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### CREATING THE 1980S MARITIME STRATEGY AND IMPLICATIONS FOR TODAY

John T. Hanley, Jr.

hile important differences exist, the first decade of the twenty-first century paralleled the 1970s for the Department of Defense and the U.S. Navy. U.S. armed forces were embroiled in extended and expensive counterinsurgency wars. American military equipment was growing old, budgets were tight, and extended projections called for significant decreases in the nation's armed forces, just as the main prospective military adversary was both rapidly modernizing and expanding its forces, particularly its navy. "From 1962 to 1972, the navy had programmed the construction of 42 ships per year, but between 1968 and 1975 only 12 ships, or less than a third as many per year, were programmed. In 1975, given the age of ships already at sea, and the navy-expected service life for a warship of 25-30 years, the service anticipated retiring about 4 percent of the active fleet each year."<sup>1</sup> The Soviets were extending their defensive perimeter from two to three thousand kilometers.<sup>2</sup> Today, the Chinese suggest extending their defensive perimeter from the "first island chain," enclosing the East and South China Seas, to the second, bounded by the Marianas, three thousand kilometers from the Chinese coast.<sup>3</sup> In the 1970s, the United States questioned its own ability to fight forward, defend allies, and achieve objectives -as many defense analysts and many in the Navy do now.

The maritime strategy of the 1980s rapidly changed the 1970s Navy's narrative and perspective. In the early 1980s the Navy came to believe that it could play a decisive role in a global war with the Soviet Union. Using sensitive intelligence on Soviet operations, plans, and military science, a newly created group of upwardly mobile officers working directly for the Chief of Naval Operations (CNO) and interacting with the Navy leadership and fleet commands employed operations analysis and war gaming to create novel operational concepts and campaigns to defeat the Soviet strategy. The operational concepts that became William A. Owens's "system of systems" and that Arthur K. Cebrowski branded "network-centric warfare" provided underpinnings for this turnaround.<sup>4</sup> These concepts involving close cooperation among Navy, Marines, Air Force, and allies, akin to today's "Air-Sea Battle," were key to victory in the maritime theaters.<sup>5</sup> Revisiting the creation of the 1980s strategy suggests opportunities for dealing with the antiaccess/area-denial challenges presented by China and others today.

# THE SPIRIT OF THE U.S. NAVY IN THE '70S: WRINGING OF THE HANDS

"The accelerating obsolescence of the U.S. Navy since the end of World War II as opposed to the impressive growth of and modernization of the Soviet Navy during the same period" was in the forefront of Admiral Elmo "Bud" Zumwalt's mind when he became Chief of Naval Operations in 1970.<sup>6</sup> American and Soviet maritime development were "asymmetrical" in a number of fundamental respects:

- The United States was a "world island" long experienced in the use of the seas, but the Soviet Union was a self-sustaining land power.
- The Soviets were able to "protect their most important client states or attack all but one of its most likely enemies without going to sea," while "the political interests and commitments of the United States require[d] that it be capable of having a large military influence overseas."
- The U.S. Navy had been at its largest at the end of World War II and was now retiring large numbers of aging ships, while the Soviet navy, having been destroyed, was rebuilding.
- The Soviets had an advantage in naval cruise missiles.
- The Soviets had only limited access to the seas but were increasing their operations in the Mediterranean, in the Persian Gulf, in the Caribbean, and around Africa.
- The Soviet navy controlled land-based, long-range aircraft armed with cruise missiles, as well as merchant ships and fishing fleets.
- The U.S. Navy was emphasizing power projection rather than sea control, in response to the demands of the Vietnam War.
- The U.S. services' budgets were limited, as was their control over roles and missions.

All these factors led, in Zumwalt's view, to an unbalanced fleet with a rapidly diminishing capability to deal with the Soviet navy.<sup>7</sup> Zumwalt estimated "that

as of 1 July 1970 the United States had a 55 percent chance of winning a major conventional war at sea, and was heading toward a 45 percent chance as of 1 July 1971, and [a] considerably smaller one than that by 1 July 1972 if budget levels under discussion were maintained.<sup>8</sup>

Nuclear arms control agreements were driven by "Henry Kissinger's world view: that the dynamics of history are on the side of the Soviet Union; that before long the USSR [Union of Soviet Socialist Republics] will be the only superpower on earth and that the United States will be an also-ran; that a principal reason this will happen is that Americans have neither the stamina or the will to do the hard things they would have to do to prevent it from happening."<sup>9</sup>

On coming to office in 1977, President Jimmy Carter directed in Presidential Review Memorandum 10 "that a comprehensive examination be made of overall U.S. national strategy and capabilities."<sup>10</sup> The review generated "alternative integrated military strategies," all of which emphasized Central Europe. The strategies planned on losing territory but holding for thirty days. Strategies to take territory back were deemed unaffordable. The strategies counted on Soviet hostility with China to pin Soviet forces in Asia. They contained no viable approaches for conflict termination. While they acknowledged options for conflicts outside Europe, they did not analyze these. The Joint Chiefs of Staff footnoted in several places that "adoption of any of these [alternative integrated military strategies] contains the high risk of the loss of Western Europe or early initiation of a nuclear response, should deterrence fail."<sup>11</sup> The plans called for swinging U.S. forces, particularly naval forces, from the Pacific to Europe, though there was a question whether they would arrive within the thirty days needed to stop a Soviet advance.<sup>12</sup>

Secretary of Defense Brown seemed to be trying to bring the huge defense budget under control by strengthening NATO's land and air forces through reduction of the navy's role and budget. The Assistant Secretary of Defense for Program Analysis and Evaluation, Russell Murray, was quoted as saying that [the Defense Department's] short-term objective was to ensure that NATO would not be overwhelmed in the first few weeks of a *blitzkrieg* war, and he advised that the navy should be concerned with local contingencies outside the NATO area.<sup>13</sup>

#### Further,

In February 1978, the Chief of Naval Operations, Admiral James L. Holloway III, testified to the House of Representatives Armed Services Committee that in the event of war with the Soviet Union the U.S. Navy could not maintain complete superiority in the western Pacific or protect vital commercial shipping to allies in Japan and Korea. As Holloway later recalled in his memoir, "Supporting NATO was our first priority. With the continuing decline in our naval force levels, we had become a one-ocean navy."<sup>14</sup> The assessment of the 1978–79 *Military Balance*, produced by the International Institute for Strategic Studies, was that NATO no longer had the capacity to exert sea control in all areas vital to the alliance at the start of a NATO–Warsaw Pact war.<sup>15</sup>

#### THE CHIEF OF NAVAL OPERATIONS STRATEGIC STUDIES GROUP

In July 1981 the CNO, Admiral Thomas B. Hayward, established a Center for Naval Warfare Studies at the Naval War College, with Robert J. Murray, who was just leaving his position as Under Secretary of the Navy, at its helm and a Strategic Studies Group (SSG) as its centerpiece. As commander of the Seventh Fleet in 1976–77, "Hayward became aware that it was not until the three-star level that a senior officer was faced with having to make strategic decisions."<sup>16</sup> He "had two parallel interests: to create a core of future naval leaders who were well versed in the role of naval forces in national policy and strategy and to reestablish the Naval War College, in everyone's view, as the pinnacle for education in naval strategic thinking."<sup>17</sup> As CNO, Hayward "wanted to break away from the program planning process that seemed to dominate so much of the navy's thinking and to focus on a realistic and effective strategy for fighting at sea."<sup>18</sup> As commander of the Pacific Fleet he had initiated a "Sea Strike" concept for employing naval forces in the Pacific in the event of war with the Soviets.<sup>19</sup>

Hayward wanted to form a group made up of extremely capable and successful naval officers with recent fleet experience, and who themselves would be the future leaders of the navy, to work toward this new strategy. . . . In selecting the first group of officers for the Strategic Studies Group, Hayward received nominations from a wide variety of sources within the navy, and then he personally reviewed the service jackets of candidates, spending hours on them in an attempt to find the men he felt would certainly be the best future choices for flag rank.<sup>20</sup>

The first SSG consisted of six naval officers (commanders and captains) and two Marines (a lieutenant colonel and a colonel), assigned to the Center for Naval Warfare Studies for a year as "CNO Fellows."<sup>21</sup> This group had no template for how to conduct its studies. Its members spent a considerable amount of time talking to the commanders of fleets and unified commands (i.e., in this connection, theater commands, today realigned and known as "unified combatant commands"), well-known academics, and former senior defense officials to familiarize themselves with the strategic context and issues facing the Navy. Each of the officers chose a topic of interest relating to practical war fighting. They tested their collective ideas as they developed them in a series of war games. Of the individual efforts, a P-3 Orion maritime patrol aircraft pilot, Captain Dan Wolkensdorfer (who was selected for rear admiral while with the SSG), worked with a submariner, Commander Bill Owens, on a "combined arms" approach to antisubmarine warfare. Commander Art Cebrowski focused on the air campaign in NATO's northern region. These efforts, informed by high-quality intelligence, coalesced into a campaign and strategy aimed at defeating the Soviet naval strategy in a way that was to affect the fundamental Soviet approach to war.<sup>22</sup>

#### THE SSG'S MARITIME STRATEGY

One of the important findings of our Strategic Studies (Review) Group at [the Naval War College] and the [CNO Executive Panel] folks here, during their fleet visits and discussions with navy leadership, is that there is a great deal of confusion about strategies and analysis relating to force acquisition and strategy for winning wars. Much of the analysis done is more related to the first than the latter.

ADMIRAL WILLIAM SMALL, VICE CHIEF OF NAVAL OPERATIONS, 1982

In the Pentagon, the focus of the Navy Staff was on programming and budgeting.<sup>23</sup> The SSG focused its efforts instead on war fighting with existing forces. The SSG's approach was to identify strengths that U.S. and allied forces could apply against Soviet weaknesses in the maritime theaters to attack the Soviet Union's strategic sensitivities in a global war. The first SSG concentrated its analysis on the Soviet Northern Fleet and NATO's northern region as presenting the greatest leverage for NATO. Soviet sensitivities to the "correlation of forces," particularly nuclear, and "combat stability" became targets for the SSG's strategy.

Though a forthcoming new national intelligence estimate on the Soviet's naval strategy had not yet been published, the SSG had access to the intelligence on which it was based as it was analyzed. Key findings were these:

Within the Soviets' overall wartime strategy, however, the primary initial tasks of the navy remain:

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

Accomplishment of these tasks would entail attempts to control all or portions of the Kara, Barents, and northern Norwegian and Greenland seas, the seas of Japan and Okhotsk, and the Northwest Pacific Basin, and to conduct sea-denial operations beyond those areas to about 2,000 kilometers from Soviet territory. We believe that virtually all of the Northern and Pacific Fleets' available major surface combatants and combat aircraft and some three-quarters of their available attack submarines would be committed initially to operations in these waters. Other initial naval wartime tasks are: support of ground force operations in the land theaters of military operations (including countering naval support to enemy operations in peripheral areas such as Norway), and some interdiction of Western sea lines of communication (SLOCs).

... We expect these requirements—particularly the need to counter Western units armed with the new Tomahawk land-attack cruise missile—will drive the Soviets to expand the area in which their navy would initially deploy the bulk of its Northern and Pacific Fleet forces for sea-control/sea-denial operations—possibly out to 3,000 kilometers from Soviet territory.<sup>24</sup>

Analysts at the Center for Naval Analyses, Alexandria, Virginia, who had been studying Soviet naval writings for decades had come to the conclusion that the Soviets would use most of their naval forces to provide "combat stability" for their nuclear-powered ballistic-missile submarines (SSBNs) and to defend against strikes on their homeland. The dominant Navy vision, in contrast, had been of Soviet submarines flooding the Atlantic to sink U.S. shipping bound for Europe, as the Germans had done in World War II.<sup>25</sup> Sensitive intelligence was now confirming the center's findings. The new Delta class of Soviet SSBNs, armed with SS-N-8 missiles, had the range to reach American targets from bastions in Arctic waters rather than having to transit into the Atlantic, as SSBNs of the previous classes had to do. The bulk of the Soviet Northern Fleet would be north of the Greenland–Iceland–United Kingdom gap.

The SSG also was aware of the Soviet emphasis on calculating "correlation of forces" to assess whether the Soviet Union had sufficient forces to succeed in an operation, including nuclear war fighting.<sup>26</sup> Changing the Soviet perception of the correlation of forces in NATO's favor—in the maritime theaters, so as to require the USSR to devote forces to defense early in a conflict, and also in nuclear forces, and rapidly, so as to deter escalation to the use of nuclear weapons by either side—set the strategic intent for the SSG.

From discussions with the unified commands early in its year of study, the first SSG quickly learned that the United States had no coherent global strategy for fighting the Soviets. Each theater commander was operating on a different timeline.<sup>27</sup> From discussions at the headquarters of Supreme Allied Commander Europe, the SSG knew that its commander, then General Bernard Rogers, believed that he would have to resort to nuclear weapons within days of a Soviet invasion of Western Europe.<sup>28</sup> U.S. Navy war plans of the 1970s called for breaking contact with the Soviets as they extended their defensive perimeter with (in the antiaccess/area-denial approach of the day) naval aviation and surface forces armed with cruise missiles, falling back and later, over time, fighting back toward the Soviet Union.

Nonetheless, the United States had a huge advantage in antisubmarine warfare (ASW) over the Soviets. In 1949, facing demobilization, the U.S. submarine force had adopted ASW as a new mission, establishing Submarine Development Group

2 to develop required capabilities. Over two decades of close cooperation with Navy laboratories and intelligence, the group had developed tactics for emerging technologies through rigorous scientific analysis of submarine exercises. The submarine force had gone from having essentially no ASW capability to being the Navy's premier ASW capability.<sup>29</sup>

The SSG's campaign approach called for using combined-arms antisubmarine operations to exploit that advantage further. Plans at the time called for maritime patrol aircraft, carrier battle groups, surface action groups, and submarines

A renewed focus on war-fighting strategy and operations might dust off some old SSG concepts while focusing on the development of new ones. to operate independently in separate areas. Taking a page from U.S. Army concepts of combined arms and using lessons from the Navy's Coordination in Direct Support

program, the SSG developed concepts for ASW forces working as integrated teams.<sup>30</sup> Analysis indicated that the primary U.S. submarine losses would be from counterfire (i.e., weapons fired in immediate response to torpedo launches—the United States had the quietest submarines and noisiest torpedoes in the world) and mines. Having maritime patrol aircraft and helicopters from surface ships conduct the attacks would not only reduce submarine losses but accelerate attack rates, by preserving the most effective sensors and preventing submarines from having to withdraw to reload their tubes. Combined arms offered the prospect of higher Soviet SSBN-loss rates at the onset of conflict than did independent ASW operations, a differential that would affect the nuclear correlation of forces within days.

To allow the maritime patrol aircraft to operate forward, the submarines needed to sink the Soviet navy ships that carried antiaircraft missiles. The Soviets had about fifteen such ships available in their Northern Fleet. They operated them in surface action groups arrayed to provide defense for their SSBNs and against air strikes against their homeland. To target these surface action groups, the SSG's concept called for U.S./NATO Airborne Warning and Control System (AWACS) aircraft operating in a maritime mode to provide location data to the submarines, using digital data links (Link 11). To achieve the intended strategic effect, the intent was to sink the key Soviet air-defense ships in the first days of the war, rapidly expanding the area in which combined-arms ASW could be conducted. The AWACS could then return to their role in the air battle over Norway.

Sinking the Soviet air-defense ships would have another effect on the nuclear correlation of forces. The Soviet surface action groups operated where U.S. bombers planned to refuel on their paths from the United States to Moscow. Sinking these ships rolled back the Soviet defenses against both aircraft carrier and intercontinental bomber strikes toward the heart of the Soviet Union, placing greater pressure on national air-defense forces (Voyska PVO Strany).

To be in position at the outset, U.S. submarines and maritime patrol aircraft would have to move quickly. The SSG used intelligence on Soviet fleet readiness to lay out U.S. and Soviet timelines for deploying forces to station. Detailed analysis of the Northern Fleet battle and war gaming of all the maritime theaters indicated rates at which to expect Soviet and American losses. Intelligence officers with access to the latest assessments played the "Red" teams in the war games, employing their best understanding of Soviet plans and operations.

As with the war at sea, the SSG carefully analyzed the air war over northern Norway and gamed the air war in the maritime theaters. The Soviets organized their forces within "theaters of military operations," each with its own command and assigned forces.<sup>31</sup> The primary mission of Soviet Naval Air Force (SNA) Bear and Backfire bombers in the Northwestern, Southwestern, and Far East Theaters was to prevent strikes by U.S./NATO naval forces on Soviet forces and territory. The SSG's appreciation was that the SNA had two possible routes for attacking U.S. carrier battle groups coming from the Atlantic. They either could go around the North Cape of Norway, as they did during routine training and surveillance flights, or test Swedish neutrality by flying over Sweden. The latter risked adding the very capable Swedish air defenses to those NATO had deployed. Gaining air control over northern Norway would increase Northwestern Theater SNA losses should they fly over or close to land, significantly reduce the range at which they could attack U.S./NATO naval forces, and similarly limit attacks on Iceland.

Campaign analysis and gaming indicated that U.S. naval air, working with the NATO forces assigned to the northern region, could be decisive in gaining and maintaining air control over northern Norway. Furthermore, maintaining control over northern Norway provided airfields for strikes against Northwestern Theater SNA and Voyska PVO Strany bases, further rolling back defenses against U.S. strategic bombers. The PVO Strany was, and is, a separate branch of air forces dedicated to defense against air strikes on Soviet and now Russian territory, a structure reflecting the priority placed on defense of the homeland. At that time, only U.S. naval air had all-weather, nighttime attack capabilities. Marine expeditionary airfield equipment could be used to expand rapidly the ability of Norway's airfields to handle military jets. The SSG envisioned using these fields in a manner similar to that in which Henderson Field on Guadalcanal was occasionally used in World War II—that is, to extend the range of carrier-based air strikes by recovering, refueling, and rearming aircraft.

The key to effective, coordinated air operations over northern Norway was creating the means to share information between the NATO Air Defense Ground Environment command-and-control system and U.S./NATO naval data links (Link 4 and Link 11). Since only the Marines worked regularly with sea/air/ ground forces, only a Marine "tactical operations center" had all the networks needed for the desired coordination. The Marine Corps prepositioning plan in Norway included a tactical operations center.

Combined-arms ASW and networking the U.S./NATO sea-, air-, and groundsurveillance and command systems were at the core of the SSG's operational concepts, designed to allow the Navy to fight forward, negate Soviet combat stability, and change both the conventional and nuclear correlations of forces. This was the SSG's alternative to losing in the center and falling back on the flanks. Bill Owens would later frequently recall that his year on the SSG had been an epiphany—beginning with the perspective of a submariner, he had quickly come to appreciate the power that could come from integrating the advantages of each Navy branch and military service into a war-fighting whole. As Owens and Art Cebrowski advanced in their careers, they would continue to refine and expand on their notions of system of systems and network-centric warfare.

The first SSG departed early in the summer of 1982, and the second SSG convened in August. SSG II picked up where SSG I had left off, focusing on NATO's southern flank (the USSR's Southwestern Theater of Military Operations) and Northeast Asia (the Soviet Far East Theater) in the way that the first SSG had focused on the NATO northern and Soviet Northwestern theaters. Its members followed the SSG template of visiting senior commanders and strategists and analyzing and gaming their concepts. The team working on the Pacific included officers who had participated in Admiral Hayward's Sea Strike concepts when he commanded the Pacific Fleet. The Mediterranean team came from command of ships recently deployed there. Recalling how Soviet T-34 tanks arriving from the Far East Theater had saved Moscow in World War II, Sea Strike planners intended to use naval forces to prevent Soviet far-eastern forces from moving west.<sup>32</sup> The team working the Mediterranean also focused on pressing the Soviet correlation of forces in the Southwestern Theater and targeting the few available Soviet / Warsaw Pact lines of communication that would support an attack on NATO's south.

SSG II added two significant refinements to the work of the previous year. One was the concept of "havens." SNA bombers had to lock their cruise missiles onto their targets before they launched. The SSG, using data on the flight profiles of the bombers and technical intelligence on Soviet cruise missiles, adopted a concept from a paper by a former amphibious-squadron commander at the Naval War College to use the islands of the Aegean and eastern Mediterranean to prevent the SNA from targeting carriers or their escorts with cruise missiles. Though islands are sparse in the western Pacific, the concept offered opportunities there also. The fjords of Norway were well suited to this tactic. The second refinement was teaming with the U.S. Air Force, which had the best low-altitude models for penetrating Soviet air defenses. Using these models, the SSG focused its efforts on "targets that count," in terms of limiting the effectiveness of Soviet air forces and the ability of the Warsaw Pact to move large ground formations along the limited land lines of communications supporting the maritime theaters. The "targets that count" approach evolved into a Joint Warfare Analysis Center, focusing on "effects-based operations."<sup>33</sup>

The strategy called for close Air Force / Navy cooperation in the Pacific theater. The distances involved in the conduct of strikes demanded extensive in-flight refueling for carrier-based aircraft. Also, B-52s played a large role in a planned mining campaign. In addition to being the origin of network-centric warfare, the SSG's maritime strategy was in effect "Air-Sea Battle 1.0."

#### IMPLEMENTING THE SSG MARITIME STRATEGY

To meet Admiral Hayward's aims as CNO to stimulate strategic discourse within the Navy leadership, he encouraged the SSG to meet with as many flag officers as it could. "In many ways, the Strategic Studies Group acted like a small swarm of honeybees, migrating from one flag officer to another, discussing issues, exchanging views, and carrying the pollen of stimulating thought from one widely separated command to another."34 By the end of their year at the Center for Naval Warfare Studies, Owens and Cebrowski had briefed 162 flag officers.<sup>35</sup> A key briefing came in October 1982, when they were invited back to present their ideas to Admiral James D. Watkins, the new CNO, at his first Navy "four-star" conference -that is, with the Navy's four-star admirals and the Navy Staff's three-stars attending. The briefing, scheduled for forty-five minutes at the end of the day, went on for almost six hours; Admiral William J. Crowe (Commander in Chief, U.S. Forces Pacific, later Chairman of the Joint Chiefs of Staff) continued the conversation afterward with Art Cebrowski, using a chart on the hood of his car. By 1983 the first SSG concepts were being reflected in revised Navy war plans and the CNO had signed a memorandum of understanding with the Chief of Staff of the Air Force to work jointly on the concepts contained in the maritime strategy.<sup>36</sup>

War gaming involving admirals in operational and staff commands and senior representatives from other services became a very effective mechanism for familiarizing those outside the SSG with its concepts even as it was refining them. The SSG conducted games every few months to explore its concepts, and its members served as theater commanders in the Naval War College's annual Global War Game. As the Global War Game series matured, flag and general officers from the theater commands came to play their forces, and other services brought their campaign models to adjudicate game outcomes. Following their respective years in the SSG, its fellows were assigned by the CNO either to positions where they could influence implementation of the strategy or to command. Dan Wolkensdorfer was assigned to develop ASW programs on the Navy Staff, and Bill Owens became executive assistant to the Director for Naval Warfare on the Navy Staff, responsible for balancing naval warfare capabilities in Navy programs. Art Cebrowski went immediately to command a carrier air wing. The Center for Naval Warfare Studies staff worked with the Navy Staff on writing a new formal document, *The Maritime Strategy*. CNO Fellows from the SSG also held important positions in Navy policy and served as direct links to or supervisors of the drafters of the Navy's *Maritime Strategy* briefing

The SSG's approach was to identify strengths that U.S. and allied forces could apply against Soviet weaknesses in the maritime theaters to attack the Soviet Union's strategic sensitivities in a global war. and classified booklet and of the U.S. Naval Institute *Proceedings* supplement about it (published in January 1986) by Admiral Watkins and the Commandant of the Marine Corps, P. X. Kelley.

The SSG's concepts led also to exercises and technology development. When in command of a submarine squadron, Owens had exchanged an officer with a nearby maritime patrol aircraft squadron to coordinate exercises by which, at every opportunity for a submarine and P-3 aircraft to operate within range of each other, clandestine communications for use in forward areas could be developed. As chief of staff for Commander, Submarine Force Atlantic Fleet, Owens had established an exercise called AGILE PLAYER to get all available submarines out of port and headed toward their wartime patrol areas within seventy-two hours. By 1985 the Second Fleet had begun exercising the carrier-haven concept in Vestfjord as part of Exercises NORTHERN WEDDING and OCEAN SAFARI. As Commander, Submarine Group 2, Rear Admiral J. D. Williams (who had played in SSG war games) initiated submarine exercises with AWACS aircraft to work out tactics and resolve technical glitches in Link 11 communications. Commander, Submarine Force Atlantic Fleet and the commander of Development Squadron 12 worked with their counterparts in the fleets and other Navy branches to exercise and develop combined-arms ASW.

In March 1986, a large NATO exercise covering the Norwegian Sea and commanded from the Northwood headquarters in the United Kingdom demonstrated the effectiveness of combined-arms ASW. Using Bayesian approaches to estimate where the adversary submarines were, the NATO force achieved detection rates that exceeded the ability of attack aircraft to sortie in response, reversing the normal constraint in ASW. Against the expectation that the Soviets would target fixed command headquarters, in 1988 a combined-arms ASW exercise demonstrated the ability of a mobile command center deployed to an air base in Norway to command ASW forces near the North Cape.<sup>37</sup> Other fleets conducted similar exercises, both in national exercises and with allies. In November 1987 during Exercise NORPAC87, the commander of the Third Fleet, Vice Admiral Diego "Duke" Hernandez, used a series of havens along the Aleutians, to cover his approach to the Kamchatka Peninsula.<sup>38</sup>

#### THE EFFECTS OF THE MARITIME STRATEGY

The work of the SSG added to The Maritime Strategy operational depth and detail that has not otherwise been achieved in strategy documents coming from the Pentagon. These efforts rapidly changed the Navy's narrative from one of handwringing over the growing advantages of the Soviet navy to a belief that it could make a decisive difference in the maritime theaters and create conditions that could lead to war termination on conditions acceptable to NATO and without the use of nuclear weapons.<sup>39</sup> The exercises with allies—particularly Japan, Norway, and Turkey-not only developed confidence within the U.S. Navy that it could fight forward but demonstrated its intent and increased allied confidence in American support in the event of war, thereby contributing to alliance cohesion and to deterrence.<sup>40</sup> The emphasis on forward operations played to the Soviets' concern for protecting their naval bastions and the homeland against strikes from aircraft carriers and cruise missiles, reinforcing their instincts to keep the bulk of their naval forces near home waters rather than interdicting reinforcements to NATO and Pacific allies. Following the demise of the Soviet Union, Russian naval leaders were mistakenly to infer that the next U.S. Navy capstone document-Forward . . . From the Sea-meant that the United States felt that it no longer had to worry about the Russian navy but could sail up to the coast and attack from there.<sup>41</sup>

Even at the time, the maritime strategy sparked a vigorous debate in the West among academics and former government officials.<sup>42</sup> "By the end of 1986, the public and professional discussion of the issues surrounding *The Maritime Strate-gy* had taken a sophisticated form. The issues of naval strategy could be, and were, understood and being debated widely. This contrasted starkly with the absence of such discussion a decade earlier, and at the same time, seemed to demonstrate a widespread appreciation of strategy within the officer corps."<sup>43</sup>

Following the end of the Cold War, Owens's appreciation for the power of combined arms, as opposed to forces operating independently, as well as his conviction that networking all service and allied intelligence, surveillance, and reconnaissance (ISR) capabilities into a system of systems could lead to a decisive information advantage over adversaries, was to govern his actions.<sup>44</sup> As

commander of the Sixth Fleet, he exchanged officers with Army and Air Force counterparts in an effort to bring joint capabilities into the exercises he oversaw. As Vice Chairman of the Joint Chiefs of Staff, he made every effort to ensure that service ISR capabilities were interoperable. Similarly, Art Cebrowski was to develop the "brand" of "network-centric warfare" and to refine its concepts in his positions as Director for Command, Control and Communications on the Joint Staff and as President of the Naval War College, contributing to a rapid growth in military network capabilities.

#### IMPLICATIONS FOR TODAY

China's People's Liberation Army (PLA) has replaced the Soviet military as the most challenging for U.S. forces in the vicinity of its homeland. The strategic relationship of the United States with China differs in important ways from that with the Soviets. On the national level, rather than containing the Chinese, the United States encourages them to promote security and peaceful development that benefits China's rise, while deterring its use of armed coercion or aggression to settle territorial claims and other disputes.<sup>45</sup> The competition with the Soviets was perceived largely as a zero-sum game, wherein any advance for the Soviets was a loss for the free world—though all would lose massively in a large-scale war. The game with the Chinese, in contrast, is one in which both sides win big or lose big.

The overall military concept for deterring the Chinese is similar to that embodied in *The Overall Strategic Concept for Defense of the North Atlantic Treaty Organization Area*, or MC 14/3.<sup>46</sup> The overall concept is defensive. The United States has no intention or reason to initiate armed conflict. Its intent is to provide for security and peaceful development by credible deterrence, effected by working with the nations of the region and leading the Chinese to conclude that if they launched an armed attack on the United States or its allies the chances of a favorable decision to them are too small to be acceptable, and that fatal risks could be involved. The overall military concept, rather, is a balance of deterrence and encouragement, inviting the PLA to play a responsible and constructive role in promoting security and peaceful development and join in coalition operations, as it has in countering piracy in the Indian Ocean. Underpinning this concept is the 2010 Quadrennial Defense Review (QDR), analysis for which began in 2008.<sup>47</sup> "High-end asymmetric threats," presented mainly by the PLA, were the focus of much of that analysis.<sup>48</sup>

Within the Pentagon today, the last decade of double-digit growth in Chinese military expenditures and increasing Iranian military sophistication, largely focused on U.S. forces moving to and within the nearby theaters, has led to another period of hand-wringing. Iran's capabilities are much more limited in scale, geographic scope, and forces than are China's, but they are potent in the restricted waters near shore and against bases in nearby countries. The Pentagon's approach to programming future forces centers principally on capability shortfalls created by adversary militaries, rather than creating concerns among adversaries regarding their own military capabilities against U.S. forces. The Pentagon, stimulated by Congress and the defense industry, turns to superior technology (the means)

*In the early 1980s the Navy came to believe that it could play a decisive role in a global war with the Soviet Union.* 

rather than to strategy (the ways) to accomplish its desired ends. Reacting to what the PLA and other military forces are doing cedes the

initiative to them at a time when technology is rapidly shared and copied around the globe and the U.S. military budget is declining.

In July 2009, in a constructive effort to redirect somewhat this unproductive approach, the Secretary of Defense, with strong support from Navy and Air Force leadership, initiated an Air-Sea Battle effort to address concerns raised in the QDR. The initiative recalls the Air Force / Navy cooperation engendered by the 1983 memorandum of understanding.<sup>49</sup> The Air-Sea Battle is not a strategy but a concept "to better integrate the Services in new and creative ways."<sup>50</sup> War-fighting strategies as such are the responsibility of the combatant commanders, not the services. The Air-Sea Battle concept concentrates on identifying cost-effective methods for disrupting "effects chains" in an adversary's processes of command, control, communications, computers, intelligence, surveillance, and reconnaissance, ideally precluding attacks on friendly forces; on destroying or neutralizing adversary weapon platforms to enhance friendly survivability and provide freedom of action; and on defeating weapons that have been launched so as to defend friendly forces and allow sustained operations.<sup>51</sup>

However, a declared design to "attack in depth" has triggered a vigorous debate over the escalatory potential of Air-Sea Battle and how it fits into a strategy for war with China.<sup>52</sup> T. X. Hammes has offered an "offshore control strategy" that eschews any strikes on the mainland, calling instead for a long-duration blockade to cripple the Chinese economy.<sup>53</sup> Similarly, Wayne Hughes and Jeffrey Kline have argued for a war-at-sea strategy involving blockade and destruction of PLA forces at sea without strikes on the mainland, thus reducing possibilities of escalation.<sup>54</sup> David Gompert and Terrence Kelly too have argued for greater emphasis on defensive measures, to include giving antiaccess/area-denial capabilities to allies in Asia to deny the Chinese the use of the seas.<sup>55</sup>

These concepts and strategies differ in their judgments on the feasibility and wisdom of strikes on the Chinese mainland, but all aim to align program planning and budgeting for future force development rather than to provide strategy and concepts for winning a war using forces and capabilities that could be available in months. To the extent that these proposed concepts and strategies require future investment for success, their credibility is suspect in today's budget environment. Also, given current international dynamics, the security situation may change significantly in the decade or two that would be required to procure the force structures envisioned by these concepts and strategies. Both factors suggest putting more effort into developing strategic and operational concepts for prevailing with today's forces to effect credible deterrence and reassure allies. The public debate is useful. However, more important would be a declaratory strategy that is effective in a long-term competition with the PLA, supported by a military strategy in which American leadership and military officers have confidence.

The military operational challenge posed by the PLA is similar to that which the Soviet military presented in the early 1980s. The SSG addressed the latter by focusing on Soviet military strategy, Soviet concepts of war fighting, Soviet sensitivities and vulnerabilities, and command and bureaucratic structures that affected Soviet decisions and operations, in addition to details of Soviet military technology. A similar effort would carefully investigate the perspectives of Beijing and PLA regional and local commands; it would emphasize PLA military science, strategic concepts, campaign theories, and command and operational practices, so as to take advantage of Chinese and PLA sensitivities and theories of victory. Such Chinese concepts as "victory of form" (winning without fighting), "shi" (psychological momentum using both strength and deception), force groupings, command arrangements, and the importance of the Second Artillery as a special branch analogous to the Voyska PVO Strany should play into new strategic concepts. While the Second Artillery has responsibilities for intercontinental nuclear strike, the effectiveness of missiles generally is central to PLA theories of victory and warrants particular attention.

SSG operational concepts in the early 1980s trumped the typical Washington analysis of technical weapon-system capabilities that suggested the Navy would be "taking a knife to a gunfight" in a battle with Soviet naval aviation.<sup>56</sup> The first SSG devised approaches for controlling key geography at sea and over land to limit the SNA's lines of approach to the U.S. fleet and for extending the range of U.S. strikes by using expeditionary air bases ashore. SSG II added the concept of aircraft carrier havens and "targets that count" to compensate for the limited range and sortie rates of naval strike aircraft.

A renewed focus on war-fighting strategy and operations might dust off some old SSG concepts while focusing on the development of new ones. All U.S. concepts and strategies exploit the limitations of the PLA's ASW capabilities. Shortly following the end of the Cold War the U.S. Navy lost its competence in combinedarms ASW; these capabilities are now receiving renewed attention. Over the last decade the value, limitations, and vulnerabilities of network-centric warfare have been further explored. Electronic warfare has received renewed emphasis, after being bureaucratically submerged in "information operations" and generally neglected. Perhaps the most fertile field for concept development is cyber war fighting, which receives scant attention in most public discourse. New concepts in these fields should consider investment primarily in payloads that could be procured in a few years, or months in an emergency, vice platforms, etc., taking decades to develop and deploy.

In 1985 the CNO, with the urging of Secretary of the Navy John Lehman, assigned a director to the SSG separate from the dean of the Center for Naval Warfare Studies, thereby disconnecting the SSG from the center. In 1995, Admiral Mike Boorda, as CNO, changed the direction of the SSG to focus on warfare innovation and the "Navy after next." The current CNO, Jon Greenert, reportedly is pleased with the work that the SSG is doing for him under its current charter and approach, and the rate of promotion to flag rank of CNO Fellows has returned to that of the 1980s. That said, the ingredients that led to the success of the maritime strategy would likely contribute as well to the success of new strategic and operational concepts. A core of future naval leaders working directly for the CNO and with the Navy leadership, counterparts from other services, and the relevant combatant commands; provided with access to special intelligence and programs; located away from the Pentagon but in an environment where they can think, experiment with games, and learn; supported by first-rate operational analysis; focused on war fighting rather than programs and budgets; and assigned thereafter to positions where they can implement the concepts they helped develop -such a group could again rapidly generate an effective declaratory strategy underpinned by strategic and operational concepts in which the military and civilian leadership could have confidence.

#### NOTES

The author was directly involved in the events discussed and made direct personal contributions to the development of the maritime strategy of the 1980s. This article draws extensively on his own experience in those years, without citation except at points of particular interest or contention. The author would like to thank John Hattendorf, Wayne Hughes, Michael McDevitt, David Rosenberg, Peter Swartz, the *Naval War College Review*, and anonymous referees for their improvements to this article.

- John B. Hattendorf, *The Evolution of the* U.S. Navy's Maritime Strategy, 1977–1986, Newport Paper 19 (Newport, R.I.: Naval War College Press, 2004), pp. 9–10. Also see John B. Hattendorf and Peter M. Swartz, eds., U.S. Naval Strategy in the 1980s: Selected Documents, Newport Paper 33 (Newport, R.I.: Naval War College Press, 2008), which elaborates on the 2004 monograph. Both available at www.usnwc.edu/press/.
- National Intelligence Estimate 111582: The Soviet's Naval Strategy in Hattendorf,

- 3. In Philip C. Saunders et al., eds., *The Chinese Navy: Expanding Capabilities, Evolving Roles* (Washington, D.C.: National Defense Univ. Press, 2011), the contributions provide extensive coverage of Chinese navy discussions regarding the first and second island chains.
- 4. In 1982 I shared an office with Capts. ("frocked" at the time-i.e., selected for promotion and authorized to wear the insignia in anticipation of formal advancement) Bill Owens and Art Cebrowski. We were conducting the quantitative campaign analysis, with a focus on sea control and the antisubmarine campaign, and developing the strategic and operational concepts that underpinned the maritime strategy. Bill Owens went on to commands, including Sixth Fleet, ultimately serving as Vice Chairman of the Joint Chiefs of Staff. Art Cebrowski was to end his naval career as President of the Naval War College; he then went on to form in 2001 the Office of Force Transformation in the Department of Defense. For "network-centric warfare," Vice Adm. Arthur K. Cebrowski and John I. Garstka, "Network Centric Warfare: Its Origin and Future," U.S. Naval Institute Proceedings (January 1998), pp. 28-36. For "system of systems," Adm. Bill Owens, Lifting the Fog of War (New York: Farrar, Straus, Giroux, 2000).
- 5. The maritime theaters were NATO's northern and southern regions and the Soviet Far East; there lines of communication were principally at sea, and naval forces could decisively affect the outcomes of battles ashore. Robert S. Wood and John T. Hanley, Jr., "The Maritime Role in the North Atlantic," *Naval War College Review* 38, no. 6 (November– December 1985), pp. 5–18.
- 6. Elmo R. Zumwalt, Jr., *On Watch* (New York: New York Times, 1976), p. 59. Zumwalt states (p. 281) that "the mood of the Chiefs, though one of apprehension, was by no means one of self-pity or despair."
- 7. Ibid., pp. 59-71.
- 8. Ibid., p. 281.
- 9. Ibid., p. xiv.
- Presidential Review Memorandum / NSC10, available at www.fas.org/.
- 11. Ibid., p. 17.

12. Ibid., p. 21.

- 13. Hattendorf, Evolution of the U.S. Navy's Maritime Strategy, p. 12.
- John B. Hattendorf, ed., U.S. Naval Strategy in the 1970s: Selected Documents, Newport Paper 30 (Newport, R.I.: Naval War College Press, 2007), pp. xi–xii.
- 15. Hattendorf, Evolution of the U.S. Navy's Maritime Strategy, p. 289.
- 16. Ibid., p. 17.
- 17. Ibid., p. 45.
- 18. Ibid., p. 44.
- 19. Hayward's objectives in Sea Strike were twofold. First, he wanted to place the Pacific Fleet within a global U.S. naval strategy, as the most effective means of developing plans for use in the event of war with the USSR. Second, he was concerned at the condition of the Pacific Fleet and its state of preparation for war. At that time it had no offensive naval war plans, only defensive plans. Hayward believed that for the sake of flexibility, if for no other reason, a credible offensive plan should be available. Ibid., p. 18.
- 20. Ibid., pp. 44–45. Indeed, the Navy did select three of the first six officers for flag rank: Rear Adm. Dan Wolkensdorfer, Vice Adm. Art Cebrowski, and Adm. Bill Owens. Over the first fourteen years of the SSG over 60 percent of the CNO Fellows were selected for flag rank, as many as a quarter of the unrestricted line flag officers at any one time. Eight naval officers and one Marine (Anthony Zinni) among them ultimately received four stars—including the current CNO, Jon Greenert.
- Robert J. Murray, "A Warfighting Perspective," U.S. Naval Institute *Proceedings* (October 1983), p. 66.
- 22. For an account of the kinds of intelligence available, see Christopher A. Ford and David A. Rosenberg, "The Naval Intelligence Underpinnings of Reagan's Maritime Strategy," *Journal of Strategic Studies* 28, no. 2 (April 2005), pp. 379–409.
- 23. The epigraph is from Hattendorf, *Evolution of the U.S. Navy's Maritime Strategy*, p. 67.
- 24. Director of Central Intelligence, Soviet Naval Strategy and Programs through the 1990s: National Intelligence Estimate, NIE 11-15-82/D

(Washington, D.C.: 15 November 1982). A declassified version appears in Hattendorf, *Evolution of the U.S. Navy's Maritime Strategy*, app. 1; the quoted passage appears on page 109.

- 25. Peter M. Swartz, Understanding an Adversary's Strategic and Operational Calculus: A Case Study—U.S. Views on Soviet Navy Strategy and Operations toward the End of the Cold War, DOP2013U003646Final (Alexandria, Va.: Center for Naval Analyses, January 2013); Robert W. Herrick, Soviet Naval Strategy: Fifty Years of Theory and Practice (Annapolis, Md.: Naval Institute Press, 1968).
- 26. Former Soviet officers discuss the evolution of their war-fighting strategy and correlationof-forces calculations in interviews, in John Hines, Ellis M. Mishulovich, and John F. Shulle, Soviet Intentions 1965–1985, vol. 1, An Analytical Comparison of U.S.-Soviet Assessments during the Cold War (Tysons Corner, Va.: BDM Federal, 22 September 1995), excised version available at www.gwu.edu/.
- 27. Before the Goldwater-Nichols legislation of 1986, the Navy developed its own war plans, supporting higher-level plans. This effort resulted in sets of theater, fleet, and submarineforce plans rather than one comprehensive plan for all forces assigned to a theater commander; further, each theater command had its own set.
- 28. This was openly reported in Anthony H. Cordesman and Benjamin F. Schemmer, "*AFJ* Interview with General Bernard W. Rogers," *Armed Forces Journal International*, September 1983, p. 74.
- 29. Submarine Warfare and Tactical Development: A Look—Past, Present, and Future, Proceedings of the Submarine Development Group Two & Submarine Development Squadron Twelve 50th Anniversary Symposium, U.S. Naval Submarine Base New London, Groton, Conn., 20–22 May 1999, available at books .google.com/. I served for over fifteen years as an officer in Submarine Development Squadron 12's reserve unit, beginning as a lieutenant analyst and ending as the reserve unit's commanding officer.
- 30. The Los Angeles (SSN 688)-class nuclear submarine cost about twice as much as its predecessor for twice the shaft horsepower but did not have the electronic-surveillance

or under-ice capabilities of the Sturgeon (SSN 637) class. Admiral Rickover justified the additional speed as needed for direct support to carrier battle groups. The Coordination in Direct Support program, run by a former Submarine Development Group 2 commander, adopted the practice of developing metrics for operational effectiveness and of exploring all forms of prototype and fielded means of communicating with submarines in fleet exercises. Ten fleet exercises over three years demonstrated that direct support would not work as envisioned, but in the process they generated detailed data on submarine communications with fleets using every method from extremely-low-frequency and acoustic communications to lasers. The analysis resulted in putting "submarine element coordinators" on battle group staffs and improving submarine tactics for communications and operations with other forces.

- "Approximate Soviet Theaters of Military Operations (TVDs)," November 1982, Wikimedia Commons, commons.wikimedia.org/.
- 32. James M. Patton, "Dawn of the Maritime Strategy," U.S. Naval Institute *Proceedings* (May 2009), pp. 56–60, provides a detailed account of Sea Strike by one of its authors; also see Hattendorf, *Evolution of the U.S. Navy's Maritime Strategy*, pp. 18–19. The SSG extended the arguments regarding the allies to the NATO theaters.
- 33. Description available at *Joint Warfare Analysis Center*, www.jwac.mil/.
- 34. Hattendorf, *Evolution of the U.S. Navy's Maritime Strategy*, p. 48.
- 35. Using Owens's and Cebrowski's notes of the briefing that we had prepared, I wrote the first classified "Newport Paper" (no relation to the unclassified Newport Paper series later produced by the Naval War College Press, such as those cited here), a monograph explaining SSG I's strategic, operational, and tactical concepts and recommending changes, such as networking and quiet torpedoes, that could be implemented in the near term. Owing to its classification and sensitivity, the Center for Naval Warfare Studies distributed copies only to the most senior two dozen naval leaders.
- 36. Murray, "Warfighting Perspective," p. 66.

- 37. I served on the operational staffs for the combined-arms ASW exercises SUBASWEX 2-86 and 2-88 as a reserve officer.
- 38. Peter M. Swartz, e-mail, 17 July 2013.
- 39. SSG II developed a set of "pretty good rules." One was that it is difficult to punch someone in the nose while you are wringing your hands.
- 40. The Navy Staff was also conducting staff talks to explain the maritime strategy to these countries. Hattendorf, *Evolution of the U.S. Navy's Maritime Strategy*, p. 84.
- 41. Discussions with Rear Adm. Anatoliy P. Rudometkin, director of the Russian Naval Research Institute, Newport, R.I. (1993), and Saint Petersburg, Russia (1994).
- 42. See Peter Swartz's extensive list of articles on the maritime strategy in Hattendorf, *Evolution of the U.S. Navy's Maritime Strategy*, pp. 191–273.
- 43. Ibid., p. 90.
- 44. William A. Owens, High Seas: The Naval Passage to an Uncharted World (Annapolis, Md.: Naval Institute Press, 1995); Owens, Lifting the Fog of War.
- 45. The most current unclassified defense strategic guidance is contained in U.S. Defense Dept., *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, D.C.: January 2012), available at www.defense .gov/.
- 46. North Atlantic Treaty Organization, Final Decision on MC 14/3: A Report by the Military Committee to the Defence Planning Committee on Overall Strategic Concept for the Defense of the North Atlantic Treaty Organization Area, MC 14/3 (Final) (n.p. [Brussels]: North Atlantic Military Committee, 16 January 1968), available at www.nato.int/.
- 47. I served in the Office of the Secretary of Defense coordinating some of the studies



leading to the QDR and participating in the QDR analysis.

- 48. For a description of the QDR and high-end asymmetric threats, see Michèle Flournoy and Shawn Brimley, "The Contested Commons," U.S. Department of Defense: Quadrennial Defense Review, n.d., www.defense.gov/.
- 49. For a description of the Air-Sea Battle effort, see Jason Kelly, "Overview of the Air-Sea Battle Concept," *Navy Live: The Official Blog of the United States Navy*, 3 June 2013, navylive.dodlive.mil/.
- 50. Ibid., p. i.
- 51. Ibid., p. 7.
- 52. See Elbridge Colby, "Don't Sweat Air-Sea Battle," *National Interest*, 31 July 2013, and "War over the War with China," *National Interest*, 13 August 2013; and T. X. Hammes, "Sorry, Air-Sea Battle Is No Strategy," *National Interest*, 7 August 3013, and "Air-Sea Battle: Who Wins?," *National Interest*, 21 August 2013.
- 53. T. X. Hammes, "Offshore Control Is the Answer," U.S. Naval Institute *Proceedings* (December 2012).
- 54. Jeffrey E. Kline and Wayne P. Hughes, Jr., "Between Peace and the Air-Sea Battle: A War at Sea Strategy," *Naval War College Review* 65, no. 4 (Autumn 2012), pp. 35–40.
- 55. David Gompert and Terrence Kelly, "Escalation Clause: How the Pentagon's New Strategy Could Trigger War with China," *FP National Security*, 2 August 2013, www.foreignpolicy .com/.
- 56. For a recent analysis of this type as justification for new weapon systems, see Thomas P. Ehrhard and Robert O. Work, *Range, Persistence, Stealth, and Networking: The Case for a Carrier-Based Unmanned Combat Air System* (Washington, D.C.: Center for Strategic and Budgetary Assessments, 2008), p. 63.

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