-class naval powers disappeared after 1815, the Navy reconstituted itself as a small forward-deployed SSC operations and OOTW force. When periodic, short-term, ad hoc, larger threats emerged—Mexico, the Confederacy, to some extent Spain—the Navy briefly reconstituted itself as a high-intensity, warfighting force, and then lapsed back into an SSC operations/OOTW posture immediately thereafter.

The post-Spanish-American War era proved an exception: Due to the rise of perceived threats from first-class naval powers—Britain, Germany, and Japan—the Navy was already in the process of transforming itself into both a standing warfighting force and a selective SSC/OOTW force. From then until the end of the Cold War 90 years later, the Navy always had a first-class enemy to prepare to fight, as well as SSC and OOTW responsibilities.



*The absence of such a threat today is a major change akin to that facing the Navy almost a century ago.*

### **The allies**

Until 1941 (except for 1917-1918), the country was ostensibly neutral and therefore without allies. Yet, as we have seen, myriad forward naval SSC operations and OOTW were often conducted in league (if not formal alliance) with the forward squadrons of the Royal Navy and occasionally with other European navies and the Japanese. The Navy, while prepared to view Britain, Japan, Germany, and others as potential future enemies in high-intensity warfare, was otherwise also prepared to cooperate with them in low-intensity operations in the third world, especially China.

Since 1941, the country—and the Navy—has been prepared to operate with allies at sea during high-intensity warfare. The Navy, however, has in fact operated normally as a single-nation force in most (but not all) SSC operations and OOTW.

*The historical succession of allies differs from the historical cycle of threats.*

### **The technology**

Earlier, we said that *technology* (as well as *environment*) drove Navy policy change. Technological change has dramatically affected the Navy, including its conduct of SSC operations and OOTW. In particular, the introduction of different energy sources for propulsion, new ship-to-shore ship systems designs, and the effects of changing communications technology have radically changed the way naval forces operate.

Most of this technological change has been driven by the need to fight high-intensity naval war. Yet, as we have seen, many new technologies have had important side effects in enhancing SSC operations and OOTW. Radio communications greatly facilitate coordination of diplomatic and contingency operations by forward forces. Purpose-built amphibious ships are ideal for command, control, and conduct of NEOs. And underway replenishment systems enable forward-deployed numbered fleets to conduct a wide range of forward SSC operations and OOTW simultaneously.

Throughout its history the Navy has used technology to expand the scope and reach of its operations. The question for the Navy is: as technology changes, does it also expand the range of missions, other than high-intensity warfighting, that are open to the Navy? Likewise, if the range of missions the Navy is asked to do expands, then new technologies may be required, not just new ways of using high-intensity warfighting technology.

## How history forms our perceptions of naval forces

On what do we base our current thinking about fleets?

The Navy today is focused on providing maximum warfighting power on (and deep inside) the littorals of all the world's oceans, and particularly on the Mediterranean, Persian Gulf, and China Seas littorals of the Eurasian land mass.

The Navy has this focus partly because it judges that the current and future world environment and the state of military technology demand such a posture, if the Navy is to contribute significantly to the national security of the United States. The Navy interprets the mandates of the *Quadrennial Defense Review*, the *National Security Strategy* and the *National Military Strategy* as requiring it to operate in this fashion.<sup>37</sup>

But there is another set of reasons at play. The Navy has in fact been focused on providing maximum warfighting power on (and deep inside) the Eurasian littorals since just after World War II. This is the "Trans-Oceanic Strategy" that Samuel Huntington wrote about in his celebrated U.S. Naval Institute *Proceedings* article of 1954. By a few years after World War II, the Navy thought it had broken the code on how to best deploy and employ naval forces: rotate men, ships, and airplanes through forward-deployed battle fleets capable of operating across the full spectrum of naval warfare.

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37. Of course, U.S. Navy officers who participated in the drafting of these documents strove mightily to have them give just such mandates.

This *deployment* policy has enabled the Navy to *employ* its forces in a wide variety of often highly successful Cold War and post-Cold War SSC operations and OOTW. Coming out of World War II, the Navy continued to *organize* itself in coherent geographical areas and numbered fleets to maximize its ability to carry out these deployments and employments. It also *procured* and *trained* the machines and people it needed to carry out missions at the high end of the warfighting spectrum, assuming that operations lower on the spectrum could be handled by these high-end systems and specialists, or by ad hoc alterations to them.

The result was a U.S. Navy quite different from any of its predecessors, including the World War II Navy.

This post-1940s U.S. Navy is the only Navy that today's current naval officers and enlisted personnel and today's Navy Department civilians (and public and private sector analysts, consultants, and contractors) have ever known. Moreover, it and the high-intensity forward-deployed warfighting World War II Navy are the only navies that any of their teachers and trainers and mentors ever knew.<sup>38</sup>

This Navy was very successful in carrying out the nation's tasks during the Cold War and immediate post-Cold War eras, given the world environment and military technology of those eras.

*What the Navy of today has to ascertain is whether that environment and/or technology have changed or will change enough for the Navy to have to change its basic deployment, employment, procurement, and organizational policy paradigms.*

What we have sought to demonstrate in this paper is that there indeed have been different environments and technologies in *deep history*, which in turn drove different past naval policy paradigms. Some of these paradigms focused more—and all of them focused differently—on SSCs and OOTW.

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38. Also, since few Navy officers study history after commissioning, they often fail to recognize the existence of other models, especially those drawn from history.

We believe that careful study of those earlier policy paradigms can contribute to an understanding of possible alternative future Navy paradigms that are focused more, or differently, on SSCs and OOTW. We also believe that the overwhelming power of recent history—i.e., of the post-World War II paradigm—has often blocked such careful study.

## Historical models and the future

How military professionals think of themselves, their systems, and their mission is an important factor in determining what they ultimately do, and how they do it. Throughout this paper we have developed various models for how naval forces have operated. These models reflect the thought of the times as fleets were equipped, organized, bought, and used.

More important, as this paper has shown, the *Navy has often changed models*. It has done so because of changes in environment and changes in technology.

Recently, military literature has given much attention to innovation, revolutions, and new ways of thinking about warfare. In many cases, history shows that these “new ways” were used by naval officers during times when the technology, culture, or environment were different.

But our recent and current experience with how fleets operate can make it difficult—or impossible—to imagine how we might operate differently either with different technologies, or in a changed environment. *Historical models, such as we have developed here, provide the framework for imagining how things might be different*. Fleets were actually used in these other ways. The sheer variety of models shows the flexibility inherent in naval forces.

Innovators will quickly point out that in any historical model the environment, culture, and technology that influenced a particular fleet concept will be different from those of today. Technology’s arrow, like that of time, points only toward the future. However, if we can escape from the particulars of the environment or, especially, the technology, and look at the intent behind the model, then we may be able to change our perception of what *has* to be, to what *can* be.

## Appendix A: Deployment policy

A significant operational driver for the current post-Cold War fleet is the particular general *deployment policy* the U.S. Navy has maintained since just after World War II. For decades, an almost continuous Carrier Battle Group (CVBG) and Amphibious Ready Group (ARG) presence has been maintained in the three “hubs” of the Far East, the Persian Gulf region, and the Mediterranean—locked and loaded and ready for anything. This requires considerable resources and drives the training and outlook of almost everyone in the Navy.<sup>20</sup>

The fleet has *not always* rotationally deployed to hub stations, however. It has *not always* been ready for high-intensity or mid-intensity warfighting. *Nor has it always* been ready for participating in SSC operations or OOTW.

What forces have caused the Navy to adopt particular ways for deploying its forces around the world? More fundamentally, what are the models the Navy has used throughout its history for deploying forces?<sup>21</sup>

### Models

If you look at the history of the U.S. Navy you find that the fleet has deployed according to five major models:

#### 1. Model I: Combat surge

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20. The Western Pacific hub dates back to World War II and before. The Mediterranean hub had its beginnings in the late 1940s. The Persian Gulf/Indian Ocean hub originated later, in the 1970s.

21. Historically derived models are not the only models that can be used to analyze Navy deployments. For an alternative typology, see “Forward Presence” in ADM J. Paul Reason, USN, with David G. Freymann, *Sailing New Seas* (Newport, RI: Naval War College Press, 1998).

- ships and squadrons held near the continental United States (CONUS)
  - fleets ready to surge against enemy ships and installations
  - little or no SSC operations and OOTW
2. Model II: Combat forward
    - ships and squadrons stationed forward
    - primary focus is defeating an enemy fleet in high-intensity or mid-intensity war
    - little or no SSC operations or OOTW
  3. Model III: Contingency forward
    - ships and squadrons permanently stationed forward
    - primary focus on SSC operations and OOTW
    - little or no focus on high-intensity or mid-intensity warfare
  4. Model IV: Multi-mission and multi-area, separate fleets
    - forward-deployed contingency squadrons, combat fleet held at CONUS
    - colonial-type missions dominate for forward forces
    - CONUS forces focus on preparation for high-intensity fleet actions
    - CONUS forces seldom if ever surge in peacetime
  5. Model V: Multi-mission and multi-area, mixed fleets
    - battle fleets both forward and in CONUS
    - all fleets capable of doing any mission, contingency, or war-fighting

In the next five sections we describe each of these major models in detail. Then we use them to comment on the Navy's rotation policies and develop alternatives for naval force deployments.<sup>22</sup>

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22. Figure 2 contains a list of years and their corresponding models.

## Model I: Combat surge

During its early years, from roughly 1798 to 1806, the U.S. Navy was primarily designed to do one mission: mid- and high-intensity warfighting. It was built and maintained almost solely to fight the British, the French, the Spanish, and/or the Barbary States, should war between any of them and the United States threaten. In actual fact, the Navy did fight the French in the Caribbean and the Barbary States (Tripoli) in the Mediterranean, and prepared to fight the British in the Atlantic and elsewhere.<sup>23</sup> Warfighting was usually in one-on-one engagements rather than squadron or fleet actions. Nevertheless it pitted sophisticated U.S. Navy warships against equally high-end or almost high-end naval opponents. Figure 3 shows Navy deployment during this period and after, from 1798 to 1815.

As an almost single-mission fleet, the U.S. Navy was designed to carry out major contingency combat operations against warships and forts of large and medium powers. It also worked to train for these missions. There was little or no preparation for SSC operations or other forms of OOTW.<sup>24</sup>

Table 11 shows the core missions for the deployments illustrated in figure 3. *In the table, and all subsequent figures in this series, SSC and OOTW missions are shaded.*

The fleet during this time was held near CONUS and expected to surge when conducting operations.

This posture had a rationale: During this time, the United States was a medium-sized naval power in an era when there were several large

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23. It continued to prepare to fight these powers from 1807 to 1815, and actually fought Barbary States again (this time they were Algiers, Tunis, and Tripoli) and Britain (in the War of 1812); in this latter period, however, the warfighting fleet co-existed with an SSC/OOTW fleet, as discussed below.

24. Characteristics of the era are summarized in G. Terry Sharrer, "The Search for a Naval Policy, 1783-1812," in Kenneth J. Hagan (ed.), *In Peace and War: Interpretations of American Naval History, 1775-1984* (Second Edition), (Westport CT: Greenwood Press, 1984), 27-45.

Figure 3. U.S. Navy deployment, 1789-1815

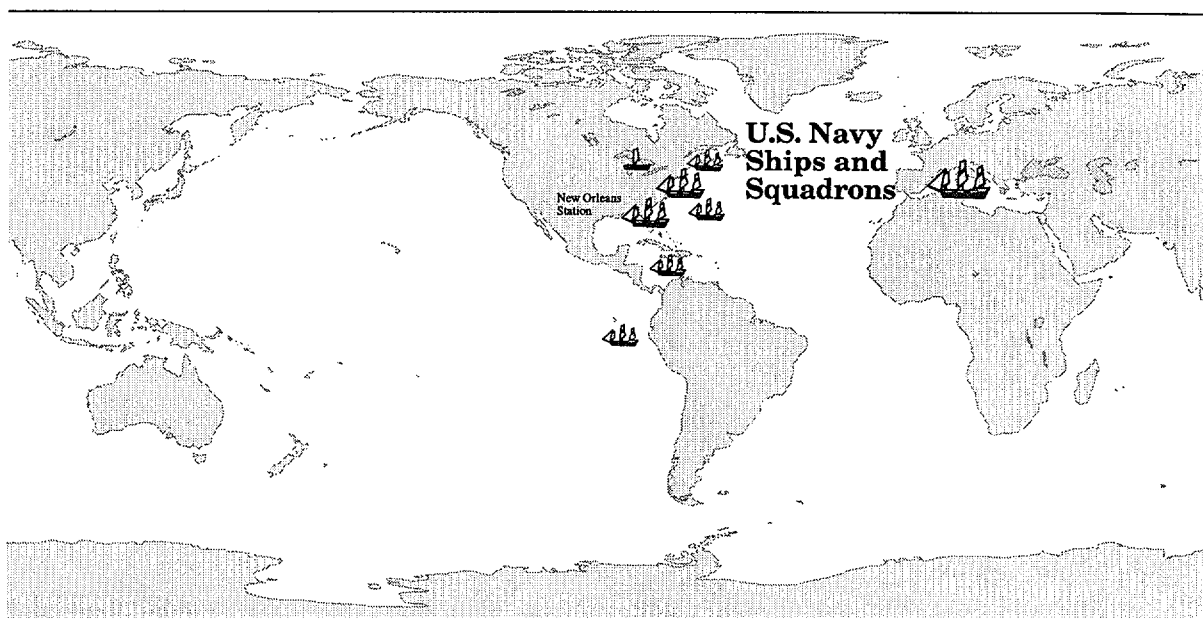


Table 11. Context for U.S. Navy deployment pattern, 1789-1815

Important deployed units	Core missions
Mediterranean Squadrons	Mid-intensity warfare in the Mediterranean: - To deter/combat Barbary States
Ships & Squadrons deployed to Eastern Atlantic & Caribbean	Mid- and High-intensity warfare: - To deter/combat France, Britain, Spain
Frigate deployed to Pacific	High-intensity cruising warfare in the Pacific: - To combat Britain
New Orleans Station (after 1806)	SSCs/OOTW in and around Louisiana: - To deter/combat pirates, smugglers, ex-slaves, Indians - To deter/combat Spain/Britain

and medium-sized naval powers all constantly engaged in warfare all around the world. The country's interests were national survival and protection of commerce in an era when that commerce was chiefly



threatened by other large and medium powers. SSC operations and OOTW missions seldom had much importance.

## Model II: Combat forward

This is the ultimate mid/high-intensity warfighting Navy. During the Civil War and World War II, when the United States had a large fraction of its national attention and effort involved in high-intensity warfighting, it deployed its fleets to the enemies' shores. In the case of the Civil War this was not far from the United States, but it was still forward (i.e., it was not arrayed defensively off New England or New York). During World War II, fleets deployed at great distances from the United States. Once the fleets deployed, they did not rotate. Figure 4 shows an example of major U.S. Navy fleet deployments during the middle phases of World War II.

The fleets' missions were to conduct combat operations against enemy fleets and enemy forces ashore. They were deployed as squadrons or fleets (vice single ships). There was almost no participation in SSC or OOTW during this time (an exception was U.S. Navy participation in a European coalition operation in Japan during the Civil War).

Table 12 shows the reasons the fleets pictured in figure 4 were deployed as they were. In this model the fleets were almost exclusively used in high-intensity warfighting missions.

Why was the fleet was deployed like this?

During these years there were relatively short periods of intense naval and amphibious warfare where the stakes were seen to include national survival. The focus of national attention on high-intensity warfighting just about excluded either SSC operations or OOTW from any significant role as naval missions.

Figure 4. U.S. Navy deployment, 1943-1945

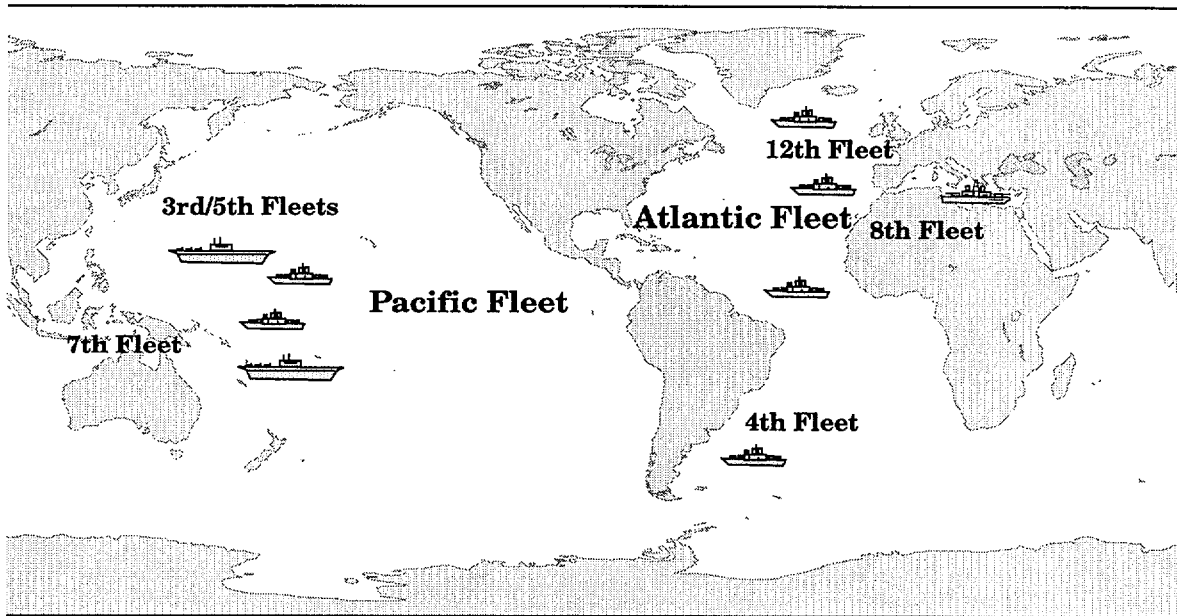


Table 12. Context for U.S. Navy deployment pattern, 1943-1945

Important deployed units	Core missions
3rd/5th Fleets Pacific Fleet Task Forces	High-intensity warfare in the North, Central, South and Southwest Pacific: To combat and defeat Imperial Japan, jointly with the U. S. Army
4th, 8th, 12th Fleets Atlantic Fleet Task Forces Sea Frontier Task Forces	High-intensity warfare in the North and South Atlantic and Mediterranean: To combat & defeat Nazi Germany alongside the Royal Navy, and supporting the U. S. & British armies

### Model III: Contingency forward

If the previous model was the ultimate warfighting navy, this model is the ultimate contingency navy. In this model the Navy also had one mission, but now it was SSC operations and OOTW against third-rate powers and entities, not high-intensity warfighting.

In order to be oriented toward SSC operations and OOTW, the Navy was made up of permanent squadrons forward deployed. These squadrons were focused on conducting SSC operations and OOTW in their region. Figure 5 shows generally where the major squadrons were deployed during the 19th century.

Warfighting, however, was not dropped entirely from the Navy's missions. If the squadrons were called on to fight a major or medium power, they would coalesce—with little or no preparation—into larger ad hoc entities. (Examples of wars where the Navy did coalesce include the Mexican, Civil, and Spanish American Wars, plus a couple of war scares.) This form of forward contingency operations combined with an ad hoc warfleet represents most of the fleet deployment design during the 19th century.

As shown in figure 5, the Navy for most of this period maintained stations in the North and South Atlantic and the North and South Pacific, as well as the Caribbean, the Mediterranean, the Western Pacific, and off West Africa.<sup>25</sup>

Table 13 gives some of the reasons for these fleet and squadron deployments.

Why was the fleet deployed like this?

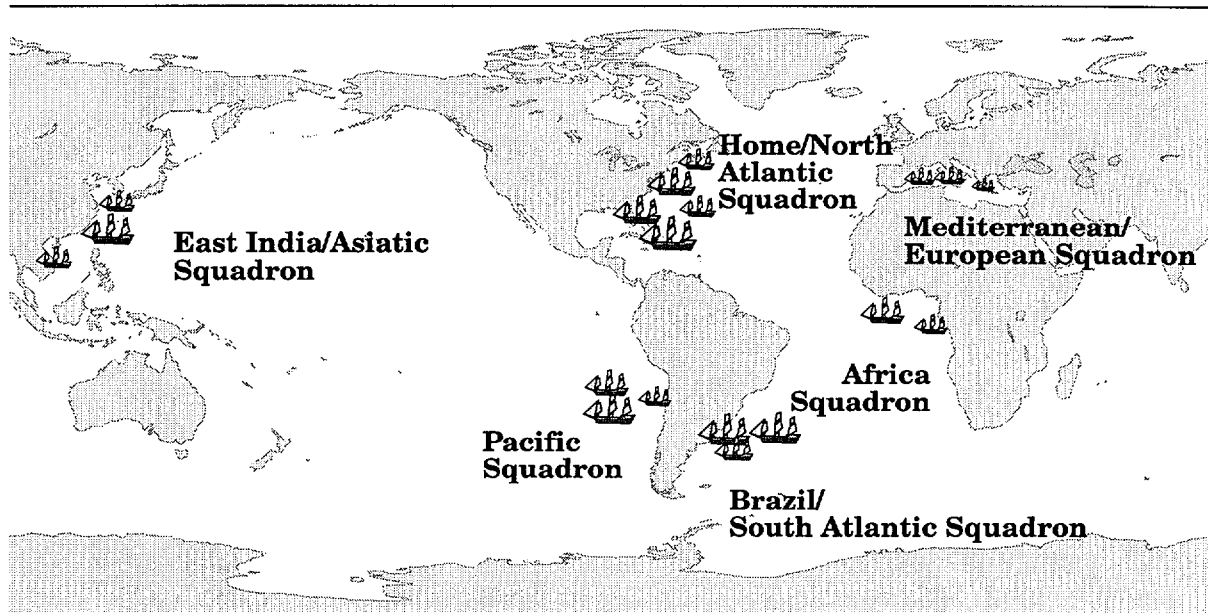
There were no major threats to the country (or to most countries) during this period. For example, the U.S. did not fight a major European power for the century-long period between 1815 and 1917. It was generally a "long peace" among large and medium powers, punctuated by a few bilateral, localized wars (e.g., the Mexican War) and war scares. The interests of the country at sea were mostly expansion

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25. The best short analysis of this 19th-century "cruising Navy" is Robert Greenhalgh Albion, "Distant Stations," U.S. Naval Institute *Proceedings*, 80 (March 1954), 265-273. See also Stephen S. Roberts, *An Indicator of Informal Empire: Patterns of U.S. Navy Cruising on Overseas Stations, 1869-1897*, September 1980 (CNA Professional Paper 295).

and protection of commerce. The threats to that commerce during this period were largely from pirates and weak, third-world states.<sup>26</sup>

Figure 5. U.S. Navy deployment, 1841-1860 and 1865-1898



26. In theory, and in the minds of naval officers of the period, the overseas cruisers could be called together to form fleets to operate against a second-tier adversary with a fleet at the lower end of the high-intensity warfare capability spectrum—such as Spain. This happened briefly during a war scare in 1873, and for real in 1898.

Table 13. Context for U.S. Navy deployment pattern, 1841-1860 and 1865-1898

Important deployed units	Core missions
East India Squadron Later, Asiatic Squadron	SSCs in East Asian kingdoms and empires: E.g.: Sumatra, Fiji, China, Japan, Okinawa, Formosa & Korean Expeditions and landings OOTW throughout the Western Pacific: E.g.: Missionary, consular & merchant support, showing the flag, anti-piracy operations
Pacific Squadron	SSCs in the Eastern Pacific: E.g.: Indian War support at Seattle, Hawaii landings, intervention and war scare with Chile OOTW in the Eastern Pacific: E.g.: Merchant and consular support, Alaskan civil government support, showing the flag, exploration and surveying
Home Squadron Later, North Atlantic Squadron	<u>Mid- and high-intensity warfare:</u> To form a nucleus warfighting force, if required, to deter/combat Britain, Mexico, Confederacy, Spain
Brazil Squadron Later, South Atlantic Squadron	SSCs in the Caribbean: E.g.: Landings in Central America, Trinidad humanitarian fire-fighting operation OOTW in the Caribbean: E.g.: Merchant support and anti-piracy operations, showing the flag, exploration of Isthmus SSCs in Brazil, Uruguay, Argentina, Paraguay: E.g.: Paraguay Expedition, landings in ports, NEOs, Brazilian civil war intervention OOTW in Brazil, Uruguay, Argentina, Paraguay: E.g.: Merchant support, consular support, showing the flag
Africa Squadron	OOTW in West Africa: E.g.: Anti-slaver ops with the Royal Navy, missionary & merchant support, nation-founding support in Liberia
Mediterranean Squadron Later, European Squadron	SSCs in the Mediterranean: E.g.: Incident with Austrian Navy brig off Smyrna, landing in Egypt OOTW in the Mediterranean: E.g.: Missionary & merchant support, consular support, showing the flag

## Model IV: Multi-mission and multi-area, separate fleets

The United States occasionally maintained separate fleets for high-intensity warfighting and SSC/OOTW.

It began to do so in the period 1806-1815. A high-intensity warfighting fleet of frigates and smaller warships was maintained as was described above in Model I.<sup>27</sup> After 1806, however (three years after the Louisiana Purchase), that fleet co-existed with a small flotilla of gunboats and other shallow-draft vessels on the New Orleans Station. This small station—well out of the mainstream of the regular Navy—intimidated or fought insurrectionists, smugglers, slavers, and pirates. It continued its OOTW even during the War of 1812, when the rest of the fleet was busy fighting the major naval power of the day.<sup>28</sup>

As the 19th century drew to a close and great power competition heated up, this model for fleet employment re-emerged. It would be a model for fleet employment used both prior to World War I as well as before and immediately after World War II. This model had a main battle fleet stationed in CONUS and ready to surge against an enemy battle fleet, plus smaller outlying forces optimized for OOTW.

Figure 6 shows the fleet deployments for one of these periods, 1922–1937. Table 14 gives some of the reasons why the fleets were deployed to these stations. During this time, most of the U.S. battle fleet was stationed on the western coast of the United States, preparing solely for high-intensity warfare.

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27. Figure 1 pertains.

28. See Christopher McKee, *A Gentlemanly and Honorable Profession: The Creation of the U.S. Naval Officer Corps, 1794-1815* (Annapolis, MD: Naval Institute Press, 1991), 306-308, 310.

Figure 6. U.S. Navy deployment, 1922-1937

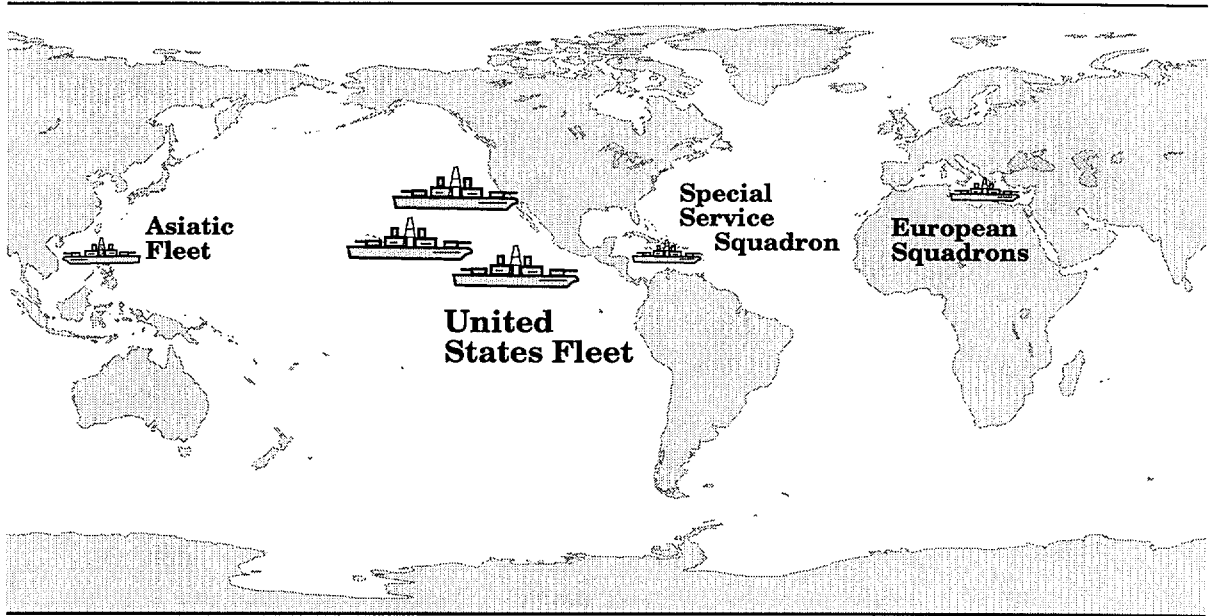


Table 14. Context for U.S. Navy deployment pattern, 1922-1937

Important deployed units	Core missions
United States Fleet	High-intensity warfare in the mid or Western Pacific: Exercises off Hawaii or Panama to deter/ prepare to combat & defeat the Imperial Japanese Navy
	<u>Minimal ad-hoc OOTW:</u> E.g.: One show-the-flag deployment to Australia and New Zealand, CV electricity generation support to Tacoma, Los Angeles earthquake humanitarian support
Asiatic Fleet (Including Yangtze River Patrol)	SSCs in China and the Philippines: E.g.: Interventions and landings in Chinese ports; Philippine colonial counter-insurrection operations OOTW throughout the China Seas and their littorals: E.g.: Showing the flag (especially in Japan & viz a viz the Japanese & British), protecting merchants & missionaries
Special Service Squadron	SSCs in Mexico, Central American & Caribbean Republics: At the behest of the State Department: interventions, NEOs and humanitarian operations OOTW in Mexico, Central American & Caribbean Republics: E.g.: Showing the flag, civil and military government support, Chile-Peru peace-making support
Naval Detachment Turkish Waters, later Naval Detachment Eastern Mediterranean	SSCs in the Eastern Mediterranean and Black Sea: E.g.: Russian Black Sea and Greek Asia Minor NEOs OOTW in the Eastern Mediterranean and Black Sea: E.g.: Showing the flag, protecting missionaries and merchants, diplomatic representation
Squadron 40(T)	SSC operations off Spain: Protecting/evacuating U. S. nationals during the Spanish Civil War



At the same time the country's need to engage in SSC operations continued, resulting in a few residual forward-deployed squadrons to conduct regional SSC operations: A Special Service Squadron—the so-called “Banana Fleet”—operated in the Caribbean and along the Central American coasts.<sup>29</sup> An Asiatic “Fleet,” including a Yangtze River Patrol, operated in and around China and the Philippines.<sup>30</sup> Various ad hoc squadrons conducted operations in European waters.<sup>31</sup>

This meant that the whole fleet was multi-mission, but that the individual fleets were separated according to whether they were the battle fleet or primarily designed to conduct SSCs and OOTW.<sup>32</sup>

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29. See Richard Millett, “The State Department’s Navy: A History of the Special Service Squadron, 1920-1940,” *The American Neptune* (April 1975), 118-138; and Donald A. Yerxa, “The Special Service Squadron and the Caribbean Region, 1920-1940: A Case Study in Naval Diplomacy,” *Naval War College Review*, 39 (Autumn 1986), 60-72.

30. On China, see Stephen S. Roberts, *The Decline of the Overseas Station Fleets: The United States Asiatic Fleet and the Shanghai Crisis, 1932*, November 1977 (CNA Professional Paper 208); CAPT Bernard Cole, USN, *Gunboats and Marines: The United States Navy in China, 1925-1928* (Newark, DE: University of Delaware Press, 1983); and RADM Kemp Tolley, *Yangtze Patrol: The U.S. Navy in China* (Annapolis, MD: Naval Institute Press, 1971).

31. For the various European SSC/OOTW squadrons, see Adam Siegel, “The Tip of the Spear: The U.S. Navy and the Spanish Civil War,” unpublished paper, 1992; A.C. Davidonis, *The American Naval Mission in the Adriatic, 1918-1921* (Washington, DC: Navy Department, Office of Records Administration, September 1943); Henry P. Beers, *U.S. Naval Forces in Northern Russia (Archangel and Murmansk), 1918-1919* (Washington, DC: Navy Department, Office of Records Administration, November 1943); and *ibid*, *U.S. Naval Detachment in Turkish Waters, 1919-1924* (Washington, DC: Navy Department, Naval Historical Center, 1940)

32. For a detailed but easily digested order of battle for each of these elements as of 1939, see James C. Fahey, *The Ships and Aircraft of the United States Fleet* (reprint edition) (Annapolis, MD: Naval Institute Press, 1978), 28.

During these times the Navy also did a complex form of OOTW ashore: civil government of certain U.S. possessions.<sup>33</sup>

The rationale for this deployment posture was as follows: The naval powers of the world in these eras mostly subscribed to concepts of the importance of main battle-fleet battles at sea.<sup>34</sup> SSCs and OOTW were clearly in second place. Nevertheless, the U.S. (and other nations) had colonial and other responsibilities they could not neglect. So the Navy—with some reluctance—sliced off little pieces of the fleet to do SSC operations and OOTW, often under the direct orders of the State Department or the Navy Department acting in its capacity as an agent of U.S. imperialism or colonial administration. The main battle fleet remained at home, to surge out to fight whomever the enemy proved to be.

## Model V: Multi-mission and multi-area, mixed fleets

This model has all the fleets ready to conduct any mission (multi-mission). They conduct peacetime OOTW and SSC operations, as well as mid- and high-intensity combat with the same ships and organizations.

To do this variety of missions, the fleets are deployed both off CONUS and to forward stations. Each forward station holds a full-up multi-capable battle fleet. CONUS forces are kept ready to surge from

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33. On the U.S. Navy's civil and military government operations, see CAPT J.A.C. Gray MC, USN, *Amerika Samoa: A History of American Samoa and Its United States Naval Administration* (Annapolis, MD: Naval Institute Press, 1960); Dr. Henry P. Beers, *American Naval Occupation and Government of Guam, 1898-1902* (Washington, DC: Navy Department Office of Records Administration, March 1944); and a massively detailed, three-volume study, LCDR Dorothy E. Richard, USN, *United States Naval Administration of the Trust Territory of the Pacific Islands* (Washington, DC: Office of the Chief of Naval Operations, 1957).

34. These concepts have traditionally been referred to as "Mahanian," after Admiral Alfred Thayer Mahan. For a fresh and somewhat contrary look at Mahan's views, see John Tetsuro Sumida, *Inventing Grand Strategy and Teaching Command: The Classic Works of Alfred Thayer Mahan Reconsidered* (Baltimore, MD: Woodrow Wilson Center Press, 1997).

CONUS in the event of either a major war or an SSC. This deployment strategy is typical for the Navy during the Cold War and post-Cold War periods (1948-present). Figure 7 shows fleet deployments for one time during this period, the late Cold War, and table 15 gives some of the missions assigned to those fleets.

Figure 7. U.S. Navy deployment, 1973-1989

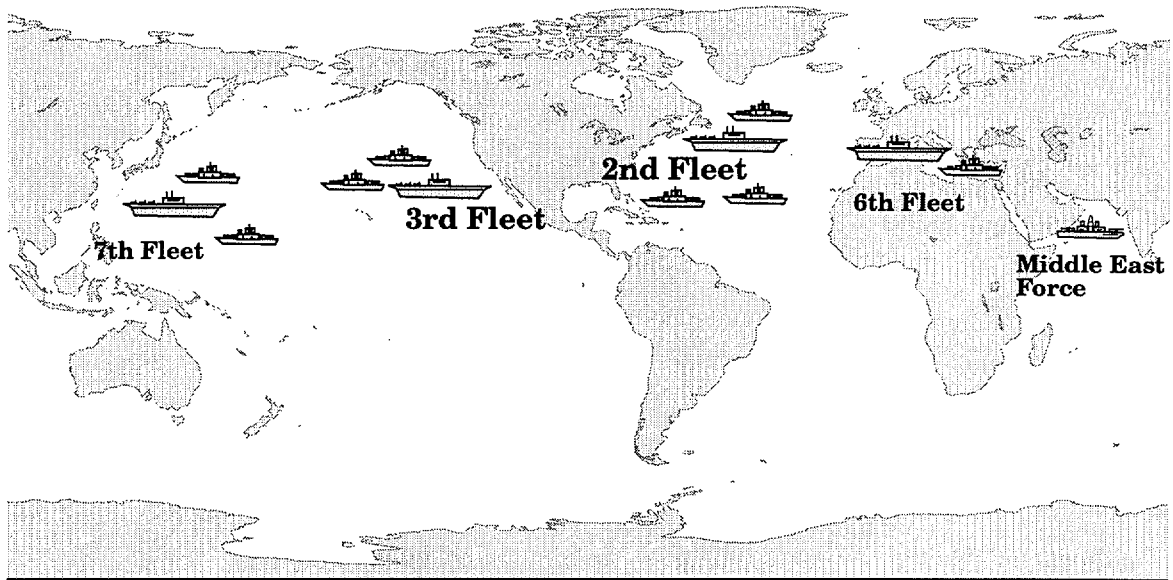


Table 15. Context for U.S. Navy deployment pattern, 1973-1989

Important deployed units	Core missions
7th Fleet	<p>High-intensity warfare vs. Soviet Union: Exercises &amp; surveillance ops to deter/prepare to defeat Soviet Navy &amp; forces ashore in N. Pacific, Arctic, Indian oceans &amp; littorals</p> <p>SSCs in the China Seas: E.g.: Vietnam minesweeping, prepare for &amp; execute NEOs, shows of force, KAL-007 shutdown recovery ops</p> <p>OOTW throughout the Western Pacific &amp; Indian ocean littorals: E.g.: Showing the flag, Freedom of Navigation (FON) ops</p>
3rd Fleet	<p>High-intensity warfare vs. Soviet Union: Exercises and surveillance ops to deter/prepare to defeat Soviet Navy &amp; forces ashore in N. Pacific</p> <p>OOTW: E.g.: Hosting PRC delegation</p>
2nd Fleet	<p>High-intensity warfare vs. Soviet Union: Exercises and surveillance ops to deter/prepare to defeat Soviet Navy &amp; forces ashore in N. Atlantic, Arctic oceans &amp; littorals</p> <p>SSCs in the Caribbean: E.g.: Grenada intervention, Central American surveillance ops, prepare for NEOs, shows of force</p> <p>OOTW in the Caribbean: E.g.: Showing the flag, counter-drug operations</p>
6th Fleet	<p>High-intensity warfare vs. Soviet Union: Exercises and surveillance ops to deter/prepare to defeat Soviet Navy &amp; forces ashore in Mediterranean &amp; Black seas &amp; littorals</p> <p>SSC operations in the Middle East and North Africa: E.g.: Shows of force, Prepare for and execute NEOs, Airlift support, Suez minesweeping, Red Sea mine-hunting, Lebanon intervention support, Libya strikes, airliner diversion</p> <p><u>OOTW throughout the Mediterranean and Black Sea littorals:</u> E.g.: Showing the flag, FON ops</p>
Middle East Force	<p>SSCs, especially viz a viz Iraq and Iran: E.g.: Tanker escort, minesweeping, oil platform bombardment, prepare for NEOs</p> <p>OOTW throughout the Persian Gulf and Red Sea littorals: E.g.: Showing the flag</p>

Why was the fleet deployed like this?

The Navy decided after World War II that, based on its World War II experience, the multi-capable, task-organized, forward-deployed

battle fleet was the paradigm for everything.<sup>35</sup> Preparation for high-intensity war with the Soviets (and, later, mid-intensity war with the Iraqis and North Koreans) necessitated a focus on battle-fleet organization and combat capability. The actual likelihood of such activity—especially during the last quarter-century of U.S. Navy history—has been small (contrast this with the high likelihood of war during the first quarter-century of U.S. Navy history).

Meanwhile, the country had become a superpower with diverse global peacetime interests. The Navy had to do both the numerous SSC/OOTW tasks and the major war-preparation task simultaneously, with the same ships. (There were a few exceptions. Two examples: the Northern European Force from the mid-1940s through the mid-1950s and the MIDEASTFOR from the late 1940s to the late 1970s were OOTW forces, somewhat reminiscent of the Asiatic Fleet and the Special Service Squadron in the Caribbean half a century earlier.<sup>36</sup>)

## Maintaining deployment patterns

### The old “forward stations”

How did the “Old Navy” maintain itself on distant station for SSC operations and OOTW?<sup>37</sup> While deployments in the 19th and early

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35. The conceptual roots of this policy are laid out in Samuel P. Huntington, “National Policy and the Transoceanic Navy,” U.S. Naval Institute *Proceedings*, 80 (May 1954), 483-493. The paradigm Huntington presents is about as valid today as when he wrote it, and tracks well with the Navy’s post-Cold War policy statement, *Forward . . . From the Sea* (Washington, DC: Department of the Navy, 1994).

36. For a history of the Middle East Force, see Michael Palmer, *On Course to Desert Storm: The United States Navy and the Persian Gulf* (Washington DC: Department of the Navy, Naval Historical Center, 1992); and W. Seth Carus et al. *From MIDEASTFOR to Fifth Fleet: Forward Naval Presence in Southwest Asia*, October 1996 (CNA Research Memorandum 95-219).

37. This discussion is adapted from Albion, “Distant Stations,” 270.

20th centuries varied somewhat by region and decade, they generally shared two basic characteristics:

- A ship-by-ship, port-by-port pattern of “showing the flag”
- A three-year tour of duty.

The squadrons were administrative rather than tactical units. Except during the winter months in the Mediterranean, it was unusual for all the vessels to be assembled in any one place. In current parlance, there was normally no “battle-group integrity.” The Navy Department policy was for the ships to keep moving from port to port, and especially to pry them away from the more attractive ports of call. Occasionally, for a particularly important SSC operation, all the ships of a squadron would come together, as occurred when the Mediterranean Squadron assembled to pressure the King of Naples for President Jackson in 1836, and when Commodore Perry went to open Japan to foreign trade in 1853-54.

The three-year cruise was likewise a dominant feature of the distant squadrons. Normally, a ship enlisted a crew for those three years and she was expected to deliver them back to their home yard before that time was up. On arrival there, the crew was discharged and the officers given a brief leave. On the more distant stations, particularly the China /Asiatic, more than half of the three-year period was often used up coming and going.

There were a few exceptions to the three-year-cruise pattern. Because of its generally unhealthy conditions, the Africa Station tour of duty was reduced to two years. In a harbinger of current Fifth Fleet mine-warfare vessel manning policy in the Persian Gulf, the river gunboats in China stayed out there indefinitely while other vessels brought out new crews to relieve the old ones.

Why did these patterns hold?

First, the SSCs and OOTW practiced by the U.S. Navy during this period could be handled by a one- or two-ship force, and occasionally by a squadron. Large expeditions—such as the 18 warships and auxiliaries sent up the Parana River in 1859 to coerce the Paraguayans—were rare. (In that instance, ships from the Home, Africa, and Brazil

squadrons—as well a Revenue Service cutter—were coalesced into an ad hoc fleet).<sup>38</sup>

Moreover, the Navy had an additional important function to perform besides SSC operations and OOTW: It was a *naval presence force* as well. Showing the flag and reassuring local American consuls, missionaries, and merchants was an important part of its job.

Also, the maritime technology of the period allowed ships to stay far forward for extended periods—provided foreign depot support could be requisitioned, which it usually could. Wood, canvas, and rope were all repairable or replaceable even in distant Third World ports. And three-year tours forward were bearable—even desirable—by the Navy's officers and men. They also could be reconciled within the social mores and civil-military relations of the period.<sup>39</sup>

## The Inter-regnum

Changes in the world and domestic environment and technology brought most of the forward squadrons home in the early 20th century. There, as the Atlantic Fleet and—later—the U.S. Fleet, they mostly stayed until World War II. The World War I European deployments and the Asiatic Fleet were the most notable exceptions, although there were others.

Some Asiatic Fleet sailors stayed in Asia for many years. The pros and cons of being a “China Fleet Sailor” and “going Asiatic” were constant sources of debate within the Navy. Ambitious career Navy men strove to stay with the fleet in CONUS.

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38. This was the largest U.S. Navy squadron ever assembled between the Navy's founding and the Civil War, and the largest U.S. military expedition ever on South American soil. The story is in John Hoyt Williams, “The Wake of the Water Witch,” U.S. Naval Institute *Proceedings Supplement*, 1985, 14-19.

39. On the three-year deployments, see Albion, “Distant Stations,” 270, and Patrick H. Roth, “The U.S. Navy's Brazil/South Atlantic Stations 1826-1904: An Informed Look,” unpublished manuscript, 1995.

Immediately following World War II, most of the Navy was simply demobilized. The remainder was deployed in and around the East and West Coasts, in the Fifth and Eighth “surge” fleets (like the old U.S. Fleet, but now divided between the coasts). Tiny task forces were maintained forward in the seas around Europe and Japan, and a small Seventh Fleet operated from Chinese and Philippine bases—the successor to the Asiatic Fleet. While there were more elements involved, the same essential underlying deployment pattern as during the interwar period is discernible.

### The post-World War II forward fleets

Starting in the late 1940s, U.S. Navy deployment patterns again changed, to emphasize forward-deployed operations. This time, as we have seen, the forward-deployed elements were configured as forward-deployed *combat-capable* fleets ready for all possible operations—from naval presence, “show the flag” operations, through OOTW and SSCs, to general high-intensity and even nuclear war.

Ship and personnel rotation policies, however, differed greatly from those of earlier eras of forward deployment. Ships deployed for several months, but not years, and crew members rotated automatically between sea and shore duty.<sup>40</sup> Throughout the Cold War, the six-month deployment was the announced Navy goal, although it was not always achieved—and was seldom achieved during the Vietnam War and the various post-Vietnam Persian Gulf crises.<sup>41</sup> During the post-Cold War period, however, the Navy has been adamant at maintaining six-month deployments in reality as well as rhetoric.<sup>42</sup>

Why the difference?

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40. For an analysis of late Cold War U.S. Navy deployment length policy, see Christopher C. Wright, “U.S. Naval Operations in 1982,” U.S. Naval Institute *Proceedings/Naval Review* 109 (May 1983), 51-57.

41. In 1980, in an extreme example of breaking the six-month rule, a nuclear-powered carrier and two nuclear-powered cruisers deployed to the Indian Ocean for 251 days. At one point the carrier was at sea for 152 consecutive days.



First, logistics requirements to support modern steel warships far exceed those of their wooden predecessors. Even with underway replenishment ships, tenders, and forward shore bases, modern warships need extensive routine maintenance, repair, and overhaul—evolutions best done in most cases in home yards.

Second, American social mores and civil-military relations have changed. Three-year deployment enlistments are gone. Now, concern for family separation and personnel retention are significant drivers of OPTEMPO and PERSTEMPO.

### Back to the future

Nevertheless, as we enter the 21st century, there is much discussion of changing the Cold War and post-Cold War deployment rotation paradigm. The “Horizon” concept, developed in 1997 by CNO Strategic Studies Group (SSG) XVI, is currently being examined in OPNAV and elsewhere.<sup>43</sup>

What is “Horizon’s” vision? Among other things, it is to use state-of-the-art and future technology and organizational concepts to achieve:

- Platforms capable of remaining forward deployed for up to three years
- Fully trained and ready sailors to rotate to these platforms.

Significantly, “Horizon” assumes a continuation of the forward-deployed combat-capable fleet model of the Cold War and Post-Cold War years (our Multi-Mission, Multi-Area Mixed Fleets Model), rather than a change to a new (or old) alternative deployment model.

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42. In 1985, the CNO ordered cuts in deployment schedules to eliminate excessive at-sea periods for ships and aircraft squadrons, resulting in adherence to the six-month deployment rule. See Roy A. Grossnick, *United States Naval Aviation, 1910-1995* (Washington, DC: Naval Historical Center, 1997), 327, 348, 352.

43. “Horizon” was first laid out in Chief of Naval Operations Strategic Studies Group XVI, *Naval Warfare Innovation Concept Team Reports* (Newport, RI: Chief of Naval Operations Strategic Studies Group, June 1997), VIII-1-12.

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## Appendix B: Organizational policy

An organizational policy has two facets: internal and external. *Internal organizational policy* refers to how an organization such as the Navy is organized. *External organizational policy* refers to how it works with and connects to other organizations within larger, inter-organizational frameworks.

In general, we find that Navy *internal* organizational policy has been driven by deployment policy. That is, the fleet has been organized as it has deployed. We conclude that *external* organizational relationships, however, have been driven by a number of other variables. This is only natural, since the Navy has far less control over its external relationships than its internal organization, and because the policies of the other organizations it connects with respond to a host of variables well beyond the Navy's control (or even knowledge).

In this section we look first at the Navy's internal organization, then its relationship with the outside world.

### Internal organization

We can fit the Navy's internal organizational policy into three distinct models:

- Model I: Washington headquarters runs squadrons
- Model II: Washington headquarters runs a mix of fleets and squadrons
- Model III: Washington headquarters runs FLTCINCs who run numbered fleet commanders

## Model I: Washington headquarters runs squadrons

### Organization

Each overseas station of the 19th-century SSC/OOTW Navy had its own squadron, with the squadron commander reporting directly to the Secretary of the Navy. The Secretary—a civilian, cabinet-rank, political appointee—provided both administrative and operational direction to the fleet. Throughout much of the century he was assisted routinely in the former by several powerful bureaus headed by naval officers. In the latter, however, he was usually clearly the man in charge: There was no Chief of Naval Operations and no OPNAV.<sup>44</sup>

Out on station a squadron commander normally flew his flag on a frigate (somewhat equivalent to a modern cruiser), and had a number of sloops-of-war and assorted other warships and support vessels under him.

### Implications

The very short chains of command and the extremely flat operational organization acted to reduce the possibilities of communications garbles, despite the poor communications of the era. (See the discussion of procurement policy above for the nature and effects of these poor communications.)

## Model II: Washington headquarters runs fleets and squadrons

### Organization

A Chief of Naval Operations was first designated to assist the Secretary of the Navy in directing fleet operations in 1915.<sup>45</sup> This was

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44. For more complete histories, see Charles O. Paullin, *Paullin's History of Naval Administration, 1775-1911: A Collection of Articles from the U.S. Naval Institute Proceedings* (Annapolis, MD: Naval Institute Press, 1968); and Robert Greenhalgh Albion, *Makers of Naval Policy, 1798-1947* (Annapolis, MD: Naval Institute Press, 1980).

45. Details of the story are in Henry P. Beers, "The Development of the Office of the Chief of Naval Operations: Part II," *Military Affairs* 10 (Fall 1946), 10-38.

necessitated in large part by the growth in number and complexity of fleet units, but—more important—by the growth in number and complexity of fleet unit *interrelationships*. That is, the fleet no longer consisted of squadrons composed of ships on what amounted to independent duty. Now the fleet was organized into tactical maneuvering units. Coordinating intricate and complex ship movements among dozens—indeed hundreds—of warships became the responsibility of senior naval officers, and new layers of command were inserted into the chain to accommodate the new mode of fleet operations.

The massive U.S. Fleet of the 1920s and 30s reported directly to the CNO. The U.S. Fleet was a separate organizational entity from the far smaller Asiatic Fleet, the normally even smaller Special Service Squadron in the Caribbean, and the very small units in Europe—all of which also reported directly to the Navy Department.<sup>46</sup> The U.S. Fleet was also the organizational crown jewel, with the other units having less internal influence within the Navy.<sup>47</sup>

The U.S. Fleet was organized into a Battle Fleet, a Scouting Fleet, a Control Force, and a Base Force. The administrative and operational organizations within the fleet were normally the same.

The Asiatic Fleet was a fleet in name only, being actually an overseas cruising squadron comprising (at peak strength) a few old cruisers, a dozen destroyers, two dozen coastal submarines, several river and coastal gunboats, and some seaplane squadrons.

The Special Service Squadron consisted of old cruisers, destroyers, and gunboats operating throughout the Caribbean.

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46. There were exceptions. A Cuba crisis of 1933-34 saw the Special Service Squadron expand to 39 ships (including two battleships) in 1933 and 29 ships (including two battleships and a submarine) in 1934. The Squadron had had 54 ships assigned briefly in 1927 during a Nicaragua crisis; and a battleship had been attached for a short period in 1921 during a Panama-Costa Rica crisis.

47. On the details of interwar fleet organization, see LT Richard W. Leopold, USNR, "Fleet Organization, 1919-1941" (unpublished manuscript, Washington, DC: Navy Department, 1945).

### Implications

The units designated for SSC operations and OOTW were small. Even though they comprised disparate classes and ship types, they were in a sense homogeneous in that they did not include ships that were at the cutting edge of technology (most especially, they did not include battleships, heavy cruisers, or aircraft carriers).

## Model III: Washington headquarters runs FLTCINCs who run numbered fleet commanders

### Organization

During the run up to World War II and the early years of the war, the U.S. Fleet, the Asiatic Fleet, and the Special Service Squadron disappeared. In their place there had emerged, by mid-war, a new system of fleet organization: A four-star CNO/COMINCH in Washington; four-star operational and administrative Fleet CINCs for the Pacific, Atlantic, and Europe;<sup>48</sup> subordinate operational numbered fleet commanders forward; and task force organizations within the numbered fleets.<sup>49</sup>

Ships were now simultaneously assigned to an administrative commander as well as to a sequence of ever-changing operational commanders. The senior administrative commanders were the Type Commanders. They had few direct operational responsibilities and reported to the Fleet Commanders-In-Chief.<sup>50</sup>

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48. The CNO (Fleet Admirals King and Nimitz) was a five-star officer from 1944-47. The Pacific Fleet Commander (Fleet Admiral Nimitz) was a five-star officer in 1944-45.

49. The evolution of the World War II fleet structure is in RADM Julius Augustus Furer USN (Ret), *Administration of the Navy Department in World War II* (Washington, DC: Department of the Navy, Naval History Division, 1959), Chapter IV: "Fleet Organization."

50. Submarines were an exception. During the Cold War, submarines on independent operations (i.e., until recently, all submarines) worked for a Submarine Operating Authority who was also the Type Commander.

This organization has continued, more or less intact, until the present day—a period of more than half a century.

The U.S. Fleet of the interwar period theoretically had a world-wide area of operations, although in reality it focused on the Pacific. The wartime and post-war Fleet CINCs and numbered fleet commanders, however, came to have specific regional geographic responsibilities.

### **Implications**

Layers were solidified. A Fleet CINC, a numbered fleet commander, and a task force commander came to direct almost every operation, no matter how small.

The experiences of each numbered fleet in SSC operations and OOTW have been shaped by the geopolitics of the regions in which it has operated. The forward-deployed Sixth and Seventh fleets have had to conduct many such operations over time.<sup>51</sup> (Unlike the Sixth Fleet, however, the Seventh Fleet has been involved in two Major Theater Wars (MTW)—Korea and Vietnam). Likewise, the Second Fleet has had to conduct many SSC operations and OOTW in the Caribbean throughout its history.

The Third Fleet (and its predecessor, the First Fleet) have, by contrast, had comparatively little to do in the world of SSC operations and OOTW.<sup>52</sup> The Fifth Fleet (and its MIDEASTFOR and other predecessors) have had to conduct innumerable low-level naval presence OOTW operations; a few recent SSC operations (the Persian Gulf Tanker War “Earnest Will” operations of the 1980s and the MIF operations of the 1990s); and one MTW—Operation Desert Storm.

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51. On the Sixth Fleet, see LCDR Philip A. Dur, USN, “The Sixth Fleet: A Case Study of Institutionalized Naval Presence, 1946-1968” (unpublished Ph.D. dissertation: Harvard University, 1975). On the Seventh Fleet, see LCDR Joseph A. Sestak, Jr., USN, “The Seventh Fleet: A Study of Variance between Policy Directives and Military Force Postures” (Unpublished Ph.D. dissertation: Harvard University, August 1984).

52. The Third Fleet has provided ships for counter-drug operations over the past decade, however.

## External organizational relationships

We now turn from the Navy's *internal* organizational policies to analyzing its *external* relationships.

Historically the Navy has had five primary ways of interacting (or not interacting) with other organizations for SSC operations and OOTW:<sup>53</sup>

- Navy conducts operations autonomously.
- Navy conducts operations for the State Department.
- Navy conducts operations embedded in a joint structure.
- Navy conducts operations with Non-Government Organizations (NGOs).
- Navy conducts operations with foreign navies.

### Autonomous operations

#### Organization

The Navy Department was spun off from the War Department in 1798. From then until 1947 it functioned as an independent government department, co-equal in status and autonomy with the War, State, and other great government departments.

#### Implications

During wartime the Navy Department was sometimes on its own but often cooperated closely with the War Department. Joint operations were commonplace in the field, the two cabinet secretaries often coordinated their activities, and the President provided centralized direction and resolved differences. This was especially true during the Lake Campaigns of the War of 1812, the invasions of Mexico and California during the Mexican War, the amphibious and riverine

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53. There is a sixth set of important external relationships: those with the U.S. Coast Guard. These will be explored later in the paper and, to avoid repetition, are not included here.



campaigns of the Civil War, and most campaigns of the Spanish-American War and World War II.

Given the complexity of multi-theater, multi-service total war, during World War II additional U.S. military coordinating mechanisms—the Joint Chiefs of Staff and joint theater commands—were created.

*For SSCs, however, jointness had been the exception rather than the rule.* Most of the SSC operations the Navy was involved in were conducted by naval forces—including Marines—without significant interaction with the Army. Examples were the various 19th-century interventions in Latin America, East Asia, and the South Pacific;<sup>54</sup> the anti-slavery patrols off West Africa;<sup>55</sup> and the exploration of the South Pacific and the Arctic. In other cases, such as the seizure and occupation of Vera Cruz, Mexico, in 1914, the Navy ran an autonomous operation as an “enabling force” and then handed off complete responsibility sequentially to the Army. (Exceptions were certain anti-piracy operations in Louisiana and Florida in the early 19th century and the Philippine Insurrection operations at the turn of the century).<sup>56</sup>

Generally, in an SSC/ OOTW-dominant military world, there was little need for much formal joint organization or doctrine. The Army had its own sea transport capability and the Navy had its Marines and bluejacket landing parties. Naval colonial government—in Guam, Samoa, the Virgin Islands, and briefly in Micronesia—had little to do

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54. For details, see David F. Long, *Gold Braid and Foreign Relations: Diplomatic Activities of U.S. Naval Officers, 1798-1883* (Annapolis, MD: Naval Institute Press, 1988).

55. A good summary is in George M. Brooke, Jr., “The Role of the United States Navy in the Suppression of the African Slave Trade,” in U.S. Naval Academy Department of History, *Readings in American Naval Heritage* (New York: American Heritage Custom Publishing, 1997), 51-61.

56. On early joint SSC operations and OOTW, see Raymond G. O’Connor, “The Navy on the Frontier,” in Major James P. Tate, USAF (editor), *The American Military and the Frontier* (Washington, DC: Office of Air Force History, Headquarters USAF and USAF Academy, 1978), 37-49. On the Philippine Insurrection, see Brian M. Linn, “Joint Operations in the Days of Empire,” in Bittner, *Selected Papers*, 81-94.

with the Army. Except in Louisiana, Florida, and the Philippines, each conducted its own SSC operations and OOTW pretty much its own way.

This more autonomous single-service posture for SSCs and OOTW has continued into the joint era since 1947, as will be recounted later.

## Operations with the State Department<sup>57</sup>

### Organization

During the time it was an independent government department, the Navy Department's relationship with the State Department was often quite close—closer at times than its relationship with the War Department.<sup>58</sup> Some examples:

- In the 19th century, Navy warships were used as much for American diplomacy as U.S. embassies and consulates.<sup>59</sup>
- Just after World War I, a serving Navy rear admiral, Mark Bristol, was named U.S. High Commissioner to Turkey, a post he held concurrently with his operational Navy job as Commander, U.S. Naval Detachment in Turkish Waters. Admiral Bristol reported to the Navy commander in Europe as well as to the State Department, which transmitted its instructions to him through the Navy Department.<sup>60</sup>

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57. For an extended discussion of the Navy-State relationship through World War II, see Robert Greenhalgh Albion (edited by Rowena Reed), *Makers of Naval Policy, 1798-1947* (Annapolis, MD: Naval Institute Press, 1980), Chapter 13, "State and Navy," 256-294.

58. One analyst notes that, for the 30 years after the Civil War, the Army cooperated more closely with the Department of the Interior, and the Navy more closely with the Department of State. See COL Adolf Carlson, USA, *Joint U.S. Army-Navy War Planning on the Eve of the First World War: Its Origins and its Legacy* (Carlisle Barracks, PA: U.S. Army War College Strategic Studies Institute, February 16, 1998), 4.

59. The standard comprehensive reference is Long, *Gold Braid and Foreign Relations*.

- In the interwar period (1920-40), the Navy operated the Special Service Squadron in the Caribbean, usually at the behest of the State Department. The Squadron was formed in part to better satisfy the State Department's constant requests for warship deployments in the Caribbean. Throughout its existence, its operations were governed by continuous coordination between OPNAV and the State Department's Division of Latin American Affairs, and by Squadron commanders and local ambassadors and consuls.<sup>61</sup>
- A similar situation occurred in the late 1930s off Spain with regard to the operations of Squadron 40-T.<sup>62</sup>

### **Implications**

The Navy has long recognized the intertwining of diplomatic and military considerations in the conduct of SSC operations and OOTW. In some eras this relationship has been formalized to the point where naval forces operated virtually at the beck and call of the State Department. This is still reflected in the joint and inter-agency arena by the State Department's lead agency status in many overseas operations short of full-scale combat.

## **Operations within a joint structure**

Navy participation in joint SSC operations and OOTW has become progressively more integrated within joint structures. Why is this?

### **Organization**

The National Security Act of 1947 and subsequent legislation and executive decisions created, in stages, a complex joint structure for undertaking U.S. military operations, including SSC operations and

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60. Henry P. Beers, "American Naval Detachment—Turkey, 1919-24," *Warship International*, 3 (1976), 209-226.

61. Yerxa, "The Special Service Squadron and the Caribbean Region."

62. Siegel's "The Tip of the Spear" is especially good on the communications arrangements and problems between the two Departments and between their representatives in the field.

OOTW.<sup>63</sup> World War II ad hoc arrangements setting up the Joint Chiefs of Staff (JCS) were formalized. The position of Chairman of the Joint Chiefs of Staff was created and—over time—strengthened, as was a Joint Staff responsive to, first, the JCS as a whole and, later, the Chairman alone.

Nominally unified joint operational commands evolved out of World War II theater command arrangements, as did, for a time, some specified single-service operational commands. The service chiefs, including the Chief of Naval Operations, remained unambiguously in the operational chain of command through 1958 as “executive agents” responsible for individual unified and specified commands.

From 1958 through 1986, as members of the JCS, they remained more ambiguously in the operational chain. With the passage of the Goldwater-Nichols Act in 1986, however, they were eased out of the operational chain of command entirely. That chain now flows directly from the President through the Secretary of Defense to the unified commanders (the last specified commander disappeared in 1993).

Since 1986, the Chairman—but not the JCS—acts as a communications link between the National Command Authorities (the President and the Secretary of Defense) and the unified and specified commands (now also styled combatant commands); oversees the activities of the combatant commands for the Secretary; and acts as a spokesman for the combatant commanders in Washington.

Occasionally, large-scale planned and/or executed military operations have been the responsibility of more than one combatant commander (e.g., the planned execution of the Single Integrated Operational Plan (SIOP) for employment of strategic nuclear weapons before the creation of the Strategic Command in 1992; the plans for global war with the Soviet Union during the Cold War; and—more arguably—the plans for the Vietnam War).<sup>64</sup> Normally, however, since

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63. The literature on defense unification is vast and largely irrelevant to our discussion here. For a quick review, see Adam Siegel, *Who Will Do What With What: Defining U.S. Navy and Marine Corps Roles, Functions and Missions*, May 1993 (CNA Occasional Paper).

World War II, any U.S. military operation of any type has been assigned to one unified (or specified) commander for its execution.

### **Jointness and SSC operations/OOTW**

Each SSC operation and OOTW since World War II has normally been conducted by one joint theater commander, although others may have provided support. Until quite recently, however, some unified commands were only nominally joint. These included the Atlantic Command (primarily Navy), and the Southern Command (primarily Army). Others, such as the Pacific and European Commands, while possessing more balanced multi-service force structures on paper, were in fact loose confederations of autonomous service components.

Thus, the record of Navy participation in SSCs and OOTW for the first 30 years or so after World War II—while nominally embedded in joint structures and processes—*was in reality a series of autonomous Navy-only or nearly-Navy-only operations*. This began to change in the 1970s, when the JCS began to cobble together operations that (for better or ill) were far more balanced in service force-structure participation. Nevertheless, the service components within these loose force structures retained considerable autonomy. Likewise, the service component commanders—nominally subordinate to the unified commanders—exercised great influence on the composition and command structure of the joint task forces created for the operations.

Some of these operations—such as the failed intervention in Iran in 1979 and the far more successful intervention in Grenada in 1983—were widely perceived as debacles by Congress, the press, and the defense policy community. The culprit was allegedly the lack of more tightly integrated joint structures and more powerful joint force commanders. Consequently, the Goldwater-Nichols Act was in part designed to eliminate service autonomy in the conduct of SSCs and OOTW.

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64. Although the commander in Vietnam nominally reported to CINCPAC, he was a *de facto* combatant commander, with CINCPAC providing naval support.

The implementation of the Goldwater-Nichols Act coincided in the late 1980s and early 1990s with other major phenomena: The end of the Cold War and the experience of the Chairman of the Joint Chiefs of Staff and the Commander of the U.S. Central Command in organizing and fighting the Gulf War. As a result of the synergistic effect of all these events, by the mid-1990s SSCs and OOTW had become the province of Joint Task Forces created by the unified commanders for those purposes.<sup>65</sup>

### **Implications**

Thus, unlike in most of the Cold War years, *SSCs and OOTW from here on in will probably be carried out by more than one service*. Also, unlike the late Cold War era, those operations will be tightly integrated under joint command structures, especially in Joint Task Forces.

As we have seen, unlike other aspects of SSC operations and OOTW, true joint operational entities like JTFs are very new concepts for the U.S. Navy. When thinking about the Navy's role in these operations more questions than answers arise. When should the JTF be formed around a Navy staff? Could a JTF formed from an afloat naval staff run sustained ground operations ashore (as was done in Grenada)? What is the role of sea basing vs. putting command elements ashore, even if the command elements are not naval?

All of these questions relate to how the CINC in charge of the JTF understands and plans to use naval forces in the operation. They are also a function of the capabilities the Navy brings to the table, and how those capabilities are perceived by the CINC and his planners.

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65. This is laid out in George Stewart, Scott M. Fabbri, and Adam B. Siegel, *JTF Operations Since 1983*, July 1994 (CNA Research Memorandum 94-42).

## Operations with non-national security and non-government organizations

### Organization and relationships

Navy relationships with non-national security and non-government organizations (NGOs) in SSC operations and OOTW are not new, especially in *humanitarian* and *exploration operations*. Here are some examples:

- In 1821, the schooner *Alligator* supports the **American Colonization Society** in the selection and acquisition of a stretch of African coast for the re-settlement of freed American slaves (the future Liberia).
- In 1847, the Navy lent the sloop-of-war *Jamestown* and the frigate *Macedonian* to the **New England Relief Committee** and the **New York Relief Committee** to transport food to Ireland during the famine there.<sup>66</sup>
- In 1848, the Brazil and Pacific Squadrons supported the **American Agricultural Association** in transporting Alpaca sheep to the United States.
- In 1879, the *New York Herald* newspaper presented *Jeanette*, a steam bark, to the Navy for an ill-fated Arctic scientific and exploration expedition. Her crew consisted of volunteer navymen and three civilians.
- From 1919 to 1927, Rear Admiral Mark Bristol, U.S. High Commissioner to Turkey and Commander, U.S. Naval Detachment in Turkish Waters, supported with ships and people the massive humanitarian assistance efforts of the **American Committee for Relief in the Near East**.<sup>67</sup>

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66. See H.A. Crosby Forbes and Henry Lee, *Massachusetts Help to Ireland During the Great Famine* (Milton, MA: Captain Robert Bennet Forbes House, 1967).

67. Beers, "American Naval Detachment—Turkey, *Warship International*, 3 (1976), 214.

- In the 1920s and later, the Navy collaborated with the **National Geographic Society** in conducting air expeditions to the Arctic.<sup>68</sup>
- In 1930, the coastal submarine *O-12* was struck from the Naval Register (in accordance with an arms limitation treaty), renamed *Nautilus*, and used by Sir Hubert Wilkins's **Transarctic Submarine Expedition** for Arctic under-ice exploration. The Navy maintained a close interest in the expedition: a battleship towed the submarine part-way across the Atlantic, most of the crew were ex-Navy submariners, and the Navy subsequently convened a board to evaluate the operation.<sup>69</sup>
- During the 1960s, the Atlantic and Pacific fleets supported the manned space flight program of the **National Aeronautics and Space Administration (NASA)**, primarily for astronaut recovery. Given the technology of the time, the United States chose to use a method of recovering space vehicles that allowed the ocean to absorb the impact of the landing, and then use prepositioned ships to recover the spacecraft. In 1965, for example, the Atlantic Fleet alone devoted a total of 1,006 ship-days in support of manned space flight, primarily for astronaut recovery.<sup>70</sup>
- The Navy Handclasp Program, formalized in 1962, has coordinated its activities with a number of NGOs both in the United States and overseas.
- Beginning in 1988, the Navy collaborated with the **National Geographic Society** and the **J. M. Kaplan Fund** in exploring ancient shipwrecks in the Mediterranean. The Navy provided

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68. See Nancy Fogelson, "U.S. Naval Air Expeditions in the Arctic in the 1920s," in *Naval History: The Seventh Symposium at the U.S. Naval Academy* (Wilmington, DE: Scholarly Resources Inc., 1988), 186-194.

69. See Marion D. Williams, *Submarines Under the Ice: The U.S. Navy's Polar Operations* (Annapolis, MD: Naval Institute Press, 1998), Chapters I-III.

70. LTC Leo P. Hirrel, USAR, *United States Atlantic Command: Fiftieth Anniversary, 1947-1997* (Norfolk, VA: Headquarters, Commander-in-Chief, U.S. Atlantic Command, Office of the Command Historian, 11 February 1998 draft), 22.



the nuclear research submarine *NR-1* to help locate shipwreck sites.<sup>71</sup>

- In 1999 the Navy will formally end the predominant role it had played during 43 years of American scientific research operations in Antarctica. In the last three decades of that period, most American operations in Antarctica have been under the authority of the **National Science Foundation**, while Navy units under the Commander in Chief, U.S. Pacific Command ran station kitchens, stores, security, and transportation. The National Science Foundation has contracted these functions to a commercial organization, Antarctic Support Associates, based in Denver.<sup>72</sup> Military airlift support will henceforth come from the New York Air National Guard.

Although all of these relationships were mutually beneficial and sometimes of long duration, *few have become permanent*.<sup>73</sup> Full-blown organizational institutions do not evolve from these relationships, which are more contractual than organizational.

Most of these operations involve exploration. Exploration in the United States has had both public and private sponsorship. The ability of the Navy to provide transportation and other services under arduous conditions has led private organizations to try to tap into Navy resources. Indeed, the Navy often has been the only organization capable of performing exploration and exploration support functions in areas with little or no civil infrastructure, such as the South Seas, the polar regions, and the deep ocean bottom.

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71. Robert D. Ballard, "High-Tech Search for Roman Shipwrecks," *National Geographic* (April 1998), 32-41.
  72. JOC (AW) Jacqueline Kiel and JO1 David Nagle, "Navy Disestablishes Antarctic Support Unit," *Around the Fleet* (Chief of Naval Information newsletter), February 27, 1998, 2.
  73. The exception is the relationship between Project Handclasp and the U.S. and foreign NGOs with which it interfaces. Project Handclasp, however, is principally a local-level *charitable* program, without many of the complexities and national policy overtones of humanitarian disaster operations, high-visibility exploration operations, and other OOTW.

When a new civil capability to explore or support exploration emerges, or when new technology develops rendering its services obsolete, the Navy typically backs out.

### **Implications**

Navy relationships with NGOs are nothing new. Nevertheless, these relationships have mostly been ad hoc, sporadic affairs usually involving the desire by one side or the other for resources unattainable through normal budget processes or unavailable through civilian channels. Thus, the relationships are normally *neither permanent nor intimate*.

## **Operations with foreign navies**

Unlike operations with other U.S. services and NGOs, ad hoc multinational naval coalitions for SSCs and OOTW have historically been as much the rule as the exception. Why is that?

### **Organization**

Coalitions and coordinated multi-national operations (like so much else, ad hoc and otherwise) are also nothing new for the Navy, especially as regards SSC operations and OOTW. In the period between the old alliance with France during the Revolution and the new alliances of the 20th century, the United States was avowedly a neutral, independent agent internationally, occasionally even isolationist. *But this was not true of the Navy*, which routinely operated in ad hoc multinational arrangements with others.

Table 16 shows a sampling of the interventions the U.S. Navy units participated in.<sup>74</sup>

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74. This listing, which focuses on SSC operations and OOTW, is derived from a variety of sources, especially Long, *Gold Braid and Foreign Relations*. A more balanced listing that includes warfighting examples is in Michael Johnson, Peter Swartz, and Patrick Roth, *Doctrine for Partnership: A Framework for U.S. Multinational Naval Doctrine*, Appendix B, March 1996 (CNA Research Memorandum 95-202).

Table 16. Ad hoc coalition and coordinated naval operations

Operation	Other navies involved <sup>a</sup>
1832 Uruguay landing	RN
1840s-50s Anti-slavery patrols	RN
1852 Argentina landings	RN, French
1855 China anti-piracy ops	RN
1858 Uruguay landing	RN
1859 China anti-fort ops	RN
1859 Argentina landing	RN
1864 Japan anti-fort operations	RN, French, Netherlands
1868 Uruguay landing	Italian, 3 others
1874 Hawaii landing	RN
1882 Egypt landing	RN
1883 China show of force	RN, French, Portuguese
1884 China interposition ops	RN, other European
1890 Argentina interposition	RN, Spanish
1900 China Anti-Boxer Rebellion operations	RN, French, Japanese, German, Russian, Italian, Austro-Hungarian
1914 Haiti landings	RN, French, German
1918-1921 Adriatic peace-enforcement	RN, French, Italian
1919 Turkey show of force	RN, French, Greek navies
1920 Russian Black Sea NEO	RN, French, Italian, Greek
1922 Turkey Greek NEO	RN, French, Italian
1923 China intervention	RN, French, Italian, Portuguese, Japanese
1924 China intervention	Others
1927 China landings	RN, French, Italian, Portuguese, Spanish, Netherlands, Japanese
1927 China bombardments	RN
1930 China NEO	RN, Italian, Japanese
1932 China Landing	RN
1936-40 Spain NEOs	RN, French, German, Italian
1939 China landings	RN, French

a. USN=U.S. Navy; RN = Royal (British) Navy.

Why this extensive record, despite the lack of formal military alliances?

First of all, these are mostly SSC interventions in what would later be called the third world. The United States had few compunctions about joining forces with like-minded European commercial powers to maintain order in Asia, Latin America, the Mediterranean, and the Pacific. Formal alliances, however, generally applied to relationships among great and secondary powers. As such, the United States shied away from them.

Second, multilateral naval cooperation in the third world was relatively easy. The operations were fairly simple and straightforward. No elaborate exercises or games or other coordinating preparations were needed. A few conferences to compare signalling procedures and rules of engagement and to de-conflict operations were usually all that was needed.

Third, cooperation was chiefly with the Royal Navy, which usually took the role of senior member of the coalition. That navy had in fact been the “policeman of the world” for much of the period in question. Until the 20th century the U.S. Navy was normally a coordinatee rather than a coordinator of ad hoc naval operations.

Fourth, naval officers often feel comfortable in dealing with naval officers with other nations, feeling that there are naval “cultural” similarities that ease cooperation.<sup>75</sup>

The lack of formal command organization structures was easily surmounted in these operations.

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75. On this point, see COL Anthony J. Rice (British Army), “Command and Control: The Essence of Coalition Warfare,” *Parameters* (Spring 1997), 165-166; and Air Marshal Roger H. Palin RAF (Retired), *Multi-National Military Forces: Problems and Prospects*, Adelphi Paper #294, (Oxford (UK): Oxford University Press for the International Institute for Strategic Studies, April 1995), 52-55.

### Implications

Ad hoc coalitions at sea for SSCs and OOTW have historically been as much the rule as the exception. We can expect this to continue: First, they're *useful*, both politically and militarily. Second, they're *easy*.

**Utility:** Navies combine for operations for two chief sets of reasons: *political reasons* and *military reasons*.<sup>76</sup> Indeed, most of the benefits of afloat naval cooperation are usually political. Naval cooperation can make coalitions for SSCs and OOTW possible, increasing the legitimacy and credibility of the operation.

Occasionally, general or specialized help from particular partners is useful—especially, as in the past, from the Royal Navy. In low-threat but platform-intensive SSC operations and OOTW (such as surveillance and interdiction), the provision of more or less generic surface combatants and maritime patrol aircraft from other nations can reduce the OPTEMPO strain on U.S. assets. Likewise, in dealing with specific at-sea tasks such as mine countermeasures, the specialized assets of certain other navies can be a useful—even a necessary—adjunct to U.S. Navy capabilities.

**Ease:** Also, ad hoc multinational coalitions at sea (including those for operations from the sea) are relatively *easy* for naval forces to put together and implement. Most navies have long histories of such operations and do them naturally. More important, naval forces have relatively few moving parts that need to interact with each other.<sup>77</sup>

Navies coordinate well both at sea and ashore and have little need for elaborate formal command and control structures (unlike armies and

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76. This analysis derives from conclusions laid out in Thomas J. Hirschfeld, *Multinational Naval Cooperation Options*, September 1993 (CNA Research Memorandum 93-44).

77. As long as a ship has a watch-stander who speaks English, that ship can interact with a U.S. Navy vessel streaming alongside it (at least on some level). That level of communications interoperability among two different national army units, however (i.e., only one person between, say, two battalions or brigades who speaks both languages) would doom ground coalition operations.

air forces). During the Cold War, a large and sophisticated library of multinational naval doctrines, tactics, techniques, and procedures was created under the aegis of NATO's naval standardization agencies. These publications were available not only to NATO member navies, but also to many other Free World navies on a case-by-case basis.

With the end of the Cold War, the multinational doctrinal net has been cast even more widely. In 1996 the U.S. Naval Doctrine Command coordinated publication of *Multinational Maritime Operations (MMOPS)*.<sup>78</sup> This doctrine covers many topics in detail, including the organizational command structure options open to multinational navies in carrying out a particular SSC operation or OOTW. The *MMOPS* Pub is supplemented by a series of more than a dozen even more detailed Multinational Maritime Manuals covering procedures for everything from non-combatant evacuation operations to humanitarian operations to maritime interdiction operations to search and rescue.

Multinational naval doctrine and tactics, techniques, and procedures (TTP) are often more highly developed than related joint U.S. doctrine and TTP. Therefore, when ships of different nations get together for SSCs and OOTW, they can readily cooperate and coordinate.

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78. This publication is open to all the world's navies and is available through the Internet (<http://www.ndc.navy.mil>). For the analysis on which the publication was based, see Michael Johnson with Richard Kohout and Peter Swartz, *Guidelines for the World's Maritime Forces in Conducting Multinational Operations: An Analytic Framework*, March 1996 (CNA Research Memorandum 95-119).

## Appendix C: Procurement policy

The design of platforms the Navy buys has normally been driven solely by high-intensity warfighting considerations. Therefore, because the Navy has gotten involved in SSC operations and OOTW, it has principally used these warfighting platforms. Nevertheless, throughout its history, the Navy has usually had to supplement its warfighting platforms with specialized ships optimized for SSC operations and OOTW. In one particular era—the two decades or so after the Civil War—fleet procurement was almost solely driven by SSC/OOTW considerations.

In the following analysis, we extract from the history of U.S. Navy procurement policy different major procurement (or fleet) *models*. These models represent how the fleet was outfitted and what kind of ships were built, with regard to SSC operations and OOTW, as opposed to warfighting. The models, in turn, were affected by important *variables* in the Navy's *environment*. More important, they reflect the changes occurring in the Navy's *technology*.

### Models

We can discern at least four major models for procurement, in regard to SSC operations/OOTW and warfighting:

- Model I: Mostly warfighting platforms, supplemented by a few specialized SSC/OOTW ships. Both used for SSC/OOTW.
- Model II: Two separate fleets with two different kinds of hardware
- Model III: Mostly platforms designed for SSC operations/OOTW
- Model IV: One fleet, designed for warfighting and used for warfighting.

Figure 2 in the main text shows how these models can be assigned to the different eras used in the paper.

### **Model I: Mostly warfighting platforms, supplemented by a few specialized SSC/OOTW ships. Both used for SSC/OOTW.**

The vast bulk of the fleet in this model is designed for war, with some purpose-built SSC/OOTW ships available. This was true of the Navy's earliest period, the Cold War Navy, and the Navy of today.

The frigates, sloops, gunboats, and (later) men-of-war of the early sailing Navy were purchased solely with major global and theater warfighting in mind—against Britain, France, and the Barbary States. They were kept busy at it for the first quarter-century of U.S. naval history. During this period, except for some Gulf Coast gunboat excursions against insurrectionist smugglers, slavers, and pirates, they conducted little in the way of SSC operations and OOTW.

After 1815, these warfighting ships became the core of a Navy now embarked on a variety of far-flung SSC/OOTW tasks. Constructed for long sea-cruises as commerce raiders, the frigates and men-of-war became useful for the extended distant overseas cruises required of the 19th-century OOTW Navy. The workhorse of the 19th-century cruising navy, however, was the sloop-of-war, roughly analogous to today's destroyer.<sup>79</sup> They were supplemented by Station Ships—ships optimized for OOTW.<sup>80</sup>

The Cold War Navy was likewise a Navy with mostly war fighting platforms, but it included several specialized platforms optimized for SSC/OOTW, including MIDEASTFOR flagships, the specialized surveillance ship USS *Sphinx*, and USS *Whidbey* (a hospital survey ship that operated in Trust Territory of Pacific Islands).

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79. For descriptions of these ship types, including analogies with Cold War era warships, see *Dictionary of American Fighting Ships*, Vol. IV (Washington, DC: Navy Department, Office of the Chief of Naval Operations, Naval History Division, 1969), 608-615.

80. These will be discussed in more detail later.



Like the early sailing Navy, the 340-ship/4,500-aircraft Navy of the post-Cold War era comprises almost exclusively warships designed for high-intensity naval warfare. (An exception is the Cyclone class of Coastal Patrol ships, in some ways analogous to the Jeffersonian gunboats of the early 19th century). Because of the flexibility and legs built into them as warships, these platforms have been pressed into service to conduct a variety of OOTW operations, such as NEOs and humanitarian assistance operations. This has been especially true of the amphibious ships, but also of Navy helicopters and maritime patrol aircraft.<sup>81</sup>

### **Model II: Two separate fleets with two different kinds of hardware**

During the interwar period, warfighting was the province of the U.S. Fleet and OOTW the province of separate squadrons—the Asiatic Fleet, the Special Service Squadron in the Caribbean, and certain small squadrons in Europe. Ships and aircraft built for the U.S. Fleet were high-intensity warfighting platforms, while the Asiatic Fleet and the Special Service Squadron included many ships designed from the keel up as OOTW ships.

This was especially true of the Asiatic Fleet's gunboats, the most famous of which were *Panay* and the fictional *San Pablo* ("The Sand Pebbles"); and the two big "gunboats" of the Special Service Squadron, mounting large-caliber 6-inch cruiser-type guns.<sup>82</sup>

### **Model III: Mostly platforms designed for SSC operations/OOTW**

This model characterized the U.S. Navy for more than two decades after the Civil War. The Navy Department deliberately

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81. The use of U.S. Marine Corps units in SSC operations, usually operating off amphibious ships, has grown steadily for at least the last 20 years. The data and analysis are in Stephen J. Guerra, *Responses to Harm's Way and Humanitarian Situations by Naval Forces, 1990-1996*, November 1997 (CNA Research Memorandum 97-100).

82. USS *Erie* (PG-50) and USS *Charleston* (PG-51) were the largest U.S. Navy gunboats ever built. For descriptions of their systems and operations, see A.D. Baker III, "Historic Fleets," *Naval History* (November/December 1997), 55.

decommissioned the bulk of its Civil War warfighting fleet, leaving only a motley assortment of disparate ship types capable of cruising to distant stations, showing the flag, exploring, occasionally conducting operations in the third world, and little else. If the United States had gone to war against a major naval power—considered an unlikely event (accurately, in retrospect)—the U.S. fleet was to be used for commerce-raiding. This was considered a sufficient mission capability in a high-intensity war.

This was a navy that even on occasion actively discouraged technological innovation, deeming it unnecessary for a navy whose mission was long-distance (and economical) SSC operations and OOTW. Thus, Admiral David Dixon Porter and others continued to opt for sail and strategic endurance rather than steam and tactical mobility (and wood rather than steel) long after Britain, France, and other naval powers of the day had begun deploying fleets of modern warships.<sup>83</sup>

This era ended as changing domestic and world conditions and the doctrines of battle fleet engagements led to the replacement of these ships by a brand new steam-driven steel big-gun battle fleet capable of high-intensity warfare against the leading naval powers of the day.

#### **Model IV: One fleet, designed just for warfighting and used for warfighting**

During times of total war the Navy has swung almost exclusively to a solely warfighting fleet. These times include the Civil War and World War II. The country needed warships to fight enemy fleets at sea and support operations ashore, and built and maintained fleets accordingly. The most significant difference between this model and Model I is that in this model any ships originally built for SSC operations

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83. A provocative analysis is Elting Morison, *Men, Machines and Modern Times* (Cambridge: MIT Press, 1966), Chapter VI: "Men and Machinery," 98-122. An equally provocative rebuttal is Lance C. Buhl, "Mariners and Machines: Resistance to Technological Change in the American Navy, 1865-1869," *Journal of American History*, 61 (1974), 703-727.

and/or other OOTW are converted quickly to warfighting purposes or discarded.

## Variables important to SSC/OOTW

Successful SSC operations or OOTW from sea-based platforms often require at least three things:

- Ship-to-shore movement—the ability to move combat power, equipment, and supplies from the ship to the shore and inland
- Sustainability—the ability to loiter for long periods of time on station in order to prepare or be available to support national objectives
- Communications—the capability to obtain the authority to successfully complete the mission and connect with other actors both in the United States and in the area of operations.

Typically U.S. Navy warships are built to meet these requirements. However, the rationale used in the procurement of these systems is usually high-intensity warfighting.

### Ship-to-shore movement

#### Pre-World War II improvisation

In general, there were no U.S. Navy purpose-built systems for ship-to-shore movements prior to World War II. Amphibious systems were always improvised. Ships' boats carried Navy and Marine landing parties ashore for 19th-century SSC operations and OOTWs. Army-converted or -hired transports carried Army troops when large masses of ground forces were required.

For the landings at Vera Cruz during the Mexican War, a U.S. Navy officer designed three sizes of expendable "surf boats" for Army troops to use in debarking from Army transports, which were themselves converted merchantmen.<sup>84</sup> During the Civil War, Union General Ambrose Burnside's Amphibious Division made its 1862 assault on the North Carolina coast in a hodge-podge assortment of vessels taken up from trade.<sup>85</sup> The U.S. Navy did not even commission its

first transport—let alone amphibious ship—dedicated to carrying Marines until 1916 (USS *Henderson*). (Of the 182 new ships authorized during the great U.S. Navy buildup of 1904-15, *Henderson* was the lone transport).<sup>86</sup>

### The World War II revolution

The progress made between the two world wars by the U.S. Marine Corps regarding ship-to-shore movement as part of amphibious *doctrine* has been well chronicled.<sup>87</sup> Nevertheless, the beginning of World War II found the Navy with little in the way of ship-to-shore *systems*. A few specialized transport and cargo ships appeared, but it was a motley collection of launches, lighters, and experimental boats of all kinds that had brought Marines in to the beach in interwar exercises. Finally, the shallow-draft “Higgins Boat,” first used experimentally in 1938, was modified and adopted for widespread fleet use. This was the first Landing Craft, Vehicle, Personnel (LCVP), not introduced in the fleet until 1941. The Roebling “Alligator”—the first tracked amphibious Landing Vehicle, Tracked (LVT)—was likewise not introduced until 1941.<sup>88</sup>

84. COL John Fleming Polk, USA (Ret.), “Vera Cruz, 1847,” in LtCol Merrill L. Bartlett, USMC (Ret.) (ed.), *Assault From the Sea: Essays on the History of Amphibious Warfare* (Annapolis, MD: Naval Institute Press, 1983), 74-78.

85. Robert W. Dalty, “Burnside’s Amphibious Division, 1862,” in Bartlett, *Assault from the Sea*, 88-94.

86. Col James H. Alexander, USMC, “Roots of Deployment—Vera Cruz, 1914,” in Bartlett, *Assault from the Sea*, 133-141.

87. See especially Barry P. Messina, *Development of U.S. Joint and Amphibious Doctrine, 1898-1945*, September 1994 (CRM Research Memorandum 94-103).

88. Henry I. Shaw, Jr., *Opening Moves: Marines Gear Up for War* (Washington, DC: U.S. Government Printing Office, 1992).

The war changed everything.<sup>89</sup> Whole new classes of amphibious ships and craft, revolutionary in design, were built and deployed, often in astonishing numbers. These included: Landing Craft, Mechanized (LCM) and the larger ocean-going Landing Ship, Tank (LST). Then came the Amphibious Force Command Ship (AGC) (more on this below), a floating headquarters ship for command coordination of landing operations, and the Landing Ship, Dock (LSD), a large seagoing ship fitted with a roomy well deck that could be flooded and pumped dry as desired.

Up until 1942, the U.S. Navy had deployed no specialized amphibious ships, and only a handful of transports. By 1945, the U.S. Navy deployed over 2,500 amphibious ships of all types.

### **The reason**

The major barrier to building an amphibious force before 1941 lay in political decisions by the Executive Branch and the Congress to focus the most important ship-building programs on warships, not auxiliaries (as transport shipping was considered at the time).<sup>90</sup> The Navy had assumed that it could create an amphibious transport force by quickly converting merchantmen and liners to military service. Not only did the Navy implement this policy in the early days of the war (creating a fleet of APAs and AKAs), but it was also able to fortuitously live off British warship design ingenuity. The radically original LCM, LST, and LSD were all British inventions.<sup>91</sup> The amphibian tractor (LVT) was the only truly novel American design. Moreover, these ship

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89. For details on the transition, see VADM George C. Dyer, USN, "Naval Amphibious Landmarks," U.S. Naval Institute *Proceedings*, 92 (August 1966), 50-60.

90. The thesis is from Allan R. Millett, "Assault from the Seas: The Development of Amphibious Warfare Between the Wars," in United States Naval Academy Department of History, *Readings in American Naval Heritage* (New York: American Heritage Custom Publishing, 1997), 145-180.

91. A summary is in Col Don P. Wycoff USMC (Ret.), "Let There Be Built Great Ships," U.S. Naval Institute *Proceedings*, 108 (November 1982), 51-57.

types could be built en masse and quickly—far more quickly than a battleship, an aircraft carrier, or a cruiser.<sup>92</sup>

### **Cold War sophistication**

Following World War II, revolutionary amphibious ship-to-shore systems continued to be designed and deployed, although scarcely in the numbers that characterized World War II. These included the Amphibious Transport Dock (LPD) (introduced in 1965), a further development of the basic LSD design. Also, with the introduction of the helicopter into amphibious operations and the development of vertical envelopment amphibious doctrine, they included a series of new straight-deck air-capable amphibious assault ship classes: the LPH (1955), the LHA (1976), and the LHD (1989).

Most of the impetus for the development of ship-to-shore systems during World War II and the Cold War came from requirements for the conduct of amphibious warfare, especially during high-intensity conflicts. Nevertheless, these systems were easily adaptable to a wide range of SSC operations and OOTW. As was the case with most capabilities developed for naval forces, the amphibious capability of projecting power ashore also allows military force to be used in direct attack on enemy centers of power (as in forcible entry or *coup de main* operations) as a way to reinforce forces operating ashore, or to move men and material across water and onto the littoral when circumstances (such as natural disasters) prevent them from using ground or air movement.

### **A post-Cold War revolution?**

Towards the end of the Cold War, Marine Corps planners foresaw a new stage of ship-to-shore movement: “ship-to-objective maneuver.”<sup>93</sup> This new operational concept was designed to eliminate the need to unload men and equipment on the beach and to re-form the landing

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92. The Army also had gotten into the amphibious ship-to-shore procurement business in 1940, but got out of it again in mid-1943, when exclusive responsibility for landing ship and craft procurement and operation was given to the Navy. See David H. Glover, *U.S. Army Ships and Watercraft of World War II* (Annapolis, MD: Naval Institute Press, 1987), 149-154; and Dyer, “Naval Amphibious Landmarks.”

force as an air-ground maneuver force. Instead, Marines would maneuver from offshore platforms directly to their objective area—sometimes far inland. This necessitated the continued development and fielding of at least three new systems with ranges vastly longer than those of their predecessors. These were the Landing Craft (Air Cushion) (LCAC), introduced into the fleet in the mid-1980s; the V-22 tilt-rotor Osprey aircraft, which will enter the fleet in 2001; and the Advanced Amphibious Assault Vehicle (AAAV), which will enter the fleet in 2004.

Why are these needed? To enable the Marines to move much faster to their inland objectives, with greater flexibility of maneuver, avoiding enemy strong points, and without the drag and vulnerability of building up supplies and formations on the beach.

These new systems had been originally designed principally for amphibious operations incident to the Maritime Strategy and other Cold War concepts of operations. Today they are touted as being essential to the amphibious and expeditionary conduct of both future Major Theater Wars and future SSCs and OOTW.

### **Conclusions**

World War II was a major break-point. During the war, the Navy moved from low-tech ad hoc ship-to-shore systems to sophisticated and specialized systems. The Navy had *jury-rigged or ignored ship-to-shore systems* throughout its entire history up until World War II. Then, at Marine Corps urging and with the British example, the U.S. Navy developed a variety of *specialized systems* during the war, then refined them in a series of follow-on post-war designs and added *vertical envelopment helicopter and VSTOL aircraft platforms* as well. Today the Navy is sorting out how it will support the Marine Corps in implementing the “Ship-to-Objective Maneuver” and “Operational Maneuver from the Sea” concepts.

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93. The overall post-Cold War U.S. Marine Corps operational concept is styled “Operational Maneuver from the Sea(OMFSTS).” It was widely distributed as an insert to the *Marine Corps Gazette* (June 1986). The subordinate “Ship-to-Objective Maneuver” concept was publicized in a later *Marine Corps Gazette* insert (November 1997).

Originally, ship-to-shore systems were minimally militarized versions of civilian ships and craft—Commercial Off The Shelf (COTS) systems in today’s parlance. Useful principally simply as transports, they lacked specialized or sophisticated capabilities that would enhance their capabilities to quickly and efficiently operate across the entire range of military activities—OOTW, SSC operations, or mid- and high-intensity war. Today’s third- and fourth-generation purpose-built ship-to-shore systems, which are highly specialized and sophisticated, are far more capable of conducting the entire range of military operations. But they are also far less capable of being slapped together in a heartbeat.

For future SSC missions, the Navy and Marine Corps will have to decide whether what are essentially military systems can meet the requirements imposed by certain kinds of SSC. If substantial, long-term ship-to-shore movement capability is required—for example, for sea-based forces—then specialized capabilities may also be required.

## Sustainability

One constant since the beginnings of the U.S. Navy has been the need for sustainability, i.e., for strategic mobility or “legs.” This requirement has transcended specific missions and eras. Whether the job has been was to wage high-intensity war on the high seas, to project power ashore, to intervene in the third world or just to show the flag, U.S. Navy ships are usually expected to be able to traverse long sea distances and to maintain themselves on station for long periods of time. The Navy has been “Forward. . . ‘From the Start.’” It has been configured for distant forward operations from the get-go, both for war-fighting and SSC/OOTW. Both have been seen as necessitating legs in USN ships.<sup>94</sup>

By building legs into its ships, the U.S. Navy also has built flexibility. The same late 18th-century frigate useful for global commerce

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94. There have been some exceptions: the Jefferson-era gunboats, Civil War and post-Civil War monitors, late 19th-century torpedo boats, early 20th-century coastal submarines, and World War I and II coastal patrol vessels.



raiding was also suitable for flagship duty in the Mediterranean or off Brazil. Likewise, the same amphibious ships necessary to invade Japanese-held islands in the Pacific in the 1940s would be useful for evacuating refugees from North Vietnam to the South a decade later. Today, the U.S. Navy deploys carriers that can launch high-intensity air strikes from the sea when in-theater bases for the U.S. Air Force are hard to come by.<sup>95</sup> These same carriers can also enforce no-fly zones and sanctions, and conduct other SSC operations. These carriers and other warships are supported by an at-sea underway replenishment capability that greatly multiplies their endurance. And the carrier force continues to inexorably move toward reliance solely on nuclear propulsion.

### Early Navy

In the Age of Sail, regarding strategic mobility, what worked for U.S. Navy warfighting also worked for SSC operations and OOTW. During America's early wars at sea, operations were conducted off the United Kingdom, in the Mediterranean, in the Caribbean, and throughout the North Atlantic (and even once in the Pacific).<sup>96</sup> (This at a time when the nation possessed neither a Gulf Coast nor a Pacific Coast.) The fleet needed sustainable frigates and sloops-of-war.

Following the end of those wars and the setting up of the distant stations, the need for sustainability remained. Even with the invention of the steamship in the early 19th century, U.S. Navy warships were mostly sail-equipped to enable them to deploy great distances at modest cost.<sup>97</sup> Wooden sailing ships did not need modern dockyards for repairs or coaling stations for replenishment.

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95. See Adam B. Siegel, *Basing and Other Constraints on Land-Based Aviation Contributions to U.S. Contingency Operations*, March 1995 (CNA Miscellaneous Paper 178).

96. The Quasi-War with France, the Barbary Wars, and the War of 1812.

97. On the slowness of the U.S. Navy's introduction of steam propulsion, see CAPT Edward L. Beach, USN (Ret.), *The United States Navy: 200 Years* (New York: Henry Holt and Company, 1986), Chapter VI: "The Slow Advent of Steam."

Note that both warfighting and SSC operations /OOTW required great individual ship *strategic mobility* but less in the way of *tactical mobility*. The U.S. Navy did not maneuver in large (or even small) tactical units until late in the 19th century.

### **The Civil War and its aftermath**

Issues of sustainability and cost were critical to the Navy's procurement decisions in the mid to late 19th century. This Navy was a cruising Navy, and valued strategic over tactical mobility. Steam therefore was introduced very slowly into the U.S. fleet.

The Civil War, however, changed things a bit. The Confederacy was not all that far away from the rump of the United States from which it had separated. The principal U.S. Navy requirement was for blockaders, amphibious transports, and a riverine fleet. The Secretary adamantly held off most pleas to send ships off on anti-Confederate commerce raider missions.

Strategic mobility and endurance were important in the early blockade, but the whole purpose of the littoral amphibious operations conducted all through the war was to provide close-in bases for the blockaders in their efforts to shut down the Confederate seaports. To carry out its operations, the Union fleet became populated with high-intensity warfighting vessels that were heavy with armor and coal-fired steam plants but has a very short unrefueled cruising radius.

After the war the Navy faced a dilemma: What kind of ships to build? It decided to ignore its experience with advanced steam engines and armor, and to eschew tactical for strategic mobility. Consequently U.S. Navy warships of the period, which conducted no mid- or high-intensity warfighting operations and a decreasing number of SSC operations and OOTW, were still sail-equipped.

### **Stations, bases, and places: Back to the future?**

U.S. Navy 19th-century forward-deployed cruising squadrons weren't totally self-contained entities. They relied on forward foreign shore support for food, water, repair, and replacement items—even crewmen. Usually there was a warehouse or two leased by the U.S. Navy in some port in the region.

Often the U.S. Navy could rely on use of local dockyards and the services of local naval stations, as well as its own depots: The Africa Squadron, for example, kept a supply base at Porto Praya in the Cape Verde Islands. The Brazil—later South Atlantic—Squadron was supported from a warehouse in Rio de Janeiro. The Squadron also had use of the Brazilian Navy dry-dock and arsenal. The Mediterranean Squadron maintained a facility at Port Mahon in the Balearic Islands. (In fact, when the Spanish withdrew U.S. Navy privileges at Port Mahon in 1846, the Mediterranean Squadron had to be temporarily withdrawn.)

With the U.S. acquisition of a small overseas empire, the U.S. Navy developed a small overseas base network in Cuba, Puerto Rico, Panama, Hawaii, Samoa, Guam, and the Philippines. These were added to by an enormous base network during World War II. The Cold War overseas base network, while nowhere as extensive as that developed during the war, was still quite large. It has shrunk in the post-Cold War era, but still has globe-girdling major nodes in Cuba, Puerto Rico, the United Kingdom, Spain, Italy, Greece, Bahrain, Diego Garcia, Japan, and Guam.<sup>98</sup>

With the end of the Cold War has come a new emphasis on “places not bases,” symbolized by the extensive U.S. Navy access to foreign civilian and military shore facilities in the United Arab Emirates and Singapore. These have more than a little similarity to the warehouses in Brazil and the Balearics that started U.S. Navy forward logistics support over a century and a half ago.<sup>99</sup>

### **Station ships**

Overseas stations also often had station ships. These were U.S. Navy auxiliaries that stayed forward in-theater, usually at one port, and

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98. For an analysis of the U.S. Cold War base structure and its future, see James R. Blaker, *United States Overseas Basing: An Anatomy of the Dilemma* (New York: Praeger, 1990).

99. For a related analysis of future basing and access in the Pacific, see Gregory N. Suess et al., *Strategic Vision for the Pacific Fleet: Challenges, Opportunities, and Strategies for the Future*, August 1997 (CNA Research Memorandum 97-52).

provided a secure U.S. national platform to store high-value supplies and provide flagship spaces. When the squadron was away—or abolished, as was the case in the Mediterranean after 1905—the station ship *was* the U.S. forward naval presence and OOTW capability in the area.

A good example was USS *Scorpion*. Built as a steel and steam civilian yacht, she was taken over by the Navy during the Spanish-American War, during which she performed dispatch (communications) and coastal patrol duties. After a stint as a Caribbean gunboat, she was ordered to Constantinople in 1908, where she remained as a U.S. Navy station ship off and on for almost 30 years—until 1927. During that time she conducted a variety of OOTW, including humanitarian assistance operations (HAO) after earthquakes in Sicily and then Turkey; prisoner of war and refugee assistance; and service as flagship for the U.S. High Commissioner to Turkey.<sup>100</sup>

The demise of the forward stations and the development of underway replenishment brought with them the demise of the station ships. The concept of the station ship did not completely disappear from the Cold War or post-Cold War navies, however. There are at least three examples: The Northern European Force station ship at Plymouth, England, from 1946 to 1956; the MIDEASTFOR flagship based at Bahrain from the late 1940s through the late 1980s; and the submarine tender stationed at La Maddelena, Sardinia, from the 1970s to the present day.

### **Battle fleet mobility**

The decision to build a coal-fired, armored, big-gun battle fleet meant a decision to build up *tactical* mobility at the expense of *strategic* mobility.<sup>101</sup> The new battleships and even cruisers of the period were not

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100. "Scorpion," *Dictionary of American Naval Fighting Ships*, Vol. 6 (Washington, DC: Navy Department), 385.

101. They also represented an abandonment of the battle fleet (and individual ship) tactics of the Age of Sail. Instead of *boarding parties* of sailors and Marines capturing enemy warships after the enemy battle line had been broken, combat at sea would now be decided by concentrated *gunnery* (or, on occasion, by torpedoes or mines).

well suited for distant cruising, whatever their strengths as fighting fleet elements. The abandonment of overseas stations in the early 20th century thus had technological as well as environmental roots (as did the digging of the Panama Canal).

That decision to go for a high-end battle fleet has never been rescinded. For the first half-century after the decision was made, the U.S. Navy would operate one of the world's most potent battle fleets; for the second half-century its battle fleet would reign supreme at sea.<sup>102</sup>

But the United States was a long way from the other great powers. If it were to fight a high-intensity war at sea or from the sea against any of them, it needed reach. For a coal-fired fleet, reach meant a global network of coaling stations. A nation such as the United States that did not have many colonies would always be dependent on others for coaling. The solution for the U.S. Navy was, first, to build colliers to accompany the fleet; second, to build colliers that could actually replenish warships while underway; and third, to abandon coal altogether in favor of oil.<sup>103</sup>

### **Underway Replenishment**

The experience with colliers then led naturally to thoughts of underway oil refueling, and in 1917 the fleet oiler USS *Maumee* conducted the first underway refueling of warships—a destroyer squadron on its way to Europe to participate in World War I.<sup>104</sup> Underway Replenishment (UNREP) became a central concept of U.S. Navy thinking.<sup>105</sup>

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102. The place of sustainability and strategic mobility within the larger technological framework of modern naval operations is explored in Karl Lautenschlager, *Technology and the Evolution of Naval Warfare*, (Washington, DC: National Academy Press, 1984).

103. The story is in John H. Maurer, "Fuel and the Battle Fleet: Coal, Oil, and American Naval Strategy, 1898-1925," *Naval War College Review* XXXIV (November-December 1981), 60-77.

104. For the development of the fleet oiler concept, see Tom Wildenberg, *Grey Steel and Black Oil: Fast Tankers and Replenishment at Sea in the U.S. Navy, 1912-1995* (Annapolis, MD: Naval Institute Press, 1996).

Before and during World War II, however, UNREP meant *only refueling*. Transfers of all other commodities to warships still demanded at minimum a protected anchorage. It was not until February 1945 that the first ammunition was transferred at sea. For the 1945 attacks on the Japanese Home Islands, however, an Underway Replenishment Group of 38 ammunition ships, supply ships, and oilers was constituted to replenish the 15 carriers and 85 other combatant ships of the Fast Carrier Task Force.<sup>106</sup>

*UNREP made possible the deployment pattern for the post-war forward numbered fleets.* While forward bases for the fleet remained useful and important things to have, they were now not *necessary* for fleet operations. An integrated network of forward bases, usable port facilities, forward-based tenders and UNREP enabled the U.S. Navy to conduct nuanced forward SSC operations and OOTW throughout the Cold War era. The nuance was important. A nation that had no problem transferring fuel to U.S. Navy warships pierside might look askance at transferring missiles. A nation that might have no problem allowing a COD or VP aircraft to fly from its airfields might never allow fighters or attack aircraft in.

The Navy developed the capability to conduct a wide variety of forward SSC operations and OOTW using a mix of logistic arrangements. Throughout, however, the real and potential capabilities of underway replenishment were the linchpin of the forward fleet logistic support concept.

A generation after World War II, the U.S. Navy refined its underway replenishment concept of operations still further. Two changes in

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105. For an overview of the U.S. Navy experience with underway replenishment, see Marvin O. Miller, "Standby for Shotline," U.S. Naval Institute *Proceedings* (April 1985), 75-79. For more detail, see Marvin O. Miller, John W. Hammett, and Terence P. Murphy, "Development of the U.S. Navy Underway Replenishment Fleet," in *Underway Replenishment of Naval Ships* (Port Hueneme, CA: Naval Surface Warfare Center, 1992), 3-50.

106. Miller et al. "Development of the U.S. Navy Underway Replenishment Fleet," 9.

particular were important: By the 1960s, the fleet was employing both multi-product replenishment ships (AOEs and AORs) and helicopter replenishment (VERTREP).

### **Nuclear power**

Meanwhile, in the 1950s, nuclear power had been introduced into the fleet. Nuclear power freed the Cold War Navy from having to consider refueling requirements for many of its deployed carriers, submarines, and cruisers.

### **Maritime prepositioning and sea-basing**

In the 1970s the Navy—with great urging from outside the service—began to deploy maritime prepositioning ships loaded with equipment for designated Army, Marine, and Air Force units. The personnel of these units would be airlifted in to a designated area by airlift, and there marry up with their equipment. The implementation of this concept greatly added to the range of possible contingencies these units could be used and sustained for—especially high-intensity warfighting but also, potentially, SSC operations and OOTW.

Strictly speaking, these are not warships, as they are manned by civilian crews. But they have greatly changed the nation's projection force sustainability posture.

From the maritime prepositioning ships (and the carriers, UNREP ships and amphibious ships) it is a small leap of the imagination (for some) to mobile offshore bases (MOBs) and “sea basing.” Their potential has been debated for years.

Since most SSCs take place ashore, sea basing, whether on stationary bases or ships, is one of the ways naval forces can be drawn into direct participation in the SSC mission.

### **Conclusions**

For almost a hundred years the U.S. Navy conducted forward SSC operations and OOTW around the world through a combination of rotating sail-and-wood cruisers, station ships, small shore establishments, and friendly relations with local navies (enabling them to use their facilities). With the advent of the tactically mobile but

strategically short-legged turn-of-the-century battle fleet, the U.S. Navy almost lost its ability to conduct extensive SSC operations and OOTW forward. Oil power and underway re-fueling, however, gave the fleet back much of its lost strategic sustainability.

This strategic sustainability has been enhanced since World War II. The combination of UNREP, nuclear power, and forward shore facility access has enabled the fleet to achieve a level of sustainability and endurance necessary to sustain routinely six-month and longer deployments and sustained at-sea periods. This enables the fleet to conduct sustained distant operations across the warfare spectrum, including SSC operations and OOTW. It also enables the fleet to station itself in likely areas of potential operational requirements—such as the Mediterranean, Persian Gulf, and Western Pacific hubs of the late Cold War and post-Cold War period.

## Communications

### Before radio

Changes in naval communications technology have affected the U.S. Navy's ability to conduct SSC operations and OOTW.<sup>107</sup> Sometimes they have enhanced that capability, but sometimes they have rendered whole categories of SSC operations or OOTW operations obsolete.

Prior to the late 19th century, transportation dictated the pace of communications. That is, communications traveled only at the speed of horses, ships, and—later—trains. U.S. Navy commanders normally left the United States with general written orders from the Secretary of the Navy or Secretary of State. After that they were on their own, especially regarding “protecting national interests”—i.e., the employment of force in SSC operations.

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107. For a good short overview of the changes through World War II, see RADM Bern Anderson, USN (Ret.), “The Impact of Rapid Communications on the Employment of Naval Forces,” U.S. Naval Institute *Proceedings* (November 1951), 1157-1167.



Occasionally naval officers of the period stepped over the bounds of their countries' foreign policy; however, governments recognized the independent nature of the distant station assignments, and were usually tolerant of such actions.<sup>108</sup>

With the advent of the trans-continental telegraph (1861) and the transoceanic underwater cable (1866), the freedom of action of forward-deployed naval commanders began to be curtailed. Commanders could now receive information and instructions whenever they put into a port with a telegraph office, no matter how far it was from Washington. More important, diplomats and consuls ashore abroad were now better informed of government wishes than were afloat naval officers arriving from home.

One casualty of this communications revolution was what had once been a centerpiece of OOTW: the use of naval officers and naval warships for the nation's diplomacy. Commodore Robert Shufelt's expedition to Korea in the early 1880s was to be the last independent major treaty-making evolution by a U.S. naval officer.

### **Radio**

This curtailed freedom of action—in SSCs, OOTW, and war—accelerated with the institution of radio in the early 20th century.

Unlike the institution of steam engines, radio entered the fleet quite rapidly.<sup>109</sup> Tested in 1898, it began to be installed in 1903, when it was also used for the first time in tactical maneuvers. In 1904 the Navy launched its first radio-communications system, consisting of 20 shore stations and 24 ship-board installations. In 1906 it was used in its first

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108. A celebrated example of naval officers interpreting "protecting national interests" too liberally is the U.S. Navy occupation of Monterey in (Mexican) California while the U.S. and Mexico were at peace. For other examples, see *ibid.*, 1158-1160.

109. For a detailed criticism arguing that this wasn't nearly fast enough, see Susan J. Douglas, "Technological Innovation and Organizational Change: The Navy's Adoption of Radio, 1899-1919," in Merritt Roe Smith (ed.), *Military Enterprise and Technological Change* (Cambridge, MA: The MIT Press, 1985), 117-173.

naval HAO: After the San Francisco earthquake, USS *Chicago* provided the only reliable means of rapid communications between the city and the outside world. The first transmissions from a Navy aircraft to a Navy ship and from a Navy submarine were in 1912.

By 1914 radio was a reliable medium of communication and was in general use throughout the fleet.<sup>110</sup> Its use in the SSC operations and OOTW of the period was widespread.<sup>111</sup> From 1917 through 1920, the Navy even ran all *civilian* as well as naval radio communications in the country.

As radio communications electronics developed, the evolving methods were applied to shipboard communications. The use of high frequency (HF) opened global communications, albeit not always reliably. The use of VHF and UHF provided reliable line-of-sight communications

During and after World War II, naval shipboard communications developed very rapidly and became exceedingly complex. During the period between World War II and the fleet introduction of satellite communications, the Navy relied on MF/HF radio for long-haul communications at sea, VLF for submarines, and land lines between stations ashore. A new globe-girdling system of shore communications was established; one important station was Kagnew Station at Asmara, Ethiopia. In 1973, there were 29 Navy communications stations throughout the world.

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110. A detailed chronology (and much else) is in CAPT Linwood S. Howeth, USN (Ret.), *History of Communications-Electronics in the United States Navy* (Washington, DC: U.S. Navy Bureau of Ships and Office of Naval History, 1963).

111. For a case study of fleet SSC strategic and tactical communications during the 1914 U.S. Navy assault and occupation of Vera Cruz, Mexico, including difficulties, see Jack Sweetman, *The Landing at Veracruz: 1914* (Annapolis, MD: Naval Institute Press, 1968), 44-49.

### Satellites

The Navy's first operational communications satellites appeared in the 1960s. In the mid-1960s the Navy operated the world's first operational worldwide satellite communications system, with six ship and four shore station installations.<sup>112</sup> With the introduction of FLTSATCOM in the late 1970s and subsequent late-Cold-War high-bandwidth, satellite-based, communications capabilities, U.S. Navy communications entered yet another era. Now it would almost be possible for afloat forces to interact with each other and with forces and commanders ashore with the same speed and fidelity as ashore commanders. This opened up possibilities of better tactical and operational situational awareness, with the concurrent possibility of greater oversight from commanders located in the rear. With the advent of video-teleconferencing, the afloat forces can now bridge the gap for images in the same way that radio bridged the gap between telegraph and voice.<sup>113</sup>

### Data links

Meanwhile, in the 1950s, the Navy introduced the Electronic Data System (EDS), its first system employing electronic means for the generation, storage, display, and use of target data and the automatic interchange of such data between component ships of a task force. This system was the forerunner of the Naval Tactical Data System (NTDS), which replaced EDS in the 1960s.

Data link architectures continued to evolve with the introduction of synthesized operational links (JOTS, JMCIS) and joint tactical links such as JTIDS.

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112. For this and other milestones in naval communications development, see Louis A. Gebhard, *Evolution of Naval Radio-Electronics and Contributions of the Naval Research Laboratory* (Washington, DC: Naval Research Laboratory, January 1976).

113. For a discussion of how video-teleconferencing has changed command and control, see ADM Paul D. Miller, USN, *End of Tour Oral History Interview* (Norfolk VA: Headquarters, Commander in Chief, U.S. Atlantic Command, Office of the Command Historian, December 1997), 11-12.

### Command and control platforms

Navies have always had flagships. Typically, one of the largest warships in a squadron or fleet was outfitted with extra offices, meeting rooms, and, later, communications equipment, to enable the commander on board to direct the activities of other ships.

During World War II, however, the British introduced the concept of a radio-rich dedicated amphibious command ship—the AGC—whose sole responsibility was the direction of complex amphibious operations.<sup>114</sup> The U.S. Navy converted its first AGC in 1943, and by the end of the war had more than 18 AGCs.<sup>115</sup>

The AGC was considered such an important and sensitive innovation that the very existence of this type of ship was not announced until after the end of the war. It was truly one of the war's "secret weapons."

During the early and mid-Cold War eras, the Navy deployed five of their World War II era AGCs as *amphibious* command ships, while using large heavy cruisers as *fleet* flagships. Only two new AGC replacements were commissioned during the Cold War: the LCCs *Blue Ridge* (1970) and *Mount Whitney* (1971). When the heavy cruiser flagships became too old for service, these LCCs, and two converted LPDs, eventually replaced them as numbered fleet command ships.<sup>116</sup>

114. For detailed descriptions and analyses, see Norman Polmar and John J. Patrick, "Amphibious Command Ships: Past Present & Future" Parts 1 and 2, in *Warship: Volume VI* (Annapolis, MD: Naval Institute Press, 1982), 222-231 and 256-265.

115. In those pre-Goldwater-Nichols Act days, the Army Signal Corps elements assigned to GEN Douglas MacArthur's Southwest Pacific Area deployed their own half-dozen jury-rigged "radio ships" as well, for the New Guinea and Philippines campaigns. The story is in Grover, *U.S. Army Ships and Watercraft of World War II*, 146-148.

116. For a CNA-sponsored analysis concluding the numbered fleet commanders should then have moved ashore, see VADM Ray Peet, USN (Ret.) and Michael E. Melich, "Fleet Commanders: Afloat or Ashore?" U.S. Naval Institute *Proceedings* 102 (June 1976), 25-33. Issues and options as of 1994 are in C. Michael Cornforth, Clifford W. Hansen, and LCDR John J. Costello, USN, *Commander, Second Fleet and Commander, Third Fleet Flagship Study*, May 1994 (CNA Research Memorandum 94-49).

Today, the information environment faced by numbered fleet commanders during SSC operations and OOTW requires access to a diverse set of both tactical and nontactical information. That environment includes:

- Personal relationships with other organizations, often at remote distances
- A diversity of U.S. and foreign, military and civilian participants in operations.
- Naval and other service tactical and operational data.

To operate within this information environment, fleet command ships require both high-bandwidth communications (voice and data) as well as ways of accessing the data wide-area networks (WANs) and databases.<sup>117</sup>

### Conclusions

Communications capabilities for afloat forces have gone through three distinct stages:

- Independence. During the early years of the U.S. Navy, communications moved only as fast as the ships did. Commanders had considerable freedom of action to shape events.
- Dependence. The introduction of radio gave commanders the ability to talk with their superiors and receive orders and guidance. But a lot of information could not flow over the radio. Afloat commanders on distant stations were captive to either their superiors' willingness to delegate, or their superiors' almost assuredly imperfect understanding of the situation they were facing.
- Collaboration. As the bandwidth of communications increases, the ability to share a common understanding of all the available information—forward, in the rear, and ashore—is increasing. This allows forward commanders, their CONUS-based

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117. For elaboration, see McGrady and Swartz, *Pacific Numbered Fleet Warfighting Requirements*.

superiors, and other (perhaps non-military) organizations to work off of a common operational picture when making decisions.

Movement toward collaboration and information sharing is not necessarily a return to the independence of action before radio. But better communications do allow responsibilities and missions to move up and down the chain of command more easily. This could have the effect of expanding the roles of forward commanders, particularly JTF commanders, to include many of the tasks associated with the independent sea captains of the Age of Sail. Examples include factional diplomacy; working with local, regional, and civilian organizations; coordinating relief or rebuilding operations; intimidating through force; and, in a more recent twist, managing the public information flow and perceptions (media).

## Conclusion

One conclusion that falls out of the preceding analysis is that SSCs (or “lower-intensity conflicts”) do not necessarily equate to low technology. “High-tech” and “medium-tech” communications, propulsion, and ship-to-shore systems have great utility in SSC operations and OOTW.<sup>118</sup>

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118. For an argument that this judgment also applies to *precision*—a variable we did not examine here—see Bellamy, “If You Can’t Stand the Heat,” 27.

## Appendix D: Employment policy

### Employment policies past and present

What kinds of SSC operations & OOTW did the fleet actually go forth to conduct?

The simple answer is: All kinds. There is hardly a type of SSC operation or OOTW that the U.S. Navy has not conducted over its history.

Trying to organize these operations into categories or types would overwhelm the reader with detail.<sup>119</sup> Instead we choose to focus on the meaning of various operations for those missions listed in table 1.

Because so much has changed over the years, not every mission the U.S. Navy has done in the past conveniently fits into the typology we use to define contemporary and future SSCs of interest. Modern, joint, operations often subsume large numbers of what used to be distinct missions into one, joint operation. Examples include nation assistance, diplomacy, and limited force. Therefore, it is useful to examine a range of mission in the examples we give here in order to assemble the range of tasks in most modern operations.

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119. Categorizing them is not solely a problem for the Navy or for this paper. On the problems attendant in categorizing OOTW, see Lester L. Gibson, CDR Paul Dunne II, with Peter Swartz, *Prolegomenon to Any Future Naval OOTW Doctrine*, March 1996 (CNA Research Memorandum 95-205); Lester Gibson, "Modeling and Simulation to Support Navy OOTW Acquisition," *Phalanx*, 30 (December 1997), 10-34; and David Fastabend, "The Categorization of Conflict," *Parameters*, XXVII (Summer 1997), 75-87.

## Smaller-scale contingencies

Today's National Military Strategy identifies ten categories of SSC operations. We chose to focus on those listed in table 1 at the beginning of the paper. Even within this limited category, the Navy has been involved in too many operations to list here. Instead we include a sampling of some relevant past SSC or OOTW operations in appendix E. This does not purport to be a comprehensive compilation. It is intended only to be illustrative of the main arguments made in this paper.<sup>120</sup>

## Other OOTW

In addition to SSC operations, the Navy has also been involved in a wide range of other missions, many relating to diplomacy and sovereignty. Because many of the underlying problems behind international interventions in failed states arise from political causes, we also listed a few of the Navy's past operations in appendix E.

One interesting point that can be drawn from the events outlined in appendix E is that in the past the Navy has participated in many missions that would be anathema to modern planners. While this observation is somewhat diluted by the fact that the Navy has participated in almost *every* conceivable mission, some missions are worth highlighting because of their continued relevance. In particular these include *diplomatic, nation-building support, and colonial administrative* missions.

### Diplomacy

Most current operations where significant numbers of U.S. forces become involved have a political component. It may be as complex as the Balkans or as relatively straightforward as Haiti or Panama. In almost every case (including the straightforward ones), some form of

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120. For more detail, see Long, *Gold Braid and Foreign Relations*; Siegel, *The Use of Naval Forces in the Postwar Era*; Guerra, *Responses to Harm's Way and Humanitarian Situations by Naval Forces*; and the references cited in those publications.



negotiation is required in order to obtain the tactical, operational, or strategic conditions for the local commander to do his job.

The Navy has considerable historical experience in facilitating diplomatic solutions to problems. Historical examples range from Commander Robley Evans's bellicosity at Valparaiso, Chile, in 1891 and Rear Admiral Henry T. Mayo's quick umbrage at Tampico, Mexico, in 1914 to Admiral Mark Bristol's scrupulous policy of complete neutrality and delivery of humanitarian aid in Turkey in the 1920s. Due to the institution of ship-to-shore radio communications in the fleet, Mayo was probably the last naval officer to enjoy such discretion that he could both follow his orders and nearly involve the nation in a war without consulting his superiors in Washington.<sup>121</sup> Bristol's career, however, is particularly instructive for today's flag officers.<sup>122</sup>

When Commodore Robert Shufelt signed the treaty with Korea in 1883, that was the last time an active duty naval officer would be called upon to fill such a role. Officers who acted as diplomats in the subsequent era were likely to represent the United States at an international conference, as did ADM William T. Sampson at the Prime Meridien conference of 1884, and Admiral Bristol at the Lausanne Conference 40 years later.

#### **Nation-building support**

The Navy had at least one early experience in what we would today call nation-building: sponsorship of the fledgling Republic of Liberia. In 1821 a U.S. Navy frigate backed up negotiations by the American Colonization Society for a parcel of land in West Africa for the resettlement of freed American slaves. For two years previous, the Americans had been fruitlessly haggling over land on which to erect a settlement. Having finally selected Cape Mesurado as a suitable site,

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121. The contrast is highlighted in James C. Bradford (ed.), *Admirals of the New Steel Navy: Makers of the American Naval Tradition, 1980-1930* (Annapolis, MD: Naval Institute Press, 1990), xvi-xvii.

122. See especially the biography of Bristol by William R. Braisted in *ibid.*, 331-373; and Henry P. Beers, *U.S. Naval Detachment in Turkish Waters, 1919-1924* (Washington, DC: Naval Historical Center, 1940).

the frigate commander and the civilian negotiator approached the local chief to arrange for purchase, but the chief—King Peter—refused. Finally, the commander held a loaded pistol to the chief's head. He signed.

A few years later, American warships helped a local leader to wipe out a notorious local slaving center and keep the shaky colony on its feet. Out of this seed was built the nation of Liberia, which declared its independence in 1847. During the remainder of the 19th century, the occasional visit of an American warship enabled the struggling Liberian government to act decisively against slavers, rebels, and other threats. American cruisers also backed up American civilian representatives charged with helping the Liberian government sort out its problems in 1909 and again in 1915.<sup>123</sup>

### Administration

One man's colonial governance is another's nation building. While the *political* difference between the two is considerable, in many cases the effects, or at least intentions, between colonial administration and what is currently referred to as "nation building" are similar.

While current planners may eschew the entire concept of nation building, past naval officers have made colonial governance or civil occupation a significant part of their careers. As can be seen in the several instances listed in appendix F, the Navy has effectively been the legal governance for some territories for an extended period of time.<sup>124</sup>

Of particular interest is the training the Navy provided for those officers. For example, after World War II the Navy set up a School of Naval Administration (SONA), first at Stanford University and later at

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123. U.S. Navy nation-building support for Liberia is discussed in Peter Duignan and L.H. Gann, *The United States and Africa: A History* (Cambridge (UK): Cambridge University Press, 1984); Russell Warren Howe, *Along the Afric Shore: An Historic Review of Two Centuries of U.S. African Relations* (New York: Barnes and Noble, 1975); and Kenneth J. Hagan, *American Gunboat Diplomacy and the Old Navy, 1870-1889* (Westport, CT: Greenwood Press, 1973, Chapter III.

the Naval Postgraduate School in Monterey.<sup>125</sup> Hundreds of officers and enlisted personnel en route to help govern Pacific islands in the late 1940s were sent through a five-month (later three-month) curriculum that included such blocks of instruction as Comparative Colonial Administration, Military Government, Social Conditions and Problems, Economic Conditions and Problems, and Education and Public Opinion.<sup>126</sup>

## Changing employment policies

This history shows policy changes. How do those changes get effected? What happens during change?

### Readiness questions

Two questions typically come up when discussing contingency operations. Both involve the concept of *readiness*:

- Does Navy involvement detract from readiness for high-intensity war?
- Does readiness for high-intensity war detract from readiness to carry out SSC or OOTW?

### From OOTW to readiness for war

The record says that switching from OOTW to readiness for war hasn't been a great problem. The nation has normally done the right

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124. For an overview of the U.S. Navy experience in military and civil government overseas, see Earl S. Pomeroy, "Colonial Administration by United States Naval Officers," U.S. Naval Institute *Proceedings* 69 (October 1943), 1320-1323; and "The Navy and Colonial Government," U.S. Naval Institute *Proceedings* 71 (March 1945), 291-298.

125. An overview is in LT William H. Hessler, USNR, "Military Government in the Navy," U.S. Naval Institute *Proceedings* 69 (November 1943), 1471-1474.

126. Details are in Richard, *United States Naval Administration of the Trust Territory of the Pacific Islands*, Volume II, Chapter IX; and Volume III, Chapter XV.

thing. That is, it has maintained an SSC/OOTW fleet during eras when it faced little high-intensity warfighting threat, and switched to a high-intensity naval posture itself well before major conflict at sea.

Three times in the 19th century the United States had to put together a high-intensity warfighting Navy out of an OOTW force: in 1846, 1861, and 1898.<sup>127</sup> In two of those instances, 1846 and 1898, earlier war scares had caused some pre-war consolidation and planning to occur, but in 1861 the fleet could not have been more maldeployed or more poorly sized for its coming tasks. Nevertheless, in all three cases successive administrations and Secretaries of the Navy were able to cobble together warfighting fleets sufficient for the purpose of overcoming the enemy—an enemy whose own naval readiness ranged from weak to non-existent.

And they did this pretty quickly. In less than a year after the start of the Mexican War, the U.S. Navy had landed the U.S. Army in Mexico at Vera Cruz with no loss of life. In the Civil War, after a little over a year's fighting, the new Union Navy had imposed a blockade all around the South; seized advance bases on the North and South Carolina coasts, advanced up the Tennessee and Cumberland rivers, and captured New Orleans. At the end of the century, American naval squadrons destroyed Spanish fleets within three months of the start of the Spanish-American war.

In the 20th century the nation has maintained battle fleets dedicated either solely to high-intensity war or with high-intensity war as their main focus. Consequently when war has come, OOTW has not been the reason for any warfighting readiness deficiencies that have existed.

In the case of World War II, by the time war came, the U.S. Navy had already disbanded two out of its three OOTW forces—Squadron 40-T in Europe and the Special Service Squadron in the Caribbean. The

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127. The 1898 case is probably a mixed one: The forward stations were still in place, but the force mix of the fleet was in the midst of changing to emphasize new battle-fleet ship types, and the Atlantic Squadron was becoming a proto-battle fleet.

remaining OOTW force, the Asiatic Fleet, was called upon to stand athwart the routes Japan's main battle fleets took to the Indies—with predictable results. It is no great insight to conclude that an under-sized, over-aged, ill-prepared OOTW force cannot fare well in battle against a main battle fleet centered on capital ships.

In the Cold War, the MIDEASTFOR did not detract from the U.S. Navy's war planning or from its posture to fight in Korea and Vietnam.

### **From readiness for war to OOTW**

The record is less clear going the other way because OOTW vary so greatly from one another. Some examples follow.

#### **Examples**

The super-frigates that fought the early wars against Britain, France, and the Barbary States were not much use in fighting pirates inshore in the Caribbean and the Gulf Coast, but they proved useful indeed for the long voyages to and from the overseas stations set up in the early 19th century.

The big U.S. Navy "74"s of the ante-bellum period, on the other hand, were tried on forward station and found wanting. The Navy laid them up, never to be resurrected, and built ships that better met the requirements of the distant stations.

The powerful river fleets of the Civil War Navy were good for little in post-war OOTW and were quickly abandoned. A force optimized for coastal blockade enforcement and amphibious landings was not the right force for long overseas deployments. Nevertheless, the demands of the post-Civil War OOTW Navy were so minimal that they could easily be met from remnants of the motley blockade fleet and occasional new construction.

Recognizing that the new steel Navy battle fleet ships were ill-suited for specialized OOTW and SSC operations, naval planners at the turn of the century and later invented OOTW/SSC fleets and squadrons to do the job. At the same time this freed up the battle fleets to concentrate on high-intensity warfighting at sea. With a variety of

specialized OOTW/SSC forces available, the Navy's leaders were able to conduct smaller-scale landings, shows of force, and NEOs without causing the rhythm of fleet exercises to be disrupted.

In the post-World War II era, as we have seen, the Navy's leaders asked its numbered fleets to be all things to all men. That is, they each had to be prepared for the full range of naval operations—from OOTW up through (in the Cold War) nuclear war. Thus ships and aircraft had to be able to switch from OOTW to general war *on the same deployment*.

During the Cold War, the Navy generally treated OOTW as a lesser-included case. That is, the Navy generally assumed that if a fleet could handle its missions in a general, global war, it could handle OOTW and SSCs. Thus, for example, amphibious forces trained almost exclusively to assault beaches were used to conduct NEOs (for example, in Indochina in 1955), and to provide hotel and communications services for oil spill clean-up crews (off Alaska in 1990).<sup>128</sup>

#### **Are they ready?**

While the above examples do not *prove* anything about readiness for the SSC/OOTW mission, they do lead to some observations:

- If the goal is to provide essentially military *services* (security, communications, transportation, etc.), then the military can train to military missions with the expectation that they will also be relevant during other operations.

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128. On the amphibious NEO from Vietnam, see RADM Edwin Bickford Hooper, USN (Ret.), Dean C. Allard, and Oscar P. Fitzgerald, *The United States Navy and the Vietnam Conflict, Volume I: The Setting of the Stage to 1959*, (Washington, DC: Department of the Navy, Naval History Division, 1976), Chapter XII. "Passage to Freedom." On the use of Navy amphibious ships and craft in the 1990 oil spill disaster, see *Military Support for Cleanup of the Exxon Valdez Oil Spill* (Alaskan Air Command: Office of History, December 1990) and J.A. McDonnell, *The U.S. Army Corps of Engineers Response to the Exxon Valdez Oil Spill* (Fort Belvoir, VA: U.S. Army Corps of Engineers Office of History, 1992).

- However, if the military is expected to fulfill non-military as well as military functions, such as diplomacy, nation building, coordination of relief efforts, and civilian communications infrastructure support, then it will need additional capabilities. These may be in the form of specialized forces, or technologies.

This suggests that the common view that SSC and OOTW can be treated as lesser included cases of warfighting is, of course, true *when the mission is a warfighting mission*. When the mission deviates from core military missions, other capabilities may be required.

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## Appendix E: Employment policy: Sampling of SSC Operations and OOTW

The following bullets give some idea of the breadth and depth of naval involvement in selected categories of SSC operations and OOTW over the past two centuries. They are provided to illustrate the Navy's *actual employment policy* regarding SSC operations and OOTW over time. By no means is this a complete list, either of types of operations or of the operations themselves within types.<sup>148</sup> They are included here to give some idea of the type and variety of certain missions the Navy has been actually been involved in since its founding.

### SSC operations

#### Limited strikes

- 1832: Capture and burning of Sumatran pirate town of Kuala Batu (in modern Indonesia)
- 1851: Naval bombardment of Grand Comoro Island in the Indian Ocean
- 1854: Naval bombardment and landing in Nicaragua
- 1855: Landings and village burnings in the Fiji Islands
- 1864: Naval bombardment and landing on Japanese warlord forts
- 1904: Cruisers provide naval gunfire and landing parties in Dominican Republic to help expel rebels

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148. More complete listings, with analyses, can be found in Long, *Gold Braid and Foreign Relations*; Siegel, *The Use of Naval Forces in the Post-war Era*; and Guerra, *Responses to Harm's-Way and Humanitarian Situations by Naval Forces, 1990-1996*.

- 1983-4: Naval gunfire and carrier air strikes in Lebanon
- 1986: Carrier strikes on Libya
- 1993: Cruise missile and TACAIR strikes into Iraq
- 1995: Cruise missile strikes on Bosnia
- 1996: Cruise missile strikes on Iraq

### **Opposed interventions**

- 1856: Bombardment and capture of the Chinese Pearl River forts
- 1867: Landing on Taiwan
- 1871: Naval gunfire and landings take Korean forts in an ultimately unsuccessful attempt to conclude a treaty with Korea.
- 1898-1903: In coordination with the Army, naval gunfire, troop transport, coastal patrol, and landings to quell the Philippine Insurrection
- 1899: Naval gunfire and landings in Samoa
- 1900: Boxer Rebellion operations in and off North China
- 1914: U.S. Navy and Marines occupy Vera Cruz, Mexico. (This also marks the first operational use of naval aviation.)
- 1983: Landings in Grenada

### **Peace operations**

- 1903: U.S. Navy river patrols to enforce treaty rights and keep the peace are begun on the Yangtse River in China. They will continue until World War II.
- 1912: Marines land in Cuba to provide security, especially for the railroad.
- 1915-34: U.S. Navy supports U.S. Marine Corps occupation and pacification of Haiti.

- 1916-26: U.S. Navy and Marine Corps occupy and pacify the Dominican Republic.
- 1918-1919: U.S. Navy peacekeeping presence at Murmansk in North Russia, during the Russian Civil War
- 1918-21: American Naval Mission to the Adriatic keeps peace and preserves order on a sector of the Yugoslav coast.
- 1925-6: A Special Service Squadron warship is stationed at Arica, Chile, throughout an unsuccessful U.S. attempt to arbitrate a plebiscite over disputed former Peruvian provinces.
- 1948: Sixth Fleet ships chop to United Nations to patrol cease-fire off Israel.
- 1960-63: Sealift support for UN peacekeepers in the Congo
- 1991: Enforcement of no-fly zones over Iraq begins.
- 1993-5: Enforcement of no-fly zone over Bosnia and contiguous areas
- 1994: Support of peace operations in Haiti

### **Humanitarian assistance<sup>149</sup>**

- 1847: Navy loans warships for Irish Great Famine relief.
- 1880: Navy sends frigate with food relief to Ireland.
- 1880: Pacific Squadron provides aid and assistance to refugees in Peru during the War of the Pacific between Chile and Peru. 1895: Six warships send sailors ashore to help combat major fire at Port of Spain, Trinidad.
- 1906: Pacific Squadron sailors help fight fires and patrol the waterfront in San Francisco, in the wake of the earthquake.

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149. David F. Long chronicles 62 instances between 1798 and 1883 in *Gold Braid and Foreign Relations*.

- 1907: Atlantic Fleet provides medical aid, wreckage clearance, provision distribution, security, and riot control services in the wake of an earthquake and fire in (British) Jamaica.
- 1912-13: In the wake of the *Titanic* disaster, U.S. Navy cruisers begins the first American ice patrols in the North Atlantic. They will be replaced in this activity by Revenue Service cutters.
- 1914: U.S. Navy cruiser carries Jews and others from Turkey.
- 1923: U.S. Asiatic Fleet deploys to Japan to assist in disaster relief operations following the great Kanto Plain Earthquake.
- 1929-30: Two U.S. Navy carriers, with the world's largest mobile power plants, provide generator power for electricity for Tacoma, Washington, in the wake of a severe drought that has dried up hydro-electric resources.
- 1931: U.S. Navy warships and U.S. Marines provide search and rescue, fire-fighting, looting prevention, first aid, and food distribution services in the wake of a severe earthquake in Managua, Nicaragua. The carrier *USS Lexington* and Marine aircraft conduct air evacuation and relief supply flights in what is one of the first large-scale airlifts.
- 1933: Personnel from the U.S. Navy battle force provide security, feeding stations, and fire-fighting assistance in the wake of a devastating earthquake in Los Angeles and Long Beach.
- 1936-40: Squadron 40-T is constituted to evacuate Americans and other foreign nationals during the Spanish Civil War.
- 1962: Navy officially establishes Project Handclasp to provide overall direction and coordination of the transportation of humanitarian assistance donations from the United States to overseas locations.
- 1991: ARG/MEU(SOC) give assistance to Bangladeshis in wake of cyclone.
- 1996: Navy amphibious and salvage ships support civilian operations to recover wreckage of TWA Flight 800 from off Long Island.

## OOTW

### Assertions of Sovereignty

- 1867: U.S. Navy sloop raises U.S. flag on uninhabited Midway Island, America's first overseas territory. (The Navy turned Midway over to the U.S. Fish and Wildlife Service in 1997.)
- 1891: U.S. Navy sloop lands Marines to protect U.S. claim to Navassa Island, near Haiti.
- 1899: U.S. Navy gunboat claims Wake Island in the mid-Pacific for the United States.
- 1979-present: Freedom of Navigation Operations. U.S. Navy warships have been employed in the formal U.S. national Freedom of Navigation (FON) program, conducting operational assertions to challenge excessive coastal state claims over the world's oceans. For example, in FY 1997 the excessive claims of 21 countries were challenged.

### Treaty-making and negotiating<sup>150</sup>

- 1852-4: Commodore Perry's expedition to Japan results in his signing the Treaty of Kanagawa with the Japanese.
- 1854: Perry concludes Treaty of Naha with the regent of the Ryukyu Islands.
- 1882: Commodore Robert Shufelt's circumnavigation eventuates in a trade treaty with Korea.

### Law enforcement

- 1808: Anti-smuggling patrols operate off Maine.
- 1840s-1850s: Anti-slavery patrols off Africa enforce Webster-Ashburton Treaty.

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150. David F. Long chronicles 61 instances between 1798 and 1883 in *Gold Braid and Foreign Relations*.

- 1879: Alaska station ship takes up law-enforcement duties at Sitka. A Navy warship will continue to provide law enforcement services there until the end of the century.
- 1892-1900: U.S. Navy warships supplement Revenue Service cutters in the Bering Sea to help enforce a sealing convention with Great Britain.
- 1982: U.S. Navy cruiser with Coast Guard Tactical Law Enforcement Team (TACLET) aboard seizes marijuana smuggler off Colombia. First direct seizure of a drug smuggler by the Coast Guard-Navy team.

## Exploration

- 1842: Charting and exploring expedition to the South Pacific. The expedition will discover Antarctica.
- 1848: Dead Sea expedition
- 1849: Astronomical expedition to the Southern Hemisphere
- 1850, 1853, 1879-82 and 1884: Arctic expeditions
- 1853: North Pacific expedition
- 1851: Amazon expedition
- 1870-74: Expedition to survey possible canal routes across Panama
- 1930-31: Wilkins Arctic expedition
- 1947-1999: Antarctic exploration support operations
- 1959: Astronaut support: Navy retrieves first satellite capsule from the sea.

## Environmental monitoring

- 1912-1914: Ice patrol, in the wake of the *Titanic* disaster
- 1952-1975: Airborne land-based hurricane reconnaissance

### **Civil government**

- 1879-80: U.S. colonial government of Alaska
- 1898-1950: U.S. colonial government of Guam
- 1900-1951: U.S. colonial government of American Samoa
- 1916-26: Direct administration of the Dominican Republic
- 1917-1931: U.S. colonial government of the U.S. Virgin Islands
- 1918-1921: Indirect administration of central Dalmatia (Croatia)
- 1947-1951: U.N. Trusteeship government of Micronesia

### **Military government**

- 1914: Military government of Vera Cruz, Mexico
- 1943-1947: Military occupation of Guam and Micronesia during and just after World War II

### **Colonization support**

- 1821: USN schooner searches for and helps acquire a stretch of African coast for the American Colonization Society (the future Liberia).

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# Bibliography

## Government documents

Clinton, President William J., *A National Security Strategy for a New Century* (Washington, DC: The White House, May 1997)

Dalton, John H., Secretary of the Navy, John, ADM Jeremy M. Boord, USN, and Gen Carl E. Mundy, Jr., *Forward . . . From the Sea* (Washington: Department of the Navy, 1994)

*Multinational Maritime Operations (MMOPS)* Internet (<http://www.ndc.navy.mil>)

“Operational Maneuver from the Sea(OMFTS)” insert to the *Marine Corps Gazette* (June 1986).

Shalikashvili, GEN John M., USA, *National Military Strategy of the United States of America* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, 1997)

“Ship-to-Objective Maneuver,” *Marine Corps Gazette* insert (November 1997)

## Books

Albion, Robert Greenhalgh, *Makers of Naval Policy, 1798-1947* (Annapolis

Bartlett, LtCol Merrill L., USMC (Ret.) (ed.), *Assault From the Sea: Essays on the History of Amphibious Warfare* (Annapolis, MD: Naval Institute Press, 1983)

Beach, CAPT Edward L., USN (Ret.), *The United States Navy: 200 Years* (New York: Henry Holt and Company, 1986)

- Bittner, Donald F., *Selected Papers from the 1992 (59th Annual) Meeting of the Society for Military History* (Quantico, VA: U.S. Marine Corps Command and Staff College, May 1994)
- Blaker, James R., *United States Overseas Basing: An Anatomy of the Dilemma* (New York: Praeger, 1990)
- Bradford, James C., (ed.), *Admirals of the New Steel Navy: Makers of the American Naval Tradition, 1980-1930* (Annapolis, MD: Naval Institute Press, 1990)
- Cole, CAPT Bernard, USN, *Gunboats and Marines: The United States Navy in China, 1925-1928* (Newark, DE: University of Delaware Press, 1983)
- Dictionary of American Fighting Ships*, Vol. IV (Washington, DC: Navy Department, Office of the Chief of Naval Operations, Naval History Division, 1969)
- Duignan, Peter and L.H. Gann, *The United States and Africa: A History* (Cambridge (UK): Cambridge University Press, 1984)
- Fahey, James C., *The Ships and Aircraft of the United States Fleet* (reprint edition) (Annapolis, MD: Naval Institute Press, 1978)
- Furer, RADM Julius Augustus, USN (Ret.), *Administration of the Navy Department in World War II* (Washington, DC: Department of the Navy, Naval History Division, 1959)
- Fuss, Charles M., Jr., *Sea of Grass: The Maritime Drug War, 1970-1990* (Annapolis, MD: Naval Institute Press, 1996)
- Gebhard, Louis A., *Evolution of Naval Radio-Electronics and Contributions of the Naval Research Laboratory* (Washington, DC: Naval Research Laboratory, January 1976)
- Glover, David H., *U.S. Army Ships and Watercraft of World War II*, (Annapolis, MD: Naval Institute Press, 1987)
- Goldrick, James and John B. Hattendorf (eds.), *Mahan is Not Enough: The Proceedings of a Conference on the Works of Sir Julian Corbett and*

- Admiral Sir Herbert Richmond* (Newport, RI: Naval War College Press, 1993).
- Gray, CAPT J.A.C. MC, USN, *Amerika Samoa: A History of American Samoa and Its United States Naval Administration* (Annapolis, MD: Naval Institute Press, 1960)
- Hagan, Kenneth J., *American Gunboat Diplomacy and the Old Navy: 1877-1889* (Westport, CT: Greenwood Press, 1973).
- Hooper, RADM Edwin Bickford, USN (Ret.), Dean C. Allard and Oscar P. Fitzgerald, *The United States Navy and the Vietnam Conflict, Volume I: The Setting of the Stage to 1959*, (Washington, DC: Department of the Navy, Naval History Division, 1976)
- Howe, Russell Warren, *Along the Afric Shore: An Historic Review of Two Centuries of U.S. African Relations* (New York: Barnes and Noble, 1975)
- Howeth, CAPT Linwood S., USN (Ret.), *History of Communications-Electronics in the United States Navy* (Washington, DC: U.S. Navy Bureau of Ships and Office of Naval History, 1963)
- Long, David F., *Gold Braid and Foreign Relations: Diplomatic Activities of U.S. Naval Officers, 1798-1883* (Annapolis, MD: Naval Institute Press, 1988)
- Love, Robert W., Jr., *History of the U.S. Navy* (2 vols) (Harrisburg, PA: Stackpole Books, 1992)
- McKee, Christopher, *A Gentlemanly and Honorable Profession: The Creation of the U.S. Naval Officer Corps, 1794-1815* (Annapolis, MD: Naval Institute Press, 1991)
- Morison, Elting, *Men, Machines and Modern Times* (Cambridge: MIT Press, 1966)
- Naval History: The Seventh Symposium at the US Naval Academy* (Wilmington, DE: Scholarly Resources Inc., 1988)

*New Interpretations in Naval History: Selected Papers from the Twelfth Naval History Symposium* (Annapolis, MD: Naval Institute Press, 1997)

Palmer, Michael, *On Course to Desert Storm: The United States Navy and the Persian Gulf* (Washington, DC: Department of the Navy, Naval Historical Center, 1992)

Paullin, Charles O., *Paullin's History of Naval Administration, 1775-1911: A Collection of Articles from the U.S. Naval Institute Proceedings* (Annapolis, MD: Naval Institute Press, 1968)

Richard, LCDR Dorothy E., USN, *United States Naval Administration of the Trust Territory of the Pacific Islands* (Washington, DC: Office of the Chief of Naval Operations, 1957)

Shulman, Mark Russell, *Navalism and the Emergence of American Sea Power, 1882-189* (Annapolis, MD: Naval Institute Press, 1995)

Smith, Merritt Roe (ed.), *Military Enterprise and Technological Change* (Cambridge, MA: The MIT Press, 1985)

Sweetman, Jack, *The Landing at Veracruz: 1914* (Annapolis, MD: Naval Institute Press, 1968)

Tate, Maj James P., USAF (ed.), *The American Military and the Frontier* (Washington, DC: Office of Air Force History, Headquarters USAF and USAF Academy, 1978)

Tolley, RADM Kemp, USN (Ret.), *Yangtze Patrol: The U.S. Navy in China* (Annapolis, MD: Naval Institute Press, 1971)

U.S. Naval Academy Department of History, *Readings in American Naval Heritage* (New York: American Heritage Custom Publishing, 1997)

*Warship: Volume VI* (Annapolis, MD: Naval Institute Press, 1982)

Wildenberg, Tom, *Grey Steel and Black Oil: Fast Tankers and Replenishment at Sea in the U.S. Navy, 1912-1995* (Annapolis, MD: Naval Institute Press, 1996)

Williams, Marion D., *Submarines Under Ice: The U.S. Navy's Polar Operations* (Annapolis, MD: Naval Institute Press, 1998)

#### Articles

Albion, Robert Greenhalgh, "Distant Stations," U.S. Naval Institute *Proceedings*, 80 (March 1954), 265-273

Anderson, RADM Bern, USN (Ret.), "The Impact of Rapid Communications on the Employment of Naval Forces," U.S. Naval Institute *Proceedings* (November 1951), 1157-1167

Baker, A.D., III, "Historic Fleets," *Naval History* (November/December 1997), 55.

Ball, Desmond, "U.S. Strategic Forces: How Would They be Used?," *International Security*, 7 (Winter 1982/1983), 32-33

Ballard, Robert D., "High-Tech Search for Roman Shipwrecks," *National Geographic* (April 1998)

Beers, Henry P. "American Naval Detachment – Turkey, 1919-24," *Warship International*, 3 (1976), 209-226.

\_\_\_\_\_ "The Development of the Office of the Chief of Naval Operations: Part II," *Military Affairs* 10 (Fall 1946), 10-38.

Buhl, Lance C., "Mariners and Machines: Resistance to Technological Change in the American Navy, 1865-1869," *Journal of American History*, 61 (1974)

Crain, Mel, "When the Navy Ruled Alaska," U.S. Naval Institute *Proceedings* LXXXI (February 1955), 198-203

Dyer, VADM George C., USN, "Naval Amphibious Landmarks," U.S. Naval Institute *Proceedings*, 92 (August 1966), 50-60.

Fastabend, David, "The Categorization of Conflict," *Parameters*, XXVII (Summer 1997), 75-87

"Getting the Military out of Humanitarian Relief," *The Defense Monitor* XXVI (October 1997)

- Gibson, Lester, "Modeling and Simulation to Support Navy OOTW Acquisition," *Phalanx*, 30 (December 1997), 10-34
- Hagan, CAPT Kenneth J., USNR (Ret.), "What Goes Around . . .," U.S. Naval Institute *Proceedings/ Naval Review* 1992 (May 1992), 88-91.
- Hessler, LT William H., USNR "Military Government in the Navy," U.S. Naval Institute *Proceedings* 69 (November 1943), 1471-1474.
- Huntington, Samuel P., "National Policy and the Transoceanic Navy," US Naval Institute *Proceedings*, 80 (May 1954), 483-493
- Johnson, LTC Rodney L., USA, "Forgotten Mission: Military Support to the Nation," *Joint Force Quarterly* (Spring 1997), 108-115
- Kiel, JOC (AW) Jacqueline, USN, and JO1 David Nagle, USN, "Navy Disestablishes Antarctic Support Unit," *Around the Fleet* (Chief of Naval Information newsletter), February 27, 1998, 2
- Maurer, John H., "Fuel and the Battle Fleet: Coal, Oil, and American Naval Strategy, 1898-1925," *Naval War College Review* XXXIV (November-December 1981), 60-77
- Miller, Marvin O., "Standby for Shotline," U.S. Naval Institute *Proceedings* (April 1985), 75-79.
- Millett, Richard, "The State Department's Navy: A History of the Special Service Squadron, 1920-1940," *The American Neptune* (April 1975), 118-138
- Nitze, Paul H., "Atoms, Strategy and Policy," *Foreign Affairs*, 34 (January 1956), 187-188
- Peet, VADM Ray, USN (Ret.) and Michael E. Melich, "Fleet Commanders: Afloat or Ashore?" U.S. Naval Institute *Proceedings* 102 (June 1976), 25-33

Pomeroy, Earl S., "Colonial Administration by United States Naval Officers," U.S. Naval Institute *Proceedings* 69 (October 1943), 1320-1323.

\_\_\_\_\_ "The Navy and Colonial Government" U.S. Naval Institute *Proceedings* 71 (March 1945), 291-298.

Rice, COL Anthony J. (British Army), "Command and Control: The Essence of Coalition Warfare," *Parameters* (Spring 1997), 165-166

Rosenberg, David A., "U.S. Nuclear Strategy: Theory vs. Practice," *Bulletin of the Atomic Scientists* (March 1987), 20

Swartz, Peter M., "Comment and Discussion: 'Reflections on a Naval Career,'" U.S. Naval Institute *Proceedings*, (November 1995), 18-21.

Williams, John Hoyt, "The Wake of the Water Witch," U.S. Naval Institute *Proceedings* Supplement, 1985)

Wright, Christopher C., "U.S. Naval Operations in 1982," U.S. Naval Institute *Proceedings/Naval Review* 109 (May 1983), 50-63, 225-246.

Wycoff, Col Don P., USMC (Ret.), "Let There Be Built Great Ships," U.S. Naval Institute *Proceedings*, 108 (November 1982), 51-57

Yerxa, Donald A., "The Special Service Squadron and the Caribbean Region, 1920-1940: A Case Study in Naval Diplomacy," *Naval War College Review*, 39 (Autumn 1986), 60-72

### **Monographs, Studies and Reports**

Beers, Henry P., *American Naval Occupation and Government of Guam, 1898-1902* (Washington, DC: Navy Department Office of Records Administration, March 1944)

\_\_\_\_\_ *U.S. Naval Detachment in Turkish Waters, 1919-1924* (Washington, DC: Navy Department, Naval Historical Center, 1940)

\_\_\_\_\_ *U.S. Naval Forces in Northern Russia (Archangel and Murmansk), 1918-1919* (Washington, DC: Navy Department, Office of Records Administration, November 1943)

Carlson, COL Adolf, USA, *Joint U.S. Army-Navy War Planning on the Eve of the First World War: Its Origins and its Legacy* (Carlisle Barracks, PA: U.S. Army War College Strategic Studies Institute, February 16, 1998)

Carus, W. Seth et al., *From MIDEASTFOR to Fifth Fleet: Forward Naval Presence in Southwest Asia*, October 1996 (CNA Research Memorandum 95-219)

Chief of Naval Operations Strategic Studies Group XVI, *Naval Warfare Innovation Concept Team Reports* (Newport, RI: Chief of Naval Operations Strategic Studies Group, June 1997)

Cornforth, C. Michael, Clifford W. Hansen, and LCDR John J. Costello, USN, *Commander, Second Fleet and Commander, Third Fleet Flagship Study*, May 1994 (CNA Research Memorandum 94-49)

Davidonis, A.C., *The American Naval Mission in the Adriatic, 1918-1921* (Washington, DC: Navy Department, Office of Records Administration, September 1943)

Forbes, H.A. Crosby and Henry Lee, *Massachusetts Help to Ireland During the Great Famine* (Milton, MA: Captain Robert Bennet Forbes House, 1967)

Gaffney, Henry H., Jr., *Relations With Russian Counterparts; Coast Guards and Navies*, December 1996 (CNA Information Memorandum 491)

Gibson, Lester, LCDR Kevin Lynch, USN, and Peter Swartz, *Incorporating Operations Other than War into Naval Doctrine: Baseline Report*, October 1995 (CNA Research Memorandum 94-148)

\_\_\_\_\_, CDR Paul Dunne II, USN, with Peter Swartz, *Prolegomenon to Any Future Naval OOTW Doctrine*, March 1996 (CNA Research Memorandum 95-205)

Guerra, Stephen J., *Responses to Harm's-Way and Humanitarian Situations by Naval Forces, 1990-1996*, November 1997 (CNA Research Memorandum 97-100)



Hirschfeld, Thomas J., *Multinational Naval Cooperation Options*, September 1993 (CNA Research Memorandum 93-44)

Johnson, Michael, Peter Swartz, and Patrick Roth, *Doctrine for Partnership: A Framework for U.S. Multinational Naval Doctrine*, March 1996 (CNA Research Memorandum 95-202)

\_\_\_\_\_, with Richard Kohout and Peter Swartz, *Guidelines for the World's Maritime Forces in Conducting Multinational Operations: An Analytic Framework*, March 1996 (CNA Research Memorandum 95-119)

Lautenschlager, Karl, *Technology and the Evolution of Naval Warfare*, (Washington, DC: National Academy Press, 1984)

McDonnell, J.A., *The U.S. Army Corps of Engineers Response to the Exxon Valdez Oil Spill* (Fort Belvoir, VA: U.S. Army Corps of Engineers Office of History, 1992)

Messina, Barry P., *Development of U.S. Joint and Amphibious Doctrine, 1898-1945*, September 1994 (CNA Research Memorandum 94-103)

*Military Support for Cleanup of the Exxon Valdez Oil Spill* (Alaskan Air Command: Office of History, December 1990)

Miller, Marvin O., John W. Hammett, and Terence P. Murphy, "Development of the U.S. Navy Underway Replenishment Fleet," in *Underway Replenishment of Naval Ships* (Port Hueneme, CA: Naval Surface Warfare Center, 1992)

Palin, Air Marshal Roger H., RAF (Retired), *MultiNational Military Forces: Problems and Prospects*, Adelphi Paper #294, (Oxford (UK): Oxford University Press for the International Institute for Strategic Studies, April 1995)

Roberts, Stephen S., *The Decline of the Overseas Station Fleets: The United States Asiatic Fleet and the Shanghai Crisis, 1932*, November 1977 (CNA Professional Paper No. 208)

\_\_\_\_\_, *An Indicator of Informal Empire: Patterns of U.S. Navy Cruising on Overseas Stations, 1869-1897*, September 1980 (CNA Professional Paper 295)

Roth, CAPT Patrick H., USN (Ret.) and Richard D. Kohout, *U.S. Coast Guard: Purpose, Characteristics, Contributions, and Worth to the Nation*, May 1997 (CNA Research Memorandum 97-17)

Scheina, Robert L., *Coast Guard at War*, Commandant's Bulletin 4-87 (February 13, 1987)

Shaw, Henry I, Jr., *Opening Moves: Marines Gear Up for War* (Washington, DC: US Government Printing Office, 1992)

Siegel, Adam B., *The Use of Naval Forces in the Post-War Era: U.S. Navy and U.S. Marine Corps Crisis Response Activity, 1946-1990*, February 1991 (CNA Research Memorandum 90-246)

\_\_\_\_\_, *A Sampling of US Naval Humanitarian Operations*, November 1990 (CNA Information Memorandum 132)

\_\_\_\_\_, *Who Will Do What With What: Defining U.S. Navy and Marine Corps Roles, Functions and Missions*, May 1993 (CNA Occasional Paper)

Stewart, George; Scott M. Fabbri and Adam B. Siegel, *JTF Operations Since 1983*, July 1994 (CNA Research Memorandum 94-42)

Suess, Gregory N. et al., *Strategic Vision for the Pacific Fleet: Challengers, Opportunities, and Strategies for the Future*, August 1997 (CNA Research Memorandum 97-52)

#### **Unpublished materials**

Dur, LCDR Philip A., USN, "The Sixth Fleet: A Case Study of Institutionalized Naval Presence, 1946-1968" (Unpublished Ph.D. dissertation: Harvard University, 1975)

Hirrel, LTC Leo P., USAR, *United States Atlantic Command: Fiftieth Anniversary, 1947-1997* (Norfolk VA: Headquarters, Commander-in-

Chief, U.S. Atlantic Command, Office of the Command Historian,  
11 February 1998 draft)

Leopold, LT Richard W., USNR, "Fleet Organization, 1919-1941"  
(Washington, DC: Navy Department, 1945)

Rosenberg, David A. (Admiral Harry W. Hill Professor of Maritime  
Strategy, National War College, Washington, DC) letter to Master  
Chief Petty Officer of the Navy ETCM (SW) John Hagan, USN,  
6 January 1997).

Roth, CAPT Patrick H., "The U.S. Navy's Brazil/South Atlantic Sta-  
tion, 1826-1904: An Informal Look," unpublished paper (1995)

Sestak, LCDR Joseph A., Jr., USN, "The Seventh Fleet: A Study of Vari-  
ance between Policy Directives and Military Force Postures"  
(Unpublished Ph.D. dissertation: Harvard University, August  
1984).

Siegel, Adam, "America's Small Wars in the Twentieth Century,"  
unpublished paper (1992)

\_\_\_\_\_, "The Tip of the Spear: The US Navy and the Spanish  
Civil War," unpublished paper (1992)

\_\_\_\_\_, "The U.S. Military and Humanitarian Assistance  
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## Related CNA studies

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\_\_\_\_\_, CDR Paul Dunne II, with Peter Swartz, *Prolegomenon to Any Future Naval OOTW Doctrine*, March 1996 (CNA Research Memorandum 95-205)

Guerra, Stephen J., *Responses to Harm's-Way and Humanitarian Situations by Naval Forces, 1990-1996*, November 1997 (CNA Research Memorandum 97-100)

Johnson, Michael, Peter Swartz, and Patrick Roth, *Doctrine for Partnership: A Framework for U.S. Multinational Naval Doctrine*, March 1996 (CNA Research Memorandum 95-202)

\_\_\_\_\_, with Richard Kohout and Peter Swartz, *Guidelines for the World's Maritime Forces in Conducting Multinational Operations: An Analytic Framework*, March 1996 (CNA Research Memorandum 95-119)

Roberts, Stephen S., *The Decline of the Overseas Station Fleets: The United States Asiatic Fleet and the Shanghai Crisis, 1932*, November 1977 (CNA Professional Paper 208)

\_\_\_\_\_, *An Indicator of Informal Empire: Patterns of U.S. Navy Cruising on Overseas Stations, 1869-1897*, September 1980 (CNA Professional Paper 295)

Roth, CAPT Patrick H., USN (Ret.) and Richard D. Kohout, *U.S. Coast Guard: Purpose, Characteristics, Contributions, and Worth to the Nation*, May 1997 (CNA Research Memorandum 97-17)

Siegel, Adam B., *The Use of Naval Forces in the Post-War Era: U.S. Navy and U.S. Marine Corps Crisis Response Activity, 1946-1990*, February 1991 (CNA Research Memorandum 90-246)

Stewart, George, Scott M. Fabbri, and Adam B. Siegel, *JTF Operations Since 1983*, July 1994 (CNA Research Memorandum 94-42)