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Numbered Fleet Operations in the Current and Future Environments: Analytical Insight from Past Fleet Operational Experience

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Abstract

This report was part of a study CNA performed for the Commander-in-Chief, US Pacific Fleet, on future options for the numbered fleets. CNA conducted this study in response to frequent requests for insights regarding future force deployment, force employment, and staff sizing for the Navy's operating forces. To better respond to these requests, the researchers examined the operational history of the US Navy, described the origins of the numbered fleet system, and summarized relevant data regarding four critical issue areas: numbered fleet commanders and the levels of warfare, the fleets in joint operations, fleet headquarters, and fleet operations and technology change. This effort aimed to help decision-makers better understand the Navy's operational history and enable them to make informed decisions about the future.

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Summary

General overview

This report provides analysis as part of CNA's study for the Commander in Chief, U.S. Pacific Fleet on future options for the numbered fleets.

As a basis for this analysis, it examines the operational history of the U.S. Navy, describes the origins of the numbered fleet system, and summarizes relevant data regarding four critical issue areas:

- Numbered fleet commanders and the levels of warfare
- The fleets in joint operations
- Fleet headquarters
- Fleet operations and technology change.

Having laid out the data, this report then makes a series of analytical observations regarding that data. The end purpose of this effort is to assist decision-makers in better understanding where they have been before, to help enable them to make informed decisions about the future.

Our focus throughout was on the operational level of war, a level of warfare and deployment policy we found to be neglected in traditional histories of the Navy—squeezed out between or scattered among narratives of strategic policy plans and choices, and tactical recountings. For the Navy of the 1990s and beyond—a Navy that will be more jointly integrated with its sister services and other organizations at the tactical and operational levels of command—an understanding of where it has already been, at the operational level of warfare, should prove useful.

Specific observations

Our analysis yielded a number of insights regarding the four issue areas under consideration. These included the following:

- While numbered fleet commanders have often operated at both the operational and tactical levels of warfare, their experience at the former has been largely during peacetime and has involved both planning for war and conducting what are now termed Military Operations Other Than War (MOOTW). Thus operating at the operational level of war *during war*, especially when commanding a Joint Task Force, will be a new experience for numbered fleet commanders, and one for which they will need extensive preparation.

- Joint integration at the numbered fleet level is likewise a relatively new phenomenon, and one for which there are few "lessons from history." In the past, numbered fleets were shielded from joint integration by integrated staffs existing at higher echelons of the national chain of command, except for amphibious operations. The record of joint amphibious operations during World War II shows, however, that joint principles, once agreed to, can successfully be applied at the tactical level, even in highly complex operations.

- Numbered fleet commanders have commanded their fleets in the past from headquarters afloat or ashore. Most significantly, they have sometimes done it both ways, sequentially. There is no one timeless correct model. The criteria used to determine the location of numbered fleet command headquarters have been: Space, communications capability, proximity, survivability, availability and security. Depending on the relative importance of these criteria under particular local circumstances, either an afloat command ship or a shore facility will have the edge.

- Changes in technology have influenced all aspects of naval warfare at all levels. Changes in two particular areas—*communications* and *mobility*—seem to have been the most influential on the operational level of naval warfare, the level at which the numbered fleet commanders will be increasingly acting. Further radical changes in communications technology can be expected. While similar changes in fleet mobility do not appear likely in the near or mid-term, changes in the mobility of ground forces and land-based air forces may well be. These changes should be embraced by the numbered fleet commanders as they will ease the current serious problems of integrating highly mobile, routinely forward-deploying naval forces with stationary, surge-deploying ground and air forces.

Introduction

The larger questions

The Navy often asks CNA for insights regarding future force deployment, force employment, and staff sizing for the Navy's operating forces. A recent example is CINCPACFLT's 1996 request for analytical assistance in determining future numbered fleet staff requirements. This report forms part of the response to that request.

One place to look to gain such insights is past experience, i.e.: Where has the Fleet been in the past? How has it been organized? What has it done? Examining past experience cannot provide solutions to current and future problems by itself. It can, however, contribute to those solutions by:

- Illustrating the range of possible solutions
- Providing Lessons Learned
- Dispelling myths and false claims allegedly based on history

CNA therefore has sought to determine just what the past experience of the Navy has been, with regard to fleet deployments and operations, and to draw insights from the data assembled.[1] This paper provides insights regarding selected aspects of fleet operations, as detailed later, in the body of the paper.

Scoping the larger problem

This effort has not been as easy as CNA originally believed it would be. The *operational* and *deployment* record of the fleet has not been neatly compiled

1. For greater detail on the processes involved, see the companion document to this report, also by Peter M. Swartz: *"Forward. . . from the start": U.S. Navy Fleet Deployment Policy, 1775-1996*, CNA Historical Paper Series (written 1996), CNA, DIM-2019-U-022390-Final, 2020.

in one accessible data base. Rather, it is hidden within both primary sources (e.g., Reports of the Secretary of the Navy and official fleet histories) and secondary sources (e.g., official public histories and scholarly and popular histories of the Navy and its elements). Naval writers, both official and non-official, are normally interested in discerning and analyzing concepts, policy, plans, administration, strategy, technology, or tactics—either alone or in combination. Actual deployment s of the fleet and the *operational* level of naval warfare is either buried and inter-mixed with these other elements, or ignored.

What we have looked for here is the Navy's *operational* or *deployment* record—how the Navy has been used at the *operational level of war—not* the strategic or tactical levels. Typically, U.S. naval forces have operated at the level of operational art organized as *fleets*, *forces,* or *squadrons*.

Approach

We have adopted a four-step analytical process to answer the questions we want to answer:

- Gather the data
- Lay out the data
- Synthesize the data
- Analyze the data

This publication is the product of the *fourth* step.

Gathering the data

We went principally to secondary sources. This is because:

- There are lots of good, accessible secondary sources to go to. The Navy does not lack for good historical treatments. In fact, over the last dozen years or so alone, there have appeared at least a dozen high-quality, perceptive analyses of the entire history of the U.S. Navy, as well as numerous more specialized works. Often, the authors of these books and articles have been the leaders in their field, and their data and judgements can be considered authoritative.

- Time and resource constraints did not allow more than a cursory look at primary sources. Ideally, *at a minimum*, we would have looked at every *Report of the Secretary of the Navy* (issued annually since early in the nineteenth century), and every annual history of every fleet, numbered fleet and force. We simply have not had the resources to do this.

Accuracy of chronological details

Every attempt was made to ensure accuracy of the data entries. As secondary sources were the principal sources of the data, however, errors in those sources may well have been duplicated here. Such errors should be errors of detail, however, and should not have affected our analysis, which is conducted at a higher level of abstraction.

Accordingly, while the data presented provides a very useful guide to the nature of the operations that the Navy has conducted, it is not an infallible chronicle of dates and details. A reader should be able to review the data as presented and arrive at conclusions similar to those drawn here, despite occasional flaws in the detailed record. Of course, such flaws are hardly useful, and CNA would appreciate the reader bringing them to our attention, so we might correct our data base.

Laying out the data

As good in quality as many histories of the Navy may be, none of them focuses on operational history in a way useful to us or to the Navy. Consequently we have had to extract data from them and organize that data systematically so that it can then be used.

We elected to initially organize the data through development of an *operational chronology*.[2] Organizing the data in this fashion makes it:

- Easy to manipulate, add to, and modify

2. The chronology makes up the bulk of the companion volume to this paper: Swartz, *"Forward . . .from the start."*

- Possible to identify specific *operational eras* in the history of the Navy

Criteria

We divided the chronology into discrete Operational Eras. We define an Operational Era as a period of time when the elements comprising the deployment pattern of the fleet remained pretty much constant, e.g.:

- The organization of the elements of the fleet
- The mix of forward deployed vs. "home" elements
- The mix of elements preparing for or fighting major wars, vs. elements conducting Military Operations other than War (MOOTW) or Major or Lesser Regional Contingencies (MRCs and LRCs)

Operational Eras

We have identified 17 Operational Eras: Table 1 summarizes our findings regarding these eras.

Synthesizing the data

Having displayed the data as a series of chronologies divided by Operational Eras, we then generalized as to the operational characteristics of each era. We chose these particular characteristics based on the tasking we received from the study sponsor, suggestions from other interested Navy organizations, and our own determination of important factors that influence naval operations. These characteristics include *inter alia* fleet deployment patterns, technological influences, the operational chain of command, joint operational relationships, and fleet headquarters characteristics.

Analyzing the data

This report represents the first analytical product to be based on the data, which has been gathered, laid out, and synthesized as described above. This data, as processed, is applicable to a wide range of studies and analyses. For this particular effort, we narrowed our focus to four main issue areas, as discussed in a later section. These areas are:

Table 1. U.S. Navy fleet composition and operations, 1775-1996

Operational Era	Organization	Operating areas	Concentration
Revolution & after 1775-1798	Ships & occasional squadrons	Lakes, E. Coast, & forward in Norlant	Highly dispersed
Early Wars 1798-1815	Ships & squadrons	Lakes, E. Coast, forward in Carib, Med.	Highly dispersed
Early 19th cent. 1815-1841	Squadrons	6 global forward stations	Dispersed by & within squadrons
Mid 19th century 1841-1860	Squadrons	Forward stations, but also E.Coast	Dispersed by & within squadrons
Civil War 1861-1865	Squadrons	Home: Atlantic & Gulf Coasts, rivers; some forward	Concentrated, by squadrons
Late 19th century 1865-1889	Squadrons	5-6 global forward stations, & E. Coast	Dispersed in squadrons
Early Mahan era 1889-1900	Squadrons	Global forward stations, plus E. Coast	Dispersed by squadrons
Early 20th cent. 1901-1917	Squadrons, then fleets	Far less forward stations; more at home on E.Coast, N.Atlantic	Increasingly concentrated in fleets, especially in N. Atlantic
World War I 1917-1918	Fleets and forces	Most forward in Europe, some at home, in W. Pacific	Dispersed by squadrons throughout theater
Interwar Era 1919-1937	A fleet & forces	At home on W. Coast; some in W.Pac, Carib, Med	Highly concentrated in fleet, forces
Pre-World War II 1937-1941	Fleets & forces	At home on W. Coast, then Pearl; N. Atlantic; forward in W. Pac	PacFlt concentrated; Asiatic Flt dispersed, LantFlt dispersed by TFs
Early Word War II 1941-1943	Fleets & forces	Global forward, mostly Pacific	Dispersed by TFs. Some con'tration
Late World War II 1943-1945	Fleets & numbered fleets	Global forward, mostly Pacific	Huge concentrated fleets
Early Cold War 1945-1950	Fleets, numbered task fleets, & forces	Home & forward, mostly N. Atlantic, Med, W. Pacific	Dispersed among fleets and forces
Mid-Cold War 1950-1973	Fleets, numbered fleets; few forces	Forward in W. Pac, Med; & home in N. Atlantic, E. Pacific.	Concentrated in 4 numbered fleets
Late Cold War 1973-1989	Same	Same, but increase in Indian Ocean	Same.
Post-Cold War 1989-1996	Fleets, numbered fleets; few forces	Forward in Med, Indian O., W. Pac	Concentrated in 5 numbered fleets

- The numbered fleet commanders and the levels of warfare
- The fleets in joint operations
- Fleet headquarters
- Fleet operations and technology change

Before we address these areas, however, we will briefly describe, in the next section, the history of the numbered fleet system.

The numbered fleets over time[3]

Numbered fleets today

In 1996 there are five numbered fleets: The Second, Third, Fifth, Sixth, and Seventh Fleets. The fleet commanders report through an operational chain of command to unified commanders: The Second to CINCUSACOM; the Third and Seventh to CINCPAC; the Fifth to USCINCCENT; and the Sixth to USCINCEUR.

The fleet commanders are vice-admirals. Their superiors are full admirals (and generals).

Two services in one department—the Navy and the Marine Corps—provide these fleets with their ships, aircraft, and personnel. The number of ships available for assignment to the numbered fleets is less than 400.

The Fifth Fleet was created in 1995. The others are much older: The Third Fleet was formed in 1973; the Sixth Fleet in 1948; the Second Fleet in 1947; and the Seventh Fleet in 1943. During the Cold War years there were a number of smaller forces not designated numbered fleets, especially the Middle East Force, out of which the Fifth Fleet eventually grew. Also, during the Cold War years, the numbered fleet reported unambiguously to the appropriate unified commander *through his naval component commander.*

Creation of the numbered fleets

ADM (later FADM) Ernest King, as Commander-in-Chief of the U.S. Fleet, instituted numbered fleets in 1943, during World War II. There were no First

3. For more detail, see the companion volume to this research memorandum, Swartz, *"Forward...from the start."*

or Second Fleets, but Task Force numbers 10 through 19 and 20 through 29 were used to designate task forces reporting to the Commanders-in-Chief of the Atlantic and Pacific Fleets respectively. The Third Fleet was ADM William Halsey's South Pacific Force in the Solomon Islands. The Fourth Fleet was VADM Jonas Ingram's South Atlantic Force off Brazil. The Fifth Fleet was VADM (later ADM) Raymond Spruance's Central Pacific Force. There was no Sixth Fleet.

The Seventh Fleet was VADM (later ADM) William Kinkaid's Southwest Pacific Force, off New Guinea. The Eighth Fleet was VADM Kent Hewitt's Naval Forces Northwest African Waters, in the Mediterranean. There was no Ninth Fleet, although there were Task Forces numbered 91-99, especially in the North Pacific Force—a force that never was given numbered fleet status. The Tenth Fleet was a headquarters division under Admiral King that directed the anti-submarine warfare campaign. There was no Eleventh Fleet. The Twelfth Fleet was ADM Harold Stark's Naval Forces Europe.

Numbered fleet commanders from 1943 to 1946 were three-star or four-star officers. At the end of World War II, two non-operating fleets (the Tenth and Twelfth) and three operating fleets (the Third, Fifth, and Seventh) were headed by full admirals. By 1946, all numbered fleet commanders were three-star officers, and that situation has endured through the present day.

As today, the odd-numbered fleets were in the Pacific. The even-numbered fleets were in the Atlantic. Each had a particular and unique relationship to the Commander in Chief of the Atlantic or Pacific Fleet.

The immediate ancestors of the numbered fleets were the various naval forces and task forces created during the undeclared anti-submarine war of 1939-41 in the Atlantic and in the wake of the attack on Pearl Harbor. The numbered fleets created in 1943 were essentially a new layer in the naval chain of command, having grown out of the previous crop of forces and task forces. They in turn would themselves be sub-divided into task forces, the most famous being the Fast Carrier Force of RADM (later VADM) Marc Mitscher and VADM John McCain—Task Force 58/38.

The new layer was necessitated by an explosive growth in the size of the fleet. The 300-400 ship navy of the interwar period—about the size of the fleet today—and the 500-ship navy of 1940 had become an 800-ship navy

in 1941 and an 1800-ship navy in 1942. It would swell to 3700 ships by the end of 1943, 6000 ships by the end of 1944, and 6800 ships by VJ-Day in August 1945 (cutting back drastically to 1250 ships in 1946 and 850 ships in 1947). The numbered fleet commander was designated as the principal operational and tactical *director* and *integrator* of these forces.

Before the numbered fleets

The Pre-war & early World War II periods

The numbered fleets were formed from Task Forces—groupings of ships of various types put together for ad hoc operations of a particular nature. These Task Forces had been formed, in turn, under the pressures of operations short of war and war, out of a pre-existing fleet structure centering around the Mahanian concept of one single main battle fleet. Experience and problems at sea—against enemy carriers, amphibious forces, surface raiders, and submarines—drove the Task Force concept (not Mahanian theory of cataclysmic fleet actions where battleships fought battleships and cruisers fought cruisers).

Early 20th century

In the 1930s, the U.S. Fleet had been organized largely on type command lines, rather than geographical or task force lines. Exceptions were the Asiatic Fleet (a progenitor of the Seventh Fleet), a (smaller) Special Service Squadron in the Caribbean, and some small ad hoc forces in Europe—each comprising a few old cruisers, and a mix of destroyers and gunboats. Otherwise, there was one Battle Force, with subordinate battleship, cruiser, destroyer, mine warfare, and aviation commands; one Scouting Force, composed principally of cruisers, but broken down as well by ship types; one Submarine Force; and one Base Logistics Force of auxiliaries and support ships.

This organization was set up principally to facilitate training by ship type. Once a year the entire fleet came together for a Fleet Problem; during the year each Force conducted a similar exercise. There were no forward deployments of the fleet (except one 1925 cruise to Australia), so therefore there were no deployment work-ups.

During World War I (when the American fleet went from 342 to 774 ships), those U.S. Navy forces that deployed and saw combat did so largely as individual single-type squadrons, not as a fleet or fleets. Most of the remainder of the fleet was kept in the Atlantic Fleet at home. Prior to World War I, and since the turn of the century, the history of fleet organization was one of striving to consolidate all U.S. naval forces into one single large U.S. battle fleet.

The Navy first sought to define the terms "fleet" and "force" in 1913. Navy regulations then stated; "The word 'Fleet' shall denote the aggregation of forces of various classes of vessels in one organization under one commander"; and "A Force is the major subdivision of a fleet. It is composed of all the vessels of the fleet that are of the same type or class or that are assigned to the same duty." Thus a "fleet" was to cut across functional areas, and a fleet commander was to exercise unity of command across those functional lines. Before the turn of the century, there were no U. S. Navy "fleets." The Royal Navy had fleets, as did some other European navies, but not the U.S. Navy.

19th century & before

Prior to the creation of "fleets" and "forces," the largest organizational element in the fleet had been the "squadron"—a collection of ships of varying size and capability headed by a commander responsible to the Secretary of the Navy and deploying to a particular geographic area to carry out the full range of contemporary naval missions. Deployment patterns in the nineteenth century by these" squadrons," however, were much more analogous to those of the modern numbered fleets than were those of the "fleets" of the first half of the twentieth century.

These squadrons were forward deployed for much of the century on a half dozen forward "stations": in the Caribbean, the Mediterranean, the China Seas, the eastern Pacific, the Southwest Atlantic, and off West Africa. Starting in 1841, there was also a Home Squadron—the distant ancestor of today's Atlantic Fleet. The forward squadrons engaged in a variety of activities that would today be called Operations Other Than War—commerce protection, diplomatic representation, anti-piracy operations, punitive landings, etc. The Home Squadron was created as a North Atlantic defense force during a British war scare; it would become the nucleus

for the combat forces pulled together for the Mexican War, Civil War, various other war scares, and the Spanish-American War.

The American Civil War of 1861 to 1865 had briefly broken the pattern of widely scattered forward deployed squadrons. Almost all the ships on forward station were brought home, and—augmented greatly by new construction and purchases—formed into Blockading Squadrons in the North Atlantic and the Gulf of Mexico. A riverine flotilla was also created for operations on the Mississippi and its tributaries—what became the Mississippi Squadron. After the war, the blockading and riverine squadrons were disbanded, most of the fleet sold off, and the distant station squadrons revived.

The Mexican War experience of 1846-8 had been similar: Ships came home from the outlying squadrons to reinforce the Home Squadron, which then descended on the Mexican Gulf Coast. The Pacific Squadron remained in place, however, to conduct operations in the Californias. After the war, the foreign stations were built up again and the size of the Home Squadron dwindled.

The pre-nineteenth century navy (the navy of 1775 through 1815) was a tiny warfighting navy mostly of individual ships, sometimes formed into small squadrons. These deployed as individual ships or squadrons to where the wars were: In the eastern and western Atlantic and the Caribbean during the American Revolution; in the Caribbean during the 1798-1801 Quasi-War with France; in the Mediterranean during the Barbary Wars; and in the North Atlantic, Caribbean, and even the Pacific during the War of 1812. They largely protected American shipping, supported troops ashore, seized advanced bases, and fought enemy raiders.

Analytical insights:

Introduction and overview

A comprehensive analysis of all possible issues embedded in the operational-level history of the U.S. Navy, as summarized above (and recounted in far greater detail elsewhere), is far beyond the scope of this paper.[4] What this paper seeks to do is identify and analyze *four main issue areas*:

- The numbered fleet commanders and the levels of warfare
- The fleets in joint operations
- Fleet headquarters
- Fleet operations and technology change

In addressing these topics, we are endeavoring to draw from history insights into:

- The American conception of numbered fleet command
- Relationships between doctrine and practice
- The effect past history has had in shaping current U.S. Navy thinking, organization, and operations at sea.

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4. The detailed recounting is in the companion document to this paper: Swartz, *"Forward... from the start."*

Numbered fleet commanders and the levels of warfare

General

Today's numbered fleet commanders operate in a complex environment. They have joint, combined, and naval responsibilities for a wide range of missions. In the past, they have, at one time or another, had to support the entire range of current missions (without, of course, possessing modern technology). Accordingly, we examined past naval experience to try to better understand the modern focus and orientation of the fleet commander. One way to understand that focus is through the concept of the *levels of warfare.*

A numbered fleet commander, like any military commander, can—in theory—plan and operate at the strategic, operational and/or tactical levels of war. In practice, U.S. Navy numbered fleet commanders have very seldom operated at the strategic level, but have often acted at the operational and tactical levels. The level at which they have planned and acted, however, has been closely identified with their mission.

In general, numbered fleet commanders have often planned and acted at both the operational and tactical levels of war when conducting peacetime or MOOTW missions. They have operated almost exclusively at the tactical level only during wartime combat operations.

The strategic level of warfare

As defined in Joint Pub 1-02, the strategic level of warfare is:

> The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) security objectives and guidance, and develops and uses national resources to accomplish these objectives. Activities at this level establish national and multinational military objectives; sequence initiatives; define limits and assess risks for the use of

> military and other instruments of national power; develop global plans or theater war plans to achieve these objectives; and provide military forces and other capabilities in accordance with strategic plans.[5]

This is clearly not the normal domain of the numbered fleet commander. Nevertheless, some of the predecessors of today's numbered fleet commanders have "been there; done that."

For example, in 1842, the commander of the U.S. Navy's Pacific Squadron —erroneously believing (but desiring) the nation to be at war with Mexico—sailed from his overseas homeport at Callao, Peru, and attacked and occupied Monterey, California. This was four years before the Mexican War. He withdrew, however, when he discovered that there was no war.

And in 1861, at the beginning of the Civil War, Captain Charles Wilkes—in independent command of the *San Jacinto*—forcibly removed two Confederate emissaries from a British ship—the so-called "*Trent* affair"—and thereby nearly precipitated a war between Britain and the United States and possibly the end of the American Union.

A numbered fleet commander, then as now, has the means—both in terms of decision-making abilities and significant firepower—to make autonomous decisions at the strategic level. His superiors, however, never have wanted him to, and so he almost never has. It's not his job. More importantly, he usually lacks not only certain types of information, but also international and domestic political and political-military *nuance*, that is only available at the center.

The power to make strategic-level decisions is normally held at the highest levels of national command authority. In the past, however, a lack of rapid communications between the center and forward deployed squadron commanders necessitated those commanders having great autonomy and independence, and enabled them to occasionally act at the strategic level.

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5. *Department of Defense Dictionary of Military and Associated Terms* (Joint Pub 1-02), (Washington DC: The Joint Staff, 23 March 1994), 363.

The operational level of warfare

Joint Pub says the *operational* level of war is:

> The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives.[6]

Numbered fleet commanders have often operated at the operational level of war, and one does not need to go back very far in history for examples.

- In 1948, upon taking command of the Sixth Task Fleet (later the Sixth Fleet), VADM Forrest Sherman re-oriented his fleet from a posture emphasizing naval presence and showing the flag to one cen-tered on protection of the sea lines of communication and power pro-jection.
- In the 1970s, upon taking command of the Seventh Fleet, VADM Thomas Hayward took the lead in re-conceptualizing the operational role of his fleet and reoriented its operational planning away from support for Southeast Asian and Chinese contingencies and toward operations against the Soviet Union to the north.
- In the 1980s, at least two successive Second Fleet commanders—VADMs J.A. "Ace" Lyons, Jr. and Henry C. Mustin—led their Atlantic Feet superiors in re-orienting the operational focus of the Second Fleet away from protection of sea lines of communications and barrier operations and toward deployment far forward in the Norwegian Sea.
- In the early 1990s, VADM William Owens re-oriented Sixth Fleet planning and operations from its Cold War basis to a new operational

6. Joint Pub 1-02, 275-6.

posture of peacetime engagement and joint and non-traditional coalition cooperation and coordination.

- In the nineteenth century, squadron commanders were empowered, by the Secretaries of the Navy and State, to make operational-level judgements in negotiating treaties, protecting American business interests, and in conducting small scale punitive actions in the Third World. That is, they were empowered not only to decide *how* best to land seamen and marines to, say, guard a customs house or seize a fort, but also *whether* to do so.

In all of these instances, and in others we have researched, it is apparent that the fleet commander has *shared* his power at this level with his superiors in the chain of command. Since at least World War I, the operational level of warfare is largely the domain of the naval leadership in Washington and the naval theater commanders; e.g., ADM Sims as Commander U.S. Naval Forces Operating in European Waters in 1917-18, FADM Nimitz as Commander in Chief, U.S. Pacific Fleet in World War II, and the post-war unified and component commanders.

The tactical level of warfare

The JCS Pub defines the tactical level of warfare as:

> The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives.[7]

Here the examples are legion.

- The World War II numbered fleet commanders operated almost exclusively at this level of warfare. Their job had been to first plan, and then execute, a series of tactical operations largely centering on amphibious assaults, war at sea, anti-submarine warfare and the destruction of enemy shipping. The operations of the Third and Fifth Fleets in the central Pacific, of the Seventh Fleet in New Guinea and

7. JCS Pub 1-02, 376.

the Philippines, and of the Eighth Fleet in the Mediterranean were all at the tactical level of warfare.

- Likewise, in Korea in 1950 and off Vietnam in the 1960s and 70s, the Seventh Fleet commanders planned and conducted a series of tactical operations implementing the strategic and operational level plans and policies of their superiors in the chain of command.

- During the Cold War, the planning and conducting of major tactical fleet exercises was a principal pre-occupation of the numbered fleet commanders, especially the First (until 1973), Second, and Third Fleet commanders, but also the Sixth and Seventh fleet commanders during certain periods (e.g., the Sixth Fleet in the early 50s, and the Sixth and Seventh Fleets in the late 70s).

- The visits of Sixth Fleet ships to Yugoslavia in the 1950s and of Seventh Fleet ships to China in the 1980s and 90s are examples of *peacetime* numbered fleet operations conducted at the tactical level of warfare. So too are the Freedom of Navigation assertions conducted by all numbered fleet commanders since 1979.

- In most of the nineteenth century, fleet tactics had far less importance. When not at war, which was most of the time, squadrons operated largely in single-ship units to conduct their range of MOOTW activities. During the War of 1812, while the British had a fleet, the Americans did not, so the U.S. Navy fought mostly single ship actions. During the Mexican War and the Civil War, the enemy lacked a fleet to employ fleet tactics against. Only during the Spanish American War were U.S. Navy squadrons pitted against enemy naval squadrons in actions where tactical skill could be appropriately employed.

While the tactical level of warfare may be the proper domain of the numbered fleet commander, here too he often has had to *share* his responsibilities with his superiors. Tactical missions often are meant to transmit strategic signals—e.g., the visit of the battleship *Maine* to Cuba in 1898, the 1942 use of a carrier carrying Army Air Forces bombers to raid Tokyo, and the exercising of amphibious forces in the Persian Gulf during Operation Desert Shield in 1990. Because tactics are the normal domain of the numbered fleet commander, participation in tactical decision-making by superiors is often contentious; e.g., Secretary McNamara's "rudder orders"

to the Second Fleet commander via the CNO during the Cuban Missile Crisis of 1962, and presidential participation in target selection during the Vietnam War in the 1960s and 70s.

Just as the introduction of instantaneous radio communication during the first decade of the 20th century all but eliminated the operation of squadron and fleet commanders at the strategic level of war, it has greatly increased the capability of their superiors to operate at the tactical level of warfare.

Observations

Our cursory scrub of the historical data indicates that while numbered fleet commanders have often operated at both the operational and tactical levels of warfare, their experience at the former has been largely *during peacetime* and has involved both planning for war and conducting what are now termed Military Operations other Than War (MOOTW).

During wartime, the numbered fleet commander has narrowed his focus almost exclusively to planning and carrying out operations at the tactical level of war. His superiors—normally the unified and component commanders, as well as the National Command Authorities—normally were responsible for operational-level and strategic-level thought and decisions.

Thus operating at the operational level of war *during war* (e.g., when commanding a Joint Task Force) will be a new experience for numbered fleet commanders. They need to prepare extensively.

Also, improvements in communications have changed markedly the mix of participants capable of participating in decisions made at each level of warfare. Fleet size, participation of joint and combined elements, and span of control issues may dictate institution of a certain number of layers in the operational chain of command. These layers may be conceptually identified with decisions at particular levels of warfare. Communications capabilities, however, enable those levels to be blurred in the minds—and actions—of senior decision makers.

The fleets in joint operations

General

Joint operations are not new to the fleets. In the past, however, most joint operations have been (a) centered around the task of amphibious assault, and (b) coordinated rather than integrated operations.

Jointness isn't new

Table 2 lays out the evolution of Navy participation in joint operations.

Early joint operations

The very first operation conducted by a squadron of the U.S. Navy was a Continental Navy (and Marine) amphibious raid on Nassau in the Bahamas in 1775, to capture cannons and other munitions for use by the Continental Army. While it was a wholly naval endeavor *tactically*, it had the *operational level* objective of provisioning the fledgling nation's ground forces. It was therefore joint *strategically* and *operationally*, although *not tactically*. This has often been the role of American naval forces in joint warfare—to operate in support of the Army—but not closely coordinated tactically with it and certainly not combined or integrated with it. This has also been the Navy's *preferred* role.

But coordinated and cooperative—even combined and integrated—operations have been a constant feature of American military and naval history. While there were long stretches when the Army and Navy went their separate ways, there were also many episodes when they operated together to achieve common strategic, operational, or tactical goals.

Parts of America's Revolutionary War naval forces were parts of America's armies—"Washington's Navy" at Boston and New York, and "Arnold's Navy" on Lake Champlain. The Mexican War produced an almost perfect model of joint Army-Navy amphibious operations, at Vera Cruz in 1847. The Civil War was largely a series of joint amphibious and riverine campaigns, mostly harmonious. The Spanish-American War also featured joint operations, although here the inter-service cooperation both in Washington and in Cuba was probably the worst America has ever seen.

Table 2. U.S. Navy joint coordination and cooperation, 1775-1996

Operational Era	Fleet Operations with Army & Air Force
Revolution & after 1775-1798	Few
Early Wars 1798-1815	Few
Early 19th cent. 1815-1841	Few. Scattered deployment pattern similar, however.
Mid 19th century 1841-1860	Few, but excellent joint amphibious operation in Mexico
Civil War 1861-1865	Numerous good amphibious & riverine operations. Some inter-personal frictions.
Late 19th century 1865-1889	Few
Early Mahan era 1889-1900	Few except a very bad war experience, with both personal and substantive differences
Early 20th cent. 1901-1917	Few. Joint Board created at Washington level
World War I 1917-1918	Transport & protection of shipping. Otherwise, little coordination (nor need)
Interwar Era 1919-1937	Stormy at Washington command level, especially with Air Corps. Coordination.
Pre-World War II 1937-1941	Stormy, especially with Air Corps. Cooperation with Army: amphibious training, GHQ maneuvers
Early Word War II 1941-1943	Joint operations the norm. JCS. Component relationships. Few integrated staffs. Army Air Corps becomes autonomous Army Air Forces.
Late World War II 1943-1945	Joint operations the norm. JCS. Component relationships. Few integrated staffs. Joint operational control in Europe, Southwest Pacific; Coordination & support in & from Central Pacific
Early Cold War 1945-1950	JCS. Creation of USAF. Unified, specified commands established. Roles & missions defined,. Great personal, bureaucratic and substantive differences at all levels
Mid-Cold War 1950-1973	Navy under Army GENs in Korea, Europe/Med; Korea & Vietnam air route packages. CNO loses command role.
Late Cold War 1973-1989	New unified commands, USCINCENT, C2F as CJTF in Grenada, last CINC-Component double-hats disappear
Post-Cold War 1989-1996	Goldwater-Nichols, CJCS, JTFs, Desert Storm, JFACC, ATO, USACOM, joint doctrine

20th century joint operations

World War II saw joint amphibious operations on a global scale, as well as Air Force anti-submarine warfare in support of Navy commanders and Navy carrier strike operations in support of ground commanders. In Korea and Vietnam, Seventh Fleet and Air Force commanders established "route packages" to enable coordinated strike operations to occur without mutual interference.

Also, during World War II and the Cold War period, a number of joint institutions emerged at the strategic and operational level of command: the Joint Chiefs of Staff, a Joint Staff, a Chairman and later a Vice Chairman for the Joint Chiefs, unified combatant theater and later and functional commanders and their staffs, and defense agencies such as the Defense Intelligence Agency. Fleet commanders were impacted by all of these institutions, but nevertheless, in carrying out their own operational and tactical level activities—*and shielded by their superiors, the naval component commanders* —they largely managed to operate with a high degree of autonomy. *The major joint integration took place at the strategic and high theater operational level, not normally at the level of the numbered fleet commanders.*

Joint staffs

JCS Pub 1-02 defines a joint staff as:

> The staff of a commander of a unified or specified command, or of a joint task force, which includes members from the several Services comprising the force. These members should be assigned in such a manner as to ensure that the commander understands the tactics, techniques, capabilities, needs and limitations of the component parts of the force. Positions on the staff should be divided so that Service representation and influence generally reflect the service composition of the force.[8]

Joint staffs were spawned by World War II. In addition to the joint staffs supporting the Joint Chiefs of Staff in Washington, each World War II theater and area commander also had a staff. Some were more joint, however, than others. In the Southwest Pacific, General MacArthur's staff was a modified U.SD. Army staff: Of its 11 senior positions, all were filled by U.S.

8. Joint Pub 1-02, 206.

Army officers, and of those, eight had come out of the Philippines with the general. General Eisenhower's staff in Europe was likewise almost exclusively Army. ADM Nimitz's CINCPACV/CINCPOA staff in Hawaii, however, was far more joint. The assistant chiefs of staff for logistics and intelligence were both Army officers, and Army, Navy, and Marine corps officers were assigned to every section.

Following World War II, unified theater commander staffs gradually became more joint as the concept of theater combatant command was developed. This was greatly aided by the splitting out of the unified and specified combatant command from the service component "double-hats"; e.g., in the Pacific in 1958, in Europe in 1963 (when the specified command "hat" was abolished), and in the Atlantic in 1984. These staffs have become progressively more integrated.

Integrated joint task forces and their staffs are mostly new

Integrated joint task forces and their staffs

JCS Pub 1-02 defines an "integrated staff" as:

> A staff in which one officer only is appointed to each post on the establishment of the headquarters, irrespective of nationality and Service.[9]

A joint task force is:

> A force composed of assigned or attached elements of the Army, the Navy or the Marine Corps, and the Air Force, or two or more of these services, which is constituted and so designated by the Secretary of Defense or by the commander of a unified command, a specified command, or an existing joint task force.[10]

The past

With some exceptions, most pre-1990s jointness—good and bad, successful and unachieved—was normally carried out through separate Navy, Army, and/or Air Force operational commanders *coordinating and cooperating with each other*, *not* under one another's command. A famous excep-

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9. Joint Pub 1-02, 188.

10. Joint Pub 1-02, 207.

tion was during the early days of Civil War riverine operations, when the Navy commander was under the operational control of the Army commander.

During World Wars I & II in Europe, U.S. naval operational level commanders (e.g., Eighth Fleet commander VADM Hewitt) worked for Royal Navy commanders (who, in World War II, worked for supreme allied commanders who were Army generals). In World War II in the Pacific, naval force and numbered fleet commanders maintained their autonomy as component commanders, working for U.S. Army or Navy theater area commanders. And in Korea, Vietnam, and other Cold War situations, naval components and numbered fleet commanders likewise maintained organizational integrity and autonomy.

Since numbered fleets were invented in 1943 and joint task forces were invented in 1946, there have been no instances besides Commander, Second Fleet commanding Operation "Urgent Fury" in Grenada in 1983, when a numbered fleet commander was himself in control of a true joint task force.

The present

This has changed recently, however, with the designation (and pre-designation) in the post-Cold War era of Joint Task Force Commanders— including numbered fleet commanders— in command of joint task groups and elements.

Thus, the modern fleet commander's concerns regarding Joint Task Force command are all of pretty recent origin. While numbered fleet staffs have often had liaison officers assigned from other services— and other nations — they have never been comprised of integrated staff sections. Staff integration, if it was present, was present at the next echelon of command above the numbered fleet commander, or the echelon above that. Today, however, not only do numbered fleet commander staffs have to be able to direct the *naval* operations of the fleet, they must also be able to direct the *entire spectrum of military operations* of a joint task force.

Amphibious operations

Planning and conducting amphibious operations has been the one area where the Navy has put the most thought and effort into establishing doctrine and procedures for joint command and control.

This doctrine and these procedures emerged during World War II, having evolved largely from Marine Corps thinking and experience.[11] The Marines themselves conducted their wartime amphibious assaults almost exclusively in the Pacific, but Army units in the Mediterranean, the Atlantic, Southwest Pacific, and the Pacific based their own amphibious landings on Marine Corps doctrine and experience.

Army commanders never completely embraced certain key aspects of Navy-Marine Corps doctrine (e.g.: the necessity for pre-assault naval and air bombardment and the efficacy of landings in daylight). Army commanders generally did implement, however, the core Navy-Marine Corps command and control concept: Tactical control of the entire operation by the naval force commander until the ground force commander is established ashore, at which time he becomes tactically autonomous of the Navy commander.

Jointness and layering

Pre-World War II

Prior to World War II, the chain of command for naval forces was short and clear: Operational control flowed from the President to the Secretary of the Navy, and from the Secretary to the fleet. During World War II, the service secretaries lost their operational roles, and a new institution—the Joint Chiefs of Staff—was created to advise the President and to direct U.S. forces in the field, including the fleets.

World War II: fleet and theater commands

As has been described already, the numbered fleets were created in 1943 out of the need for an additional layer of command between the Fleet and the

11. The history is contained in Barry Messina, *Development of U.S. Joint and Amphibious Doctrine, 1898-1945*, CRM 94-103 (Alexandria VA: Center for Naval Analyses, September 1994).

Task Force. There was no uniformity across the board in the application of the numbered fleet concept to specific operational commanders, however.

The Third and Fifth Fleet commanders reported to a fleet commander double-hatted as a theater area commander (the Commander-in-Chief, U.S. Pacific Fleet/Commander-in-Chief, Pacific Ocean Areas). Each had Army and Army Air Force components. The Seventh Fleet commander reported as the naval component commander to a theater area commander double-hatted as a supreme allied commander (the Commander-in-Chief, Southwest Pacific Area).

The Fourth Fleet commander reported to a fleet commander in an area with no joint or combined command structure (i.e., to the Commander-in-Chief, U.S. Atlantic Fleet). He was himself, however, an allied commander as the commander of the Brazilian-American South Atlantic Force. The Eighth Fleet commander reported operationally to the naval component commander of a combined theater command (i.e., to the commander of allied naval forces in the Mediterranean, a Royal Navy admiral, and through him to the Supreme Allied Commander, Mediterranean.).

The Cold War: joint commands and components

When the numbered fleets were re-instituted in 1949-1950, a new joint theater command structure was in place in the United States. The numbered fleet commanders reported to theater commanders-in-chief who were either specified commanders or double-hatted as joint unified commanders.

Thus, the First Fleet commander reported to the Commander-in-Chief of the Pacific Fleet (who was also the joint Commander-in-Chief Pacific—until 1958). The Second Fleet Commander reported to the Commander-in-Chief of the Atlantic Fleet (who was also the joint Commander-in-Chief Atlantic—until 1984). The Commander of the Sixth Fleet reported to the Commander-in-Chief, U.S. Naval Forces Eastern Atlantic and Mediterranean, a joint specified commander (until 1963, when he became the Commander-in-Chief, U.S. Naval Forces Europe—the naval component commander of the joint European Commander. The Commander of the Seventh Fleet—like the Commander, First Fleet—reported to the Commander-in-Chief, U.S. Pacific Fleet, but also, for warfighting, to the Commander, U.S. Naval Forces, Far East, the naval component commander of the Commander in Chief, U.S. Far Eastern Command (abolished in 1957).

Thus, by the end of the Cold War, as the naval component commanders had lost their unified and specified hats, they had formed into an additional layer in the chain of command above the numbered fleet commanders.

The national command authority

Not only did the Cold War solidify two command layers above the numbered fleet commanders in the field, but it also brought additional command layers in Washington.

During World War II, when the numbered fleets had been created, the President commanded their superiors—the appropriate theater, area, or fleet commander—through the Joint Chiefs of Staff, who designated a service chief as their executive agent. Thus the two area commanders in the Pacific, the Commanders of the Southwest Pacific and Pacific Ocean Areas, took direction from the Chief of Staff of the Army and the CNO respectively. The Chief of Staff of the Army was also the executive agent for the Supreme Allied Commander in Europe, while the Commander in Chief of the Atlantic Fleet took direction from the CNO.

After several intermediate changes, the Cold War operational chain of command in Washington finally settled out in 1958. Unified and Specified commanders reported to the Secretary of Defense and then to the President through the Joint Chiefs of Staff (in 1985 it became through the Chairman of the Joint Chiefs of Staff). Thus a new post-war creation—the Secretary of Defense and his staff—were inserted into the chain (although before World War II, this same operational role had been held by the Secretary of War and the Secretary of the Navy).

Observations

We're in a new era. Joint Task Forces are a new phenomenon. Organizations like the Navy's numbered fleets are trying to build a capability for joint integration that was never necessary before.

Little in earlier joint experience seems to be a useful guide, at the numbered fleet commander level, on how to go about directing integrated joint tactical operations.

The record of amphibious operations in World War II, however, shows that joint principles, once agreed to, can be successfully applied at the tactical level, even in highly complex operations.

World War II and Cold War jointness brought with it additional levels of command. This was in part to maintain the autonomy of single-service operations, in part to increase civilian control of the military, and in part the result of an increased span of control by commanders brought on by increases in overall force levels, especially during World War II but also during the Korean and Vietnam Wars.

As force levels shrink and autonomous single-service operations become less likely, however, layers of operational command should logically be examined for pruning.

Fleet headquarters

General

Fleet commanders have had their headquarters ashore, afloat, or split. When afloat, warships with extra space for flag officers and their staffs have normally been used as flagships. Complex joint undertakings, i.e.; amphibious assaults, resulted, however, in the creation of tailored ships specifically for the complex command and control role.

Afloat *and* ashore

Pre-World War II

The progenitors of the numbered fleet commanders created in 1943 normally commanded from command ships, but each also normally had flag working spaces ashore as well, during peacetime and planning periods. ADM Husband Kimmel, the Pacific Fleet commander before World War II, was expected to take tactical command of the Fleet at sea when hostilities began, and had an appropriately configured battleship—U.S.S. *Pennsylvania*—as command ship. During the summer of 1941, however, Kimmel moved his flag and staff ashore at Pearl Harbor. His thinking: "to successfully prosecute a campaign in the Pacific, ashore headquarters at the principal base must be available."

Fleet command ships in the twentieth century needed communications gear and space for staffs. Sometimes they also needed speed to keep up with the fleet, but sometimes they didn't. The interwar fleet had had a battleship as command ship for the entire fleet, and another as command ship for its main striking arm—the Battle Force. The Scouting Force—the much faster cruiser force that was the eyes and ears of the fleet—had a fast cruiser specially configured for command ship duties—*Indianapolis*, which was also outfitted as an alternative fleet flagship.

World War II

During World War II, the operational numbered fleet commanders *alternated working afloat and ashore.* The most important examples:

VADM Kent Hewitt, the Western Task Force and later Eighth Fleet commander, began his combat career *ashore* in Norfolk, planning for the invasion of North Africa in 1942. He then flew his flag *at sea* in the heavy cruiser *Augusta* during the transit and the assault itself. Subsequently, however, he set up his headquarters *ashore* at Algiers, near his superior naval (combined) component commander, the Royal Navy's Admiral A. B. C. Cunningham, and near the joint and combined theater commander's staff. At his shore headquarters he and his staff planned the assaults on Sicily and Italy. He then ran his actual assault operations *at sea*, first from the (unsatisfactory) attack transport *Monrovia* as flagship for Sicily, and then from the command ship *Ancon* for Italy (at Salerno). Following the invasion of Italy and another landing at Anzio, Hewitt moved his headquarters forward and *ashore* to Naples, adjacent to the joint and combined theater commander. There he planned the August 1944 assault on the South of France, at which he commanded the entire allied naval force *afloat* from the command ship *Catoctin.* Over a month later, when the landing force was inland and the coastal area secure, Hewitt returned to his headquarters *ashore* back in Naples.

In the Pacific, Admiral Hart's Asiatic Fleet in 1941 had been headquartered *ashore* in Manila, since he had sent his *cruiser* command ship, USS *Houston* to sea for operations without him. Before Manila fell, Hart moved his headquarters to Surabaya, in Java, also *ashore*. His successor, VADM Glassford, maintained the headquarters *ashore* in Java, moving them to Tjilatjap. When the fall of Java was imminent, Glassford moved the headquarters to Australia. It wound up in Brisbane, co-located with General Douglas

MacArthur's Southwest Pacific Command, and was transformed into the Southwest Pacific Force, MacArthur's naval component, in April 1942. In 1943 it became the Seventh Fleet. (So it was both a numbered fleet and a naval component commander, although its interest was principally tactical. Operational level planning was done on MacArthur's staff.)

Seventh Fleet headquarters remained in Brisbane with MacArthur, although the fleet commander—VADM Kinkaid after 1943—went forward with the general *by sea* to direct specific operations.

For the invasion of Hollandia, New Guinea in 1944, General MacArthur, the Supreme Commander, rode the cruiser *Nashville*, *afloat*, while Commander, Seventh Fleet VADM Kinkaid, the naval component commander, moved forward from Brisbane but remained *ashore* at Port Moresby, New Guinea. (Kinkaid did not see any reason for MacArthur's being forward afloat.) RADM Barbey, the amphibious attack force commander, and the army component commander rode destroyers *afloat* on-scene.

After the capture of Hollandia, in New Guinea, in 1944, MacArthur and Kinkaid moved their headquarters there, *ashore*, to plan the invasion of Leyte, in the Philippines. At Leyte, in October 1944, Kinkaid flew his flag in the command ship *Wasatch*, which he rode with the Army ground force commander, while the theater commander, MacArthur, again rode *Nashville*. Kinkaid continued to ride *Wasatch* and was on her during the January 1945 landings on Luzon, at Lingayen Gulf. In February, however, he moved *ashore* to Tolosa, on Leyte,where he supervised the remaining 38 Seventh Fleet landings in the Philippines and Borneo. He moved forward again in July, still *ashore*, to Manila, where General MacArthur had his headquarters, for the remainder of the war.

The experience of the Third and Fifth Fleets was somewhat different. The Third Fleet was created in March 1943 out of the Southwest Pacific Force, the organization set up in June 1942 to prosecute the landings on Guadalcanal and the war in the Solomons. Flag headquarters was first in Auckland, New Zealand, *afloat* on the destroyer tender *Rigel* (AD 13), and then in Noumea, French New Caledonia, on the command-ship-configured miscellaneous auxiliary *Argonne* (AG 31), a former transport and tender that had been serving for the past decade as the command ship for the U.S. Fleet's Base (i.e., logistics) Force. When VADM Halsey took command of the South Pacific Force in October 1943, he moved his headquarters *ashore* into

the city of Noumea, where they remained through 1944, when he had also become the Third Fleet commander. Halsey saw *Argonne* as hopelessly inadequate as a command ship, lacking both space for his increasing staff, and air conditioning. Thus the Third Fleet during the Solomons Campaign was essentially headquartered ashore.

At the same time, ADM Nimitz (as Navy Commander in Chief, U.S. Pacific Fleet and joint Commander, in Chief, Pacific Ocean Areas) had created a Central Pacific Force in August 1943, to which he appointed VADM Raymond Spruance. This became the Fifth Fleet. Its first task was the invasion of Tarawa and others of the Gilbert Islands, in November 1943. Spruance did his planning *ashore*, then rode the cruiser *Indianapolis* for the actual operation, flying his flag *afloat*. He stayed on *Indianapolis* during the Gilberts, Marshalls, and Marianas campaigns, through June 1944.

Meanwhile, Halsey's war had gone away in the South Pacific by 1944, and Nimitz had him return to Pearl Harbor and begin planning operations in support of General MacArthur's Philippine campaign. This he did *ashore*. In August 1944, he relieved Spruance in command of the fleet, which now became known as the Third Fleet. Now Halsey flew his flag *at sea*, on the new *Iowa*-class battleship *New Jersey*, for the Philippines operations. Spruance took his staff and the Fifth Fleet designation back to Pearl, where he planned the operations against Iwo Jima and Okinawa, *ashore*. Spruance then relieved Halsey in January 1945, *afloat*, with *Indianapolis* as his flagship again (and the fleet became the Fifth Fleet again). Halsey and his staff returned *ashore* to Pearl Harbor, to plan operations against the Japanese Home Islands. He relieved Spruance *afloat* in May 1945 (and the fleet again became the Third Fleet), flying his flag from *Missouri*, another *Iowa*-class battleship. Spruance returned to *shore* headquarters, this time farther forward, in Guam, still designated as Commander Fifth Fleet, to plan for his part in the invasion of Japan.

In sum, the Third Fleet and Fifth Fleet commanders flew their flags *ashore* when they were *planning*, and *afloat* when they were conducting *operations*. As with the Seventh and Eighth Fleet commanders, they were afloat a lot, but not continuously, as the episodic nature of operations during World War II did not call for it.

Speed was sometimes important and sometimes not. The Third and Fifth Fleets were fast striking fleets, and their command ships—*Indianapolis* and

the *Iowas*—were fast enough to keep up with them. When *Indianapolis* needed to depart from Okinawa for repairs in 1945, Spruance shifted his flag to the much slower old battleship *New Mexico*, but by then fleet speed was a secondary consideration in the Okinawa campaign. The Seventh and Eighth Fleets were essentially amphibious fleets. Their far slower speeds of advance dropped high speed as a necessary command ship characteristic. Thus amphibious force flagships worked just fine. Halsey's original Third Fleet flagship, *Argonne*, had had almost no speed at all, but she spent her war anchored at Noumea.

Post-World War II

Hewitt's Eighth Fleet had been disestablished in April 1945. What was left of it became Naval Forces Mediterranean, a small command of three ships and a number of bases in the process of being closed, headquartered *ashore* in Naples except for a brief period in Palermo. In 1946, however, the Commander, Naval Forces Mediterranean flew his flag at sea again, on the tender *Grand Canyon*—space, not speed, being what was needed in a command ship at that time.

Meanwhile, in the fall of 1945, Halsey moved his Third Fleet headquarters immediately *ashore* in Yokosuka, while Spruance, as Fifth Fleet commander, preferred to keep his flag flying *afloat*, on *New Jersey*. Both fleets, however, with their flagships, would disappear within the next two years, as had the Eight Fleet.

VADM Kinkaid's Seventh Fleet remained, as it had a major immediate post-war role to play. It landed Army troops in Korea and two Marine Divisions in China, to keep order and take the Japanese surrender, all the while dodging the Chinese Civil War. It would remain in and off China through 1949, with its commander flying his flag *afloat*, first on slow amphibious force flagships (AGCs), later on faster cruisers.

Thus the immediate post-war period saw the movement of the two forward fleet and force commanders—of Naval Forces Mediterranean and the Seventh Fleet—*to sea* on flagships, rotating in from the United States. These flagships, however, were always associated with small *shore* facilities at particular forward ports—Naples in the Mediterranean and Tsingtao and Shanghai, China, until 1949. (And with their fleets not being challenged at sea, they could afford to be *slow*.)

Afloat command became the pattern during the remainder of the Cold War and into the post-Cold war as well, until the Commander, Middle East Force moved his headquarters from a command ship ashore in 1993. And while *speed* became more important, later amphibious ship designs enabled amphibious ships as well as cruisers to keep up with the fleet.

Command ships

World War II

From the above, it can be seen that a variety of ship types served as command ships for numbered fleet commanders in World War II during the periods when they flew their flags at sea.

Hewitt and Kinkaid flew their flags at sea principally from *amphibious force flagships* (AGC), given the centrality of amphibious assault to their fleets' missions. (Their fleets normally lacked fast carriers and battleships.) AGCs were built on merchant ship hulls and were based on a British idea that the U.S. navy enthusiastically embraced. Halsey and Spruance chose *fast surface combatants* capable of keeping up with their fast carrier task forces—a twelve-year old heavy *cruiser* and a new *fast battleship*, both capable of steaming at in excess of 30 knots. Halsey liked the space *New Jersey* and *Missouri* afforded him. Spruance rode *Indianapolis* deliberately to squeeze his staff size down and because he did not wish to take a front-line fighting ship away from its primary tactical duties (he did shift his flag to *New Jersey* once in 1944 when he wanted to participate in a particular tactical evolution at Truk).

The Third and Fifth Fleet fast carrier task force commanders (CTF 38/58), Vice Admirals John S. McCain and Marc Mitscher, flew their flags from *Essex*-class fast carriers.

The early Cold War

During the immediate postwar period, *a variety of ships served as numbered fleet flagships.* In 1946, the striking fleet on the West Coast, the Fifth Fleet, used a *battleship* as a command ship. In the striking fleet on the East Coast, however, VADM Mitscher, who loathed battleships, flew his flag as Commander, Eighth Fleet, on a *Midway*-class large *carrier.* The commanders of U.S. naval forces in Europe—also briefly styled commanders of the Twelfth Fleet—in London, ADMs Hewitt and Conolly, flew their flags

from *heavy cruisers* that rotated to Plymouth to serve as the core of the Northern European Force as well as flagships. Naval Forces Mediterranean (later the Sixth Fleet) used a *tender* as its first command ship, then a *light cruiser*. The Commander, Seventh Fleet (later Naval Forces, Western Pacific), used *Estes*, an *amphibious force flagship*, from 1945 through 1948, homeported in Tsingtao, China.

By the late 1940s, a policy had jelled of rotating *cruisers* built at the end of World War II as numbered fleet command ships, and this policy endured through the 1970s. In the mid-1950s, as the number of cruisers in the fleet declined, the forward-deployed numbered fleets homeported their cruiser command ships forward in-theater: the Sixth Fleet command ship at Villefranche, France, in 1956 and the Seventh Fleet command ship at Yokosuka, Japan, in 1959 (the Sixth Fleet command ship home port changed to Gaeta, Italy, in the mid-1960s).

The Korean War marked an exception to the use of *cruisers*. The Seventh Fleet commander flew his flag from a succession of *Iowa*-class *battleships* off the Korean coast. (*Battleships* would not be used again as fleet command ships during their re-activations in the 1960s and 1980s.)

One cruiser in the postwar period was actually built as a command ship. USS *Northampton* was an *Oregon City*-class light cruiser only 54% built by V-J Day. FADM Ernest King, CNO and Commander-in-Chief, U.S. Fleet, ordered her completed as a prototype postwar amphibious force command ship (AGC). Within a year, however, she had been reclassified as a *command cruiser* (CLC-1) rather than an AGC. Funding constraints delayed her commissioning, and she did not join the fleet at sea until 1954. As a command ship, she had far more internal space than any of the converted cruisers. She served as command ship for the Amphibious Force Atlantic, the Sixth Fleet, and the Second Fleet for the next half-dozen years. After 1961, she was designated CC 1, a mobile national emergency command post. She stayed in the fleet as a national asset, not a fleet command ship asset, until decommissioning in 1970.

Why *cruisers* and *battleships*? They had *space*. They could be configured to carry appropriate *communications* gear. They were *fast* and could keep up with the rest of the fleet, especially the carriers. They were *survivable*. And they were *available*: There had been 72 cruisers in the active inventory at the end of World War II; 18 cruisers partially completed on V-J Day

were commissioned between then and the end of 1958. Drawing from these, a force level of 13-19 was maintained through the mid-Cold War.

Three new *small seaplane tenders* (AVPs) (*sans* seaplanes) were assigned rotationally as the Middle East Force command ship, beginning in 1949. In 1965, one of these tenders, *Valcour* (AVP55), was reclassified as a *miscellaneous command ship* (AGF 1) and homeported forward almost permanently in Bahrain.

Thus, between 1956 and 1965, the command ships of the two forward-deployed numbered fleets (and the growing Middle East Force) were all more-or-less permanently homeported forward, in-theater.

In 1969, ships previously classified as *amphibious force flagship* (AGC) became *amphibious command ships* (LCCs). Two of these would later become numbered fleet command ships, as explained below.

The late Cold War

In the 1970s and 1980s, the *cruisers* and the converted *seaplane tender* had reached the end of their useful lives and were retired. The *amphibious transport dock LaSalle* (LPD 3) became the Middle East Force command ship in 1972, and her classification was changed to *miscellaneous command ship* (AGF-3). She relieved *Valcour,* last of the converted seaplane tender command ships and like her predecessor was homeported in Bahrain.

The *amphibious command ship Blue Ridge* (LCC 2) became Seventh Fleet command ship in 1979, relieving *Oklahoma City* (CG 5). During Operations Desert Shield and Desert Storm in 1990-1991, when the Seventh Fleet Commander was dual-hatted as Commander, U.S. Naval Forces, Central Command, he continued to ride *Blue Ridge*, which deployed from Japan and the China Seas to the Persian Gulf, spending most of the Gulf War period at the pier in Bahrain.

A series of ships replaced the last *cruiser, Albany* (CG 10), as Sixth Fleet command ship: the *destroyer tender Puget Sound* (AD 38) in 1980; the *miscellaneous command ship Coronado* (AGF 11) (the converted *amphibious transport dock* LPD 3) in 1985; and the rebuilt *guided missile cruiser Belknap* (CG 26) in 1986. *Belknap* was in turn replaced by *LaSalle* in 1993, when the commander of the Middle East Force—later the commander of the Fifth Fleet —moved his headquarters ashore.

In 1981, the *amphibious command ship Mount Whitney* (LCC 20) became the Second Fleet command ship, relieving *Albany* (CG 10). *Coronado* (AGF 11) became the Third Fleet command ship in 1986. Previously, since the Third Fleet had been re-created in Hawaii in 1973, its headquarters had been ashore.

1996

As of 1996, the Second Fleet command ship is *Mount Whitney* (LCC 20). The Third Fleet command ship is *Coronado* (AGF 11). The Fifth Fleet headquarters is ashore forward, in Bahrain. The Sixth Fleet command ship is *LaSalle* (AGF 3). The Seventh Fleet command ship is *Blue Ridge* (LCC 19). All were originally amphibious force ships built in the 1960s. Why amphibious ships? They have *space* (they are 1 1/2 times the size of the old AGCs and can accommodate 2 1/2 times more people). They can be configured to carry appropriate *communications* gear. They are *fast* enough to keep up with the rest of the fleet (they are rated as having maximum speeds in excess of 20 knots). And they are *available*. They are *not*, however, particularly *survivable*.

Observations

Criteria

Numbered fleet commanders have commanded their fleets both while afloat and ashore. Most significantly, they have often done it *both* ways. There is no one timeless correct model.

The location of command headquarters has been determined based on essentially six criteria: *Space*, *communications capability*, *proximity* (to higher headquarters or to the tactical operating forces), *survivability*, *availability*, and *security and isolation from distraction*. Depending on the circumstances, either an afloat command ship or a shore facility will have the edge.

Generally speaking, shore facilities yield more space, can have more developed communications capabilities, are (potentially) more proximate to higher headquarters, and are often more survivable. A command ship will have closer proximity to naval operating forces (and perhaps—but not necessarily—to forces ashore as well). It will also normally be more secure and certainly more isolated.

Availability is highly situational: In forward, undeveloped theaters, command ships may be the only available alternatives (e.g., the assignment of *Rigel* to Auckland, New Zealand, and *Argonne* to Noumea, New Caledonia, for the Commander, South Pacific Area and Force in mid-1942). Once a theater is developed, however, there will usually be an available and suitable site ashore.

Security and isolation sometimes can be driving factors. ADM Spruance preferred having his headquarters in Japan afloat, on a command ship, in the fall of 1945. He wanted his staff isolated from distractions ashore. At the same time, ADM Halsey, by contrast, was less concerned with this issue, and opted for the greater space available to his Third Fleet staff ashore in Yokosuka.

Speed is an attribute of command ships that enhances their capabilities in two areas: (1) it can yield greater proximity to a greater number of operating forces, and (2) it improves survivability.

Proximity

Why is proximity to the operating forces considered important? Numbered fleet commanders can meet more frequently face-to-face with their subordinate task force commanders. Fleet morale may be enhanced by knowledge that an aggressive, caring commander is close by, sharing the danger. These intangibles are important. Technology can only take leadership so far: Even teleconferencing cannot establish solid working relationships and trust under combat conditions, or communicate nuance and tone. Only an on-scene commander can do that. Also, as a secondary consideration, should visual tactical signaling methods need to be employed, an on-scene command ship will be able to provide them.

Sequencing

There is no law that says a commander must be either *afloat or ashore. The historical record shows he can be* both. The experience of the fleets during World War II is a good example of *sequential* ashore and afloat fleet command. The Eighth Fleet commander in the Mediterranean conducted the planning phases of his operations ashore. He directed the operation itself from a command ship. In the Pacific, during the last year of the war, the alternating Third and Fifth Fleet com-

manders did their planning ashore, in the rear, as full-up numbered fleet staffs but shorn of their operating forces. When ready to actually direct the operations they had planned, they moved afloat and forward, taking control of the fleet's operational assets, while the alternating numbered fleet commander and his staff moved back to the rear and shore headquarters to plan the next evolution.

The Cold War and today

Cold War and post-Cold war numbered fleet commanders have generally opted for command afloat. Proximity to the operating forces drove this preference. When there was a host of available ship types to choose from, as was the case in the early and mid-Cold War eras, late-World War II cruisers were the ship type that had the perquisite capabilities. Later, when these went away, mid-Cold War *amphibious ship types* were chosen. These amphibious ships had more space than cruisers, could carry more communications gear, but were somewhat slower, not as survivable, and not as available—there being important alternative uses for them as amphibious ships.

An exception has been the post-Cold War Fifth Fleet commander, with command headquarters ashore in Bahrain. But here the exception appears to be the one that proves the rule. This numbered fleet commander's area of operational responsibility is the smallest of the five, and focuses on one particular small body of water—the Persian Gulf. The facility on Bahrain is as far forward in the theater and as close to the operating forces as most hypothetical at sea positions of a command ship would be. Thus, the Fifth Fleet commander has lost little in the way of proximity by moving ashore.

The other numbered fleet commanders—even the Sixth Fleet commander in the Mediterranean and Black Seas—have far more widely scattered forces in their operational areas at sea.

Fleet operations and technology change

General

Changes in technology have influenced all aspects of naval warfare at all levels—strategic, operational and tactical. These changes have run the

gamut from changes in the technology of weapons, armor, and platforms to changes in the technology of communications and mobility. *It is these last two kinds of changes that interest us most here, because they seem to have been the most important in the past in their influence on the nature of the numbered fleets and their predecessors, and on the level of warfare at which they have operated.*

Changes in the technology of fleet command and control

The chain of command in the eighteenth and nineteenth century U.S. Navy was short, but the time it took for communications to pass up and down that chain was quite lengthy. The civilian Secretary of the Navy in Washington was the highest operational authority in the Navy, and he issued orders to his squadron commanders directly, with no intervening command layers. He could—and did—periodically establish boards and advisory bodies. After 1842 and the establishment of the Bureau system, he had the Chief of the Bureau of Navigation to manage the operational records of the fleet, and to physically issue naval orders. But at the end of the day he was the responsible operational authority, and the best and most active secretaries—like Lincoln's Gideon Welles during the Civil War—did not hesitate to use that authority in direct communication with the commodores of the squadrons of the fleet.

Such communication, however, was slow. Fast dispatch boats and overland methods were used, but even so it took months for communications to reach the distant stations, and days or even weeks for directives and replies to travel between home squadrons and Washington. Dispatch boats were hard to intercept, however, so communications, while slow, were more or less secure.

This all had great implications for the autonomy of naval squadron commanders and for the level of warfare they operated at. It was largely because of this communications lag that commanders at sea could operate at the strategic level of war. With real-time communications, for example, it is doubtful that Commodore Jones would have ever occupied Monterey in 1842, or Captain Wilkes seize the Confederate agents from the British ship *Trent* in 1861. *The predecessors of the numbered fleet commanders occasionally operated at the strategic level of warfare because of the lack of real-time communications with the center of national strategy. Once this*

problem was obviated—initially by marine cable, then by wireless radio, then by satellites—fleet, squadron and individual ship operations at the strategic level became a thing of the past.

The transcontinental telegraph in the 1860s began to close the communications gap between the Secretary and the Pacific and East Indies squadrons. The gap was narrowed far more, for all the forward squadrons, by the laying of the trans-Atlantic marine cable in 1866, and the criss-crossing of the world's oceans and seas by subsequent cables laid by the British, Americans, French, Germans and others. Admiral Dewey and his Asiatic Squadron at Hong Kong in 1898 knew of their mission to destroy the Spanish fleet in the Philippines through receipt of several messages from Washington, via British cable lines.

The cable had a great limitation, of course: Once a commander upped anchor and cleared the harbor, he was unavailable to send or receive cable messages, and reliance on dispatch boats resumed instead.

Cable also had another limitation too: It was more susceptible to command and control warfare measures than dispatch boats were, i.e.: the cable could be cut. In the first such actions in modern warfare, Dewey cut the cable from Manila to Hong Kong, thereby cutting off his adversary from communications with Madrid. Likewise, in Cuba, the American naval commander there sent boat parties ashore to cut the cable—under fire—connecting Spanish Cuba with Jamaica and thence to Madrid.

Given the experience of the war, Guam was later specifically annexed (in 1898) and Midway—American since 1867—was developed (in 1903) as cable station sites en route to the Philippines.

While cable was important, wireless radio was revolutionary. In 1899 Guglielmo Marconi sent the first official radio message from a U.S. Navy warship, the cruiser *New York*. Unlike the shift from sail to steam, the adoption of radio by the Navy was rapid. The advantages were obvious, the nation and the navy had plenty of money, and radio was of direct relevance to the major operational change of the period—the shift from single-ship and small squadron tactical evolutions to complex large fleet and force tactical maneuvers.

In the spring of 1903, the establishment of shore stations and the installation of wireless apparatus on shipboard had begun. By 1905, 48 vessels and 36 shore stations on both coasts and in the Caribbean were either equipped or being equipped. By 1908, radio had been installed on all surface ships of the U. S. fleet, including torpedo craft.

Radio was now an omnipresent change agent at the operational and tactical levels of warfare, In August 1903, radio was first used successfully in a fleet exercise: Five east coast shore stations and five ships were equipped with wireless sets for summer maneuvers, in which radio was used to report enemy positions and bring forces to bear on them. Later, in 1914, during the joint U.S. Army-Navy intervention in Mexico, a light cruiser was stationed at sea to relay messages between Washington and the North Atlantic Fleet commander's command ship, *Wyoming*, off Veracruz.

At the tactical level, wireless gave ships a communications range of 50-to 75 miles from shore stations or other elements of the fleet. Scouting cruisers could now operate beyond the visual range of the rest of the fleet. The fleet's battlespace had grown.

At the operational level, the fabled autonomy of the captain at sea was now dead. Fleet command could now be achieved in fact as well as name, in all kinds of weather, day and night, by the fleet commander. *Large operational naval formations in part made possible by radio meant that a measure of operational and tactical initiative could be—and was—taken away from the individual ship captain and given to the fleet commander—and to Washington. True operational art—and the possibility of real-time micro-management from afar—were now realities.*

Now not only would ship and squadron commanders lose the ability of operating at the *strategic* level of warfare, but now the Secretary of the Navy and other authorities in Washington—and throughout the chain of command in between—would gain the ability to themselves direct *opera-tional* level warfare and even *tactical* operations at sea.

Changes in the technology of fleet mobility

The change from sails to steam went very slowly, taking over half a century to be fully implemented. Steam and screw propulsion enters the fleet in the mid-nineteenth century, beginning with the paddle-wheel steamer *Fulton II*

in 1837, and the screw steamer *Princeton* in 1845. During the Civil War, steam was generally an auxiliary to sail, for steam installations were inefficient, requiring heavy consumption of coal.

After the war, the low priority of naval affairs in the life of the nation, the high cost of steam propulsion, and the lack of a U.S. naval mission demanding steam propulsion all kept the Navy in sail long after other world navies had gone over almost entirely to steam. The mission of the fleet before 1890 being principally to show the flag and conduct military operations other than war (MOOTW) on far distant stations, sailing ships provided the greatest sea-keeping qualities at the lowest cost. The oceans of the world were increasingly free of pirates and local warlords, as the European powers gobbled up long stretches of coastline in Africa, Asia, and the Pacific to swell their empires. Likewise, these new empires denied the United States the ability to establish coaling stations now necessary for steam warships. Without overseas colonies where coal could be stored, the United States could either abandon overseas presence, rely on expensive and uncertain foreign coal supplies, or retain sail power but be technologically obsolete. Until the 1890s, the United States chose the third option.

The naval renaissance of the last two decades of the nineteenth century ended the Navy's dependence on sail. With new warfighting as well as MOOTW missions (e.g., demonstrations of American might and technical prowess) highly dependent on the most advanced steam propulsion systems available, the Navy shifted rapidly now to coal.

The now-universal use of steam propulsion introduced the factor of fuel consumption into naval strategy, operations, and tactics. Even at cruising speed—typically around 10 knots—a large turn-of-the-century warship would burn three to four tons of coal an hour. Coal drastically reduced the operational cruising radius of fleets just as it expanded the fleet's tactical maneuvering options. It greatly increased their dependence on nearby coaling station ashore. (Among other things, this would yield a requirement to occupy and defend advanced naval bases, a problem the Marines began to try to solve during the late nineteenth century.)

But then *oil fuel* began to be introduced into the fleet. In 1909, an experimental oil-burning installation on the steam monitor *Cheyenne* is successful. As oil was far easier to handle for refueling and as it weighed half as much as coal for the same amount of propulsive power, oil fuel restored

some of the flexibility and mobility the fleet had lost when it switched from sails to steam.

Moreover, in 1915 the first U.S. Navy fleet oiler was commissioned. Now the Navy's fleets would be able to conduct refueling at sea, further restoring their flexibility. The first such refueling was conducted in 1917, during World War I, when LT Chester Nimitz took the oiler *Maumee* to a station in mid-Atlantic and refueled the American destroyers being sent to Ireland to work under Royal Navy operational control in anti-submarine operations.

Later, the interwar navy, faced with the problem of carrying the fight across the Pacific vastnesses to Japan, spent a great deal of time thinking about and gaming the problems of improving fleet mobility through replenishment at sea. There was little money to build a mobile logistic support force, however, and the Navy's efforts in this regard, while vital, remained largely theoretical. The largesse of the pre-war and early war years, however, saw the ships built that could implement the plans. By the end of World War II, underway replenishment at sea had been developed to a high art, and the fleet had over a hundred oilers at sea, not to mention a dozen and a half ammunition ships, four dozen stores ships, and a host of other replenishment ships and craft.

Mobility had been restored. Underway replenishment meant that battle fleets could be maintained far forward indefinitely with minimal links to forward bases. The immediate post-World War II operational concept of striking fleets (the Fifth and Eighth Fleets) kept in readiness on each coast gave way rapidly to the concept of forward deployed ready battle fleets (the Sixth and Seventh Fleets). Then the advent of nuclear power in the 1950s meant that the submarine force now could have similar mobility and endurance, while retaining and enhancing its unique stealthy characteristics.

Observations

Communications

Communications matters. Communications is what enables commanders at all levels of command to expand their battlespace. Changes in communications technology—like radio—that have such positive effects on tactical maneuvers also have important effects at the operational and strategic level. Radical changes in communications technology seem to be an inherent part

of the current Revolution in Military Affairs. The current and next generations of communications technology can be expected to affect all levels of warfare similarly.

Good real-time communications has enabled the highest levels of the National Command Authorities to talk directly to the front-line forces for years. This being the case, one would therefore expect that this era of rapid communications would also be one of very short chains of command and few intervening layers. Actually, the opposite has been true. Layers have been created in part to *insulate* the tactical commanders in the field from receiving tactical direction directly from the National Command Authorities. The elimination of intervening layers of command may strip away this insulation. This is therefore a consideration in devising appropriate operational chains of command for the future.

Mobility

Mobility matters. Mobility—not firepower (although it is certainly important)—is the core essence of the forward deployed numbered battle fleets created after World War II and still the basic operational units of the fleet today. It is what gives naval forces their special ability to be "forward. . . from the sea."

At the root of many of the problems of creating joint task forces is the problem of meshing these mobile forward battle fleets with relatively stationary shore-based army and air force units. It is their *mobility*, more than any other characteristic, that makes them difficult to integrate with ground and land-based air forces.

While radical changes in communications technology appear to be part of the contemporary Revolution of Military Affairs, this does not appear to be true for mobility technology for *Navy* systems. Near- and mid-term changes in Army, Air Force, and Marine mobility technology may well be revolutionary, however; e.g.: Introduction of the AAAV and V-22 and the resultant development of the Marine Corps "Operational Maneuver From the Sea" concept.

These increases in ground, land-based air and amphibious force mobility should enable them to integrate better operationally with already highly

mobile naval forces. Consequently, for more effective Joint Task Force operations, they should be encouraged.

Concluding note

This effort has demonstrated, we believe, the efficacy of seeking to derive analytical insights from the operational record of the U.S. Navy and its fleets over time. The particular insights discussed in this paper were developed in response to specific questions by the Commander-in-Chief, U.S. Pacific Fleet regarding the future of the numbered fleets. They do not, however, exhaust the quality or number of insights possible to be drawn from the data. Accordingly, CNA plans to make further use, in other studies, of the data base from which the insights in this paper were derived.

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