Naval War College Review

Volume 64 Number 2 *Spring*

Article 8

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Recommended Citation

Friedman, Hal M. () "The Quiet Warrior Back in Newport—Admiral Spruance, the Return to the Naval War College, and the Lessons of the Pacific War, 1946–1947," *Naval War College Review*: Vol. 64: No. 2, Article 8. Available at: http://digital-commons.usnwc.edu/nwc-review/vol64/iss2/8

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THE QUIET WARRIOR BACK IN NEWPORT

Admiral Spruance, the Return to the Naval War College, and the Lessons of the Pacific War, 1946–1947

Hal M. Friedman

ar is about wreckage. Consequently, postwar periods tend to be about reconstruction, and that phenomenon is what this article is about. It sets the scene for a larger exploration (the subject of projected sequels to the recent book from which this article is adapted) of how a military-academic institution—the Naval War College, in Newport, Rhode Island—attempted to readjust to a

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Naval War College Review, 2011 Spring, Vol. 64, No. 2

peacetime period that entailed simultaneously the start of a new type of conflict for the United States (the Cold War) and with a revolutionary new weapon (the atomic bomb). While the Cold War and the Atomic Age were revolutionary in many respects, at their outset the staff, instructors, guest lecturers, and students at the Naval War College did not automatically or necessarily think so. To a great degree, American military officers in the immediate postwar period, while acknowledging that atomic energy weapons and "war during peace" were earth-shattering in one sense, fell back on fairly traditional strategic, operational, and tactical concepts for meeting these new challenges.¹

The College was reconstituted after its reduced wartime status on a full-time basis under the presidency of Admiral Raymond Spruance and was charged with the strategic reformulation of American

naval policy for this atomic and Cold War context. Some of these reforms began before the war even ended; Vice Admiral William Pye, its wartime President, had called for an expanded institution capable of teaching a tenfold increase in officers by means of a three-tiered educational structure consisting of a Command and Staff course, the War College course, and an Advanced course. Pye remained until March 1946, presiding over six-month courses that had become the order of the day during the war and beginning preparations for returning to a full, two-year program. In addition, by the time the war ended the Naval War College had started to consider joint service education for officers from the other services as well as personnel from the State Department.²

The real change came, however, when Admiral Spruance became President in March 1946. Spruance not only brought his command experience from the Pacific War and his three previous tours at the College but intimately understood how radically different the Navy's responsibilities would be in the postwar period. These responsibilities would require a Naval War College that would foster intra- as well as inter-service and even interdepartmental cooperation. They also meant a College whose curriculum took logistics into account. Spruance was convinced that the study of logistics as an aspect of modern naval warfare was being seriously neglected. In Captain Henry Eccles, who would become the chairman of the College's Department of Logistics by 1947, the admiral found an officer who believed as strongly as he that logistics had to be studied alongside strategy, operations, and tactics.³

Spruance was also a student of military history, as can be seen in the establishment of the World War II Battle Evaluation Group in 1946. Under Commodore (later Captain and then Rear Admiral) Richard Bates, the Battle Evaluation Group was to study the recent war and derive lessons for use by officers seeking to improve their professional judgment. By 1950, Bates's team had produced studies on the battles of Coral Sea, Midway, and Savo Island; it was working on a multivolume work on the battle of Leyte Gulf when in 1958 it was disestablished for lack of funds. Related to these changes, Spruance replaced the College's "Sound Military Decision" format (so named for a 1937 booklet issued by the College under Rear Admiral Edward C. Kalbfus) with what he called the "Operational Planning Model." This approach produced a much simpler, more standardized Navy-wide process for estimating operational situations and formatting orders.4

As noted above, the radically changing situation in which the U.S. Navy might have to face off against the Soviet Union in a possible atomic-warfare environment was the reason that Fleet Admiral Chester Nimitz, Chief of Naval Operations, wanted Spruance as the new President of the Naval War College. Spruance's charge was to "revitalize" the College as thoroughly as possible. Not



Courtesy Naval War College Naval Historical Collection

surprisingly, most of the "lessons learned" that he would bring came from the Navy's experience in the Pacific War, though the Atlantic was hardly ignored. Neither is it surprising that Spruance's addresses (the primary sources of this article), as well as lectures by instructors and guests and student theses (the other primary sources of my larger study) had a number of themes and issues in common. One of these themes was a continued focus on amphibious warfare, which was especially important, given the experiences of the Pacific War, to Spruance and many of the immediate postwar staff, instructors, and students. Another obvious topic was how atomic weapons would change naval ship design, strategy, and battle tactics-or not change them, as the case would sometimes be. In addition, there was considerable attention to the continued need for a balanced operational fleet, an adequate afloat train and shore-base system, and a first-rate merchant

marine as elements of a total, integrated package of American sea power.⁵

Spruance additionally thought it vital that the Naval War College keep focused on the future of naval warfare, unlike in the interwar period, when surface warfare had been the dominant interest to the detriment of studying carrier and submarine warfare, logistics, and amphibious operations. This again was the reason for his emphasis on intraservice, as well as interservice, education and cooperation and for his call for the exercise of academic freedom at the College rather than searches for the "right" answers. He understood from his own career, especially the Pacific War, that there were no pat answers to strategic, operational, or tactical questions. The revitalized College would also be focusing on a new potential enemy, the Soviet Union. While Spruance was far from a Red-baiter and thought that the United States and the Soviet Union should be able to enjoy postwar cooperation, by 1946 the Cold War was becoming ever more apparent, and Spruance was convinced that the United States could not beat Russia in a war by invading and occupying its territory. Instead, he thought Western powers with highly mobile sea and sea-air power could hold Soviet attacks in Eurasia and eventually convince the Soviet people to overthrow their own government. In some ways, this thinking marked continuity with the prewar years, in that Spruance continued to argue that the Navy was the nation's first line of defense. But for the Navy itself, the Cold War was a major geographical reorientation, since the Pacific Basin was no longer to be the primary theater of operations, eclipsed now by the Atlantic and Mediterranean.⁷

Spruance's concerns and views are encapsulated in a series of speeches and statements delivered within a few months of 1946 and early 1947, a particularly significant period between the end of the war and the early formulation of "containment" as a coherent foreign policy in the fall of 1947. These transitional years offer a valuable window through which to explore institutions such as the Naval War College in transition from a hot war to a cold one. These addresses, in turn, reflect the understandings that Spruance brought to that seminal period from the war just ended.⁸

SPRUANCE AND THE POSTWAR FORMULA FOR AMERICAN NAVAL SECURITY

In mid-June 1946, Admiral Spruance delivered to Brown University alumni an address entitled "United States as a Sea Power." He began by telling his audience that it was American and British naval power in "coordinated operation" that allowed troops and aircraft to be used overseas. Focusing on the Pacific War, he gave some idea of the problems that arose with exercising that sea power. Noting that the United States was an insular nation with the size and natural resources that went with a richly endowed continent, Spruance reminded his audience that American intercourse with the rest of the world, with the exception of Canada and Mexico, was conducted by sea. Not even the proposed Pan-American Highway, he thought, would replace seaborne commerce with the rest of the Americas. The United States was "self-contained," but with the depletion of its natural resources, the growth of its population, and increasing industrialization, overseas trade would become even more important in both peace and war. Looking at the United States as an island, Spruance felt that the United States should remain the strongest sea power in the world; in time of war, sea power would be necessary to extend "sea control" over the various parts of the world's oceans and to restrict that of the enemy.9

Spruance went on to assert the need for both ship-based and shore-based aircraft, for which reason bases were another important part of sea power. He saw bases as a "vital necessity" in time of war, valuable assets that needed to be built up in peacetime and then held when war came. "If you are unable to hold them, your enemy will take them from you and use them against you. If you are able to hold them, but have no striking forces to operate from them, they play no active part and tend to become a liability." The basic ideas by which the United States won the war in the Pacific had existed prior to its outbreak, but some had to be

further developed and elaborated. Carriers, for instance, had to be developed, especially in numbers, from the one or two available in 1942 to the quantity at sea in 1944. More carriers with better aircraft, as well as high-speed battleships, cruisers, and destroyers, gave U.S. forces mobility and then a "preponderance" against Japanese positions that "enabled us to accomplish with small losses what we could not do previously." ¹⁰

Turning to amphibious operations, Spruance recounted how landings on enemy shores against opposition had been a focus of study since the First World War. These operations required new types of ships and landing craft, as well as equipment to get the troops over the beaches. Gunfire- and air-support techniques also had to be "worked out" so as to prepare for, cover, and support the landings and ground operations. Repeating what many of the College's lecturers and students had recently noted in their own work, Spruance reminded his audience that prior to the war there had been "intensive study" of amphibious operations by the Navy and Marine Corps as well as joint Army–Marine Corps maneuvers to put theory into practice. The landing craft, however, had not progressed beyond design and testing.¹¹

Another problem was logistical support for naval forces when the fleet was operating far from fixed bases. Before the war, the Navy only had a small number of tenders, repair ships, and floating dry docks, and similarly small numbers of refrigerator, supply, ammunition, and refueling ships, only a few of which could transfer cargo at sea. When the loss of the Philippines left the United States without a base west of Pearl Harbor, Spruance began to see the Pacific War (as he had said in wartime) as "largely a matter of the seizure of advanced bases and their subsequent development for the support of fleet, air and ground forces." 12

In selecting sites for conquest and development, the first requirement was suitability for airfields, the second the availability of good anchorages. Each base taken was selected with a view to supporting the next forward movement. "In order to move ahead as rapidly as possible, we took only such of the heavily defended Japanese positions as we actually had to have. The ones we did not take were cut off from Japan and left to die on the vine." Japanese ships could not venture into waters controlled by the U.S. fleet, and each bypassed Japanese airfield received, almost daily, such heavy bombing that it became a "sink hole" for Japanese aircraft. He took time to point out to the audience, however, that the tenacity of Japanese resistance was apparent in the fact that no bypassed Japanese garrison surrendered before the end of the war. 13

Spruance next illustrated that in the South and Southwest Pacific, American operations had the advantage of large landmasses on which extensive shore installations could be built. Large bases were less vulnerable and allowed cargo to be turned around more cheaply and easily. However, they were difficult to "roll

up" during a forward movement. For instance, Spruance recalled that when offensive operations commenced in the Central Pacific in the summer of 1943, Funafuti in the Ellice Islands was the nearest base to the Gilbert and Marshall Islands that had a good anchorage. Unfortunately, Funafuti was 1,200 miles southwest of the Marshalls, seven hundred miles southeast of Tarawa Atoll in the Gilberts, and six hundred miles northwest of American Samoa. It also had very little land area that could be developed for shore installations and no deepwater channel for heavy ships. Airfield and anchorage facilities had the same limitation throughout the Ellice Islands, Gilbert Islands, Marshall Islands, and most of the Caroline Islands. The Navy was forced, therefore, to devote whatever land was available to airfields and airfield-support services, general maintenance facilities, radio stations, magazines, storehouses, fuel storage, water distillation, refrigeration, and electrical power plants. Given the physical space that these demands took up, the Navy knew, there would be no room for fleet facilities: "Everything we needed in this line would have to be afloat." Island facilities would be strictly for aviation support and island defense and would "contribute nothing of value to the fleet," with the exception of recreational facilities. 14

Given this situation, and because the advance to the Gilberts and Marshalls was so rapid, it became necessary to organize mobile service squadrons that could keep the fleet operating thousands of miles west of Pearl Harbor for months. "As a matter of fact, once we took the Marshalls in February 1944 the fleet remained continuously in the Central and Western Pacific until the war was over and out [sic] Army had been landed in Japan." Individual ships went back to Pearl Harbor or the continental United States for battle-damage repair or major overhaul, but the fleet remained in the combat zone. "Command of the sea—which these days involves command of the air over it—had to be maintained at all times. It was the fleet which did this and which enabled us to push ever closer to the shores of Japan." Service Squadron 4 was organized in the fall of 1943. When Eniwetok in the Marshalls was taken in February 1944, the squadron, as would become the pattern, was moved to the Marshalls, where it became part of a reorganized Service Squadron 10 at Majuro Atoll. The growth of Service Squadron 10 was rapid. Oilers, provision ships, repair ships, destroyer tenders, ammunition ships, and supply ships arrived, supplemented by floating dry docks, concrete and steel barges, and ammunition lighters. All of these vessels and facilities were self-propelled, as were the harbor tugs, fuel barges, pontoon lighters, and numerous other smaller craft for the unloading of cargo and its transfer from ship to ship.¹⁵

The importance of Service Squadron 10 to the fleet could be seen, Spruance asserted, in the fact that the next operation was the Marianas, a thousand miles from Eniwetok. The Marianas would give the U.S. interior lines of operation against the Japanese, and the primary targets of Saipan, Tinian, and Guam had sufficient land area for a number of airfields and shore facilities, but again without deepwater, secure anchorages. Saipan provided some protection for an anchored fleet from the sea and from northeast trade winds but none from other directions or from submarine attack. Its weather was undependable (limiting the kinds of ship repair that could be done), and the harbor itself was too small. Tinian's harbor was suitable only for small craft, and Guam had "no anchorage off shore of any consequence." The port of Apra, Guam, was small, unprotected against swells, and undeveloped even after forty years of U.S. occupation ("I may say that this condition is rapidly being remedied today"). Spruance recalled that because of the hydrographic conditions in the Marianas, the carriers and battle-ships had to go back a thousand miles to Eniwetok to replenish ammunition since handling ordnance weighing up to a ton required, as he put it, "care." 16

At this point, while fuel and aircraft could be transferred at sea, ammunition, as he mentioned, could not. The ammunition situation had not affected the Marianas operation, but Spruance had wanted the fleet to be able to do everything at sea except for major repair if it was going to operate closer to Japan. This meant that work had to be conducted at Pearl Harbor for the transfer of ammunition between ships at sea; the equipment developed there was tested during the Iwo Jima operation. A new command, Service Squadron 6, was established for this most recent type of operation; it was to ensure that the fleet could operate independently indefinitely, except for major repairs. Spruance told his audience at Brown that the technique proved itself at Iwo Jima and "paid off" during the battle of Okinawa. Service Squadron 10 continued to be an advanced base of sorts, servicing the fleet between operations from Ulithi Atoll, four hundred miles southwest of Guam, while Service Squadron 6 forward-deployed with the fleet.¹⁷

Logistics, to Spruance, was "the foundation on which large overseas operations must be built." He told his audience that in the future U.S. lines of communication would have to be secure and that the availability of enough shipping to move "enormous" quantities of supplies had to be certain. Fuel, ammunition, food, and aircraft would have to be "pipelined" all the way from the sources of production. Items could be stored at forward bases to promote efficient use of shipping, but beyond that the uses of forward bases would be quite limited. Spruance acknowledged that air transportation was "extremely valuable" for moving key personnel and critical cargo but thought it no substitute for surface shipping when it came to moving large numbers of personnel and volumes of freight overseas. "Aircraft operating over long flights require the movement by ship of fuel weighing several times the amount of pay load they carry." 18

Spruance went on to the role played by American submarines in the Pacific War. "Had it not been for the magnificent job done by our submarines, there is no doubt in my mind that the war with Japan would still be going on." Pointing out that these submarines had sunk 60 percent of the merchant tonnage lost by Japan, he reminded his audience that they had been the only weapon the United States had in the first two years of the war that could get at Japanese trade routes; by the last year of the war, Japanese merchant ships had been driven from the open ocean. "The Japanese empire was built on the use of the sea. When they lost the shipping needed to bring in the raw materials to Japan and to send out the men, weapons and supplies needed by their outlying areas, the empire began to crack." If Japan had practically no navy or merchant marine left by the end of the war, however, the Imperial Japanese Army was still intact, and Japan still had over ten thousand aircraft. "But, between the strangulation by the blockade and the burning of her cities by the B-29 bombing raids, her economic framework was stripped bare and she had to capitulate."19

Spruance then asked rhetorically whether anything had changed since the end of the war that affected the need for the United States to remain the world's strongest sea power. To answer his own question, he suggested that two weapons —the guided missile and the atomic bomb—were new. Despite speculation that these new weapons might bring about a new kind of "push button" warfare, in which American cities would be quickly destroyed by an "unscrupulous and aggressive" enemy, Spruance thought that guided missiles would contain the atomic bomb threat. In the naval context, he argued that bombs and shells that missed their targets seldom damaged anything, that battles like Midway demonstrated that high-altitude bombing rarely achieved hits on ships, and that only pilots who came in close to their targets achieved hits. Japanese suicide pilots late in the war had done a tremendous amount of damage—but the kamikazes were, for Spruance, the ultimate guided missile. Spruance, however, did not think that long-range guided missiles launched hundreds or thousands of miles from their targets would come close to their targets unless the targets were quite large. Obviously not entirely envisioning the near-future threat of intercontinental ballistic missiles, Spruance asserted that "the geographic position of the United States renders us as secure as any country in the world, as long as we keep our potential enemy on the far sides of the Atlantic and Pacific Oceans. Sea power can do this."20

Still, he admitted, the atomic bomb was the major new and unknown factor in warfare. More would be known after tests were conducted at Bikini Atoll, but the analysis of those tests might take several months. If atomic bombs did not become more plentiful, Spruance doubted "if ships at sea will be found to be a very profitable target unless a major engagement is impending." Nevertheless, in 124

a theme that would be emphasized in the following year's curriculum at the Naval War College, Spruance asserted that the bomb was so destructive within its effective radius that it could put a city, harbor, or anchorage seriously in danger.²¹

The fact that one bomb carried by a single long-range bomber could "do the work" of several hundred ordinary bombs was, to him, the real threat. Bombers on one-way missions were especially worrisome, since their radius of action was doubled, though Spruance thought the usefulness of such a mission would depend on visibility during the day, the amount of enemy territory to be overflown en route to the target, and the state of the defender's preparation and alertness. Coastal cities, he contended, would be "excellent" targets and difficult to defend if the approach was made over the sea, if the attack was made at night, and if the plane was equipped with good radar. "The practice of interception by night fighters will require much improvement before this ceases to be true." Similarly, coastal cities would be endangered if submarines could be equipped to fire atomic-armed rockets from their decks. Spruance thought that given all of this, until the United Nations had developed "far greater harmony" among the world's nations and far greater control of international affairs, "the United States must not give up the position it won with such effort and sacrifice during the recent war of being the strongest sea power. Unless we maintain that position, our influence abroad will weaken." In fact, Spruance thought the world now needed American help and guidance as it never had before.²²

SPRUANCE AND THE USE OF HISTORY

On Independence Day 1946, Spruance delivered another address (to an audience of two people) in Newburgh, New York. He spent a significant amount of it discussing the American Revolution and the comparative advantages and disadvantages of Great Britain and the United States, given the preponderance of British naval power and the American lack of it. Not surprisingly, he noted the strategic mobility that naval power gave the British, and he cited George Washington's ideas on the advantages that naval superiority would have given the new nation if it had had a respectable navy.²³ Spruance then described, in contrast, U.S. naval power at the time the Japanese struck Pearl Harbor, by when the United States had expanded to the Pacific Ocean, acquired overseas territories and possessions, and had a navy that was "second to none." He called Pearl Harbor a "treacherous blow" that was nonetheless a "blessing," in that it "brought out [sic] people into the war without reservations." He pointed out the key leadership role by President Franklin Roosevelt and the importance of the American ability to raise a huge military and then mobilize industrially to equip and supply it. In particular, sea power (exercised by the United States, and the United Kingdom as well) ensured that the war was not fought in the home territory of

the United States—a theme that he emphasized in both earlier and later talks. Admittedly, American territories in Hawaii, Alaska, and the Pacific Islands had been attacked and in some cases lost, but, he argued, these setbacks all took place in the first six months of the conflict, when these territories were not properly defended and could not be adequately supported, and the seas in which they lay were under Japanese naval control.²⁴

One key to American strategy at this time was holding the Japanese in place for the rest of 1942 through attrition warfare in the Central and South Pacific —wearing down Japanese airpower, "shattering" the myth of the Imperial Japanese Army's invincibility, and beginning to reduce, through a submarine offensive, Japan's ability to supply its empire with raw materials. Spruance outlined the two subsequent offensive prongs through the Central and South Pacific, under, respectively, Admiral Nimitz, then Commander in Chief, U.S. Pacific Fleet and Pacific Ocean Areas, and General Douglas MacArthur, Commanding General, U.S. Army Forces, Pacific, and Commander in Chief, Southwest Pacific Area. He emphasized the importance of the growing American material superiority in this phase of the war. Allied coordination of sea, air, and land forces cleared the way "to seize and develop the necessary bases," defeating the empire without landing a single soldier on the Japanese home islands.²⁵

In the Atlantic, by contrast, the Allied need had been to contain the German submarine threat: "Shipping losses in the Atlantic had a direct effect on the shipping that could be spared for the Pacific, and, so, on the rate at which we could push the war against Japan." Spruance argued that though the European Theater of Operations was primarily a land war against a strong continental power, even there sea control had been necessary before American military and economic strength could be brought to bear on Germany. Generally, the European Theater and Spruance's view of the American Revolution convinced him that "while land power is necessary to win a major war, sea power is needed if one is to be fought overseas and not on own our soil." If the United States now retained its position as the world's greatest sea power, Spruance was convinced, it could remain a secure "island" between the Atlantic and the Pacific.²⁶

SPRUANCE AND THE SENATE

A few days later, Spruance testified to the Senate Naval Affairs Committee on Senate Bill 2044, a bill that had been proposed by Senators Warren Austin of Vermont, Lister Hill of Alabama, and Elbert Thomas of Utah. The bill would have created a unified military structure that, the Navy felt, was most favorable to the Army. Spruance made clear that he had had no permanent duty in the Navy Department since 1929 and that his views would "be based primarily on what I saw of the war as it was fought in the Pacific." He asserted that the Navy continued to be the nation's first line of defense: "Only as we are able to control the Atlantic and Pacific Oceans will our potential enemies be kept far distant from our shores. Our armies and our air forces will then be able to go effectively to our enemies overseas and not theirs come to us." Control of the oceans would not prevent long-range submarines and aircraft from reaching U.S. coasts but, he believed, would make these operations much more difficult and less effective. Spruance argued that the bill lacked clear distinctions between the functions of the Army, the Navy, and the proposed independent Air Force. Nor did it affirm the right of each service to whatever "tools" it might need to carry out those functions, including the research and development of new weapons and equipment.²⁷

Echoing Secretary of the Navy James Forrestal and Fleet Admiral Nimitz, by this time the Chief of Naval Operations, on this issue, Spruance further asserted that the problem was how best to "coordinate" policies and plans at a high level without preventing what he saw as necessary and healthy decentralization of implementation and execution. The services had to be brought to "pull" in the same direction but without "stifling" initiative within each: "Overcentralization tends to retard improvements and to prevent getting rapid action when that is required." He saw the bill as creating under the proposed "Secretary of Common Defense" a bureaucracy that would grow beyond policy making and coordination and interfere with planning and administration within the services. The character of future wars and the weapons with which they were to be fought was unclear and Spruance thought that a centralized bureaucracy would inhibit the imagination needed to prepare for such conflicts: "Try as we may, none of us is sufficiently gifted with prophetic vision to foresee what new tools the future will bring forth or what needs will develop for new tools." "28"

It was already clear, however, that World War II had confirmed the importance of aircraft in all forms of warfare. Spruance's own experience in the Pacific had proved that any fleet deprived of supporting aircraft was like a "boxer with one hand tied behind him." He classified "supporting aircraft" in two categories: ship-based (operating from carriers, battleships, and cruisers) and shore-based, of various types. All of these aircraft were necessary, especially those on carriers, since they gave mobility: a "multiplicity" of carriers permitted superior concentrations of aircraft to be brought against enemy positions, particularly in surprise attacks on enemy carriers and on aircraft on the ground. Land-based aircraft would help carriers effect surprise, not only with early information but by hiding the presence of U.S. carriers (by not exposing carrier-based planes on scouting missions). Carrier planes, meanwhile, could be preserved for strikes.²⁹

Spruance gave the senators three examples of the value of shore-based air search in support of carrier operations. His first was the battle of Midway, where surprise had been vital to the U.S. force, since it had fewer carriers than its

opponent; it was important to strike first and not trade carriers on an even basis. The American carriers had waited northeast of Midway while the island's few PBY Catalinas searched the sectors from which the Japanese were most likely to approach. Carrier planes were used only to cover the two task forces' advance and prevent surprise and were recovered at night. An early report from one of the Catalinas allowed Task Forces 16 and 17 to get in the first blows and, ultimately, win the battle. "At Midway the cooperation between our search planes and our carrier task forces was vital." The scout planes reported enemy position, composition, course, and speed, but they could not provide constant tracking: "Our patrol plane pilots were handicapped by having to fly a slow, poorly armed seaplane, whose performance compared very unfavorably with the B-17s of that period. They could not remain near an enemy carrier for long without an excellent chance of being shot down by fighters."³⁰

As his second example, Spruance related how during the Marianas operation in July 1944 Vice Admiral Marc Mitscher's Fast Carrier Task Force preceded Vice Admiral Richmond Turner's Joint Expeditionary Force in order to clear out Japanese air forces, conduct preliminary bombardments of Saipan and Tinian, and cover the amphibious forces. Spruance, commanding the Fifth Fleet, had thought surprise desirable, though not vital. The nearest American base was Eniwetok in the Marshalls, a thousand miles away. Some of Eniwetok's seaplanes, such as the PBM Mariners, could, however, move to Saipan with their tenders as soon as conditions warranted, and meanwhile its PB4Y Privateers (patrol bombers adapted from the B-24) flew searches from the Marshalls and even struck Japanese shipping at Truk, in the Carolines. Spruance told the senators that knowing the Japanese would search to the east of the Marianas and thus detect the Fast Carrier Task Force, he had arranged for two Privateers from Eniwetok to run "interference" and destroy or drive off any Japanese search planes. The sea-based Mariners could not have accomplished this mission.³¹

Spruance's third example also came from the Marianas operation. On the morning after the initial landing on Saipan, a submarine off the San Bernardino Strait reported that a large Japanese force had come out the night before. The report confirmed for Spruance that Vice Admiral Jisaburo Ozawa's First Mobile Fleet intended to prevent American seizure of the Marianas; all information on this force would be of "great importance." Recalling that the amphibious force had a small seaplane tender that could care for six planes, Spruance ordered six Mariners at Eniwetok to fly to Saipan. Five of these arrived, and four were sent out to search. Since they had radar, they could operate at night; in daylight, they probably would have been shot down by Japanese fighters. On the second night, one of the Mariners located Ozawa's force, but radio delays kept the report from Spruance and Mitscher for eight hours. The two commanders received the report only an hour before Ozawa's planes began their unsuccessful attacks on the Fast Carrier Task Force.³²

From the latter example, Spruance drew for the senators the need for not only more comprehensive patrol plane coverage but also rapid teamwork, because naval actions were now so fast paced and the consequences so momentous. Teamwork, Spruance thought, best came from association, training, and indoctrination. All three examples illustrated that there were too many variables in war for everything to be planned and foreseen: "Our plans can be made out in great detail up to the time we hit the enemy. After that, they have to be flexible, ready to counter what the enemy may try to do to us and ready to take advantage of the breaks that may come to us." This required the man "on the spot" to know where he fit into the operation and to take the initiative on the basis of very brief orders.³³

Spruance moved next to antisubmarine warfare (ASW) and the protection of shipping. He saw the latter as essentially a naval function; the Navy's responsibility for the protection of shipping overseas against air, surface, and subsurface attack began when ships left their ports. For this mission, the Navy needed minesweepers, small vessels, and aircraft. Antisubmarine aircraft were also needed to prevent submarines from lying in wait off port entrances and to escort convoys once they were at sea. Again, taking an example from Pacific War amphibious operations, Spruance recalled that the great masses of naval vessels and shipping concentrated to capture the Pacific Islands had had to anchor in open waters or lie offshore for weeks or months if no anchorage was available. This had been the case at Iwo Jima. Until airfields could be seized ashore and be made operational, aircraft from carriers were relied on for all forms of local air support, including ASW patrols; as soon as the airfields were operational, land-based Navy ASW planes took over. For this reason, at Okinawa, Spruance said, the first move was to seize a group of nearby islands, the Kerama Retto, with a small, protected anchorage that could be used as an advanced base. This anchorage allowed patrol seaplanes based on tenders to be employed. These Mariners patrolled day and night until they could be replaced by land-based planes from Okinawa once the airfields there were activated.³⁴

The seaplane, Spruance argued, had an advantage over land planes in an amphibious operation, since it could move forward with its tender very early, as long as seas were calm enough to operate in. That was important because getting airfields operational for land-based planes took time, and it was vital to get extended searches and ASW patrols up at the earliest possible moment. Moreover, denying land-based planes to the Navy would also limit its ability to conduct strikes against ships—and to Spruance, attacks on ships in any form, with any weapon, were naval functions. Carrier aircraft, he said, were "particularly

effective" at this mission but could not perform the function of a long-range bomber. For sustained control of sea areas beyond the range of carrier aircraft, Spruance told the senators, long-range, shore-based planes that could hit ship targets were very valuable "tools." 35

There was a caveat: "Please note that I desire to stress the ability of such long range planes to hit the ships they aim at. Dropping bombs in the water from a safe high altitude soon loses what little moral effect it may have in the beginning." An enemy is not deterred unless prohibitive losses are inflicted. From that viewpoint, Spruance told the committee, during the war Navy shore-based bombers had been much more effective against Japanese shipping than Army Air Forces (AAF) bombers: "Our planes came down to where they could make a good percentage of hits, whereas under Army training their bombers usually remained at safe altitudes where little success was possible." The senators had been given Japanese figures showing how Japan's warships and merchant ships were lost: the AAF had sunk only a small percentage. At Midway, in spite of extravagant claims by the AAF, the Japanese had reported not a single hit from AAF aircraft. "Fortunately, the presence of our three carriers and the magnificent performance of their aircraft won the battle in spite of the failure of the B-17s to contribute."36

Spruance saw failure also in the AAF's inability to strike Japanese ships during the fall and winter of 1944/45 in connection with the seizure of Iwo Jima, a failure that produced "disastrous" results. According to Spruance, the best way to prevent the Japanese garrison on Iwo Jima from being strengthened would have been to sink Japanese ships bringing men and material to the island, but because the fleet was needed to support the Palau and Philippine operations, the Navy could not closely blockade the island. That job was therefore left to the Army Air Forces. Although the AAF bombed the island almost daily, it did not stop Japanese support shipping. "As a result, the defenses of Iwo Jima were constantly being strengthened up to 16 February 1945, when the Fifth Fleet started the bombardment preliminary to the landings. . . . [The] heavy losses incurred by our Marines in its capture and the great value of the position, subsequently, to the B-29 effort against Japan are matters of history." Only then were the Japanese no longer able to maintain picket vessels to warn the Japanese home islands about B-29 raids.37

Okinawa provided another example of the need for close cooperation between search planes and carrier forces. On 7 April 1945, search planes detected the Japanese superbattleship Yamato and its escorts south of Kyushu. It was apparent that the force meant to strike American ships at Okinawa from the northwest, but it was without air cover, so two Mariners were able to remain in contact until carrier aircraft could strike. Spruance emphasized that to do their job the Navy search planes "had to be able to navigate accurately, they had to recognize what they saw, they had to know the general naval situation, and they had to be able to communicate their information rapidly. All this required a lot of naval training."³⁸

Spruance also lectured the committee on the importance of mines as naval weapons. Used offensively in enemy-controlled waters, they could be laid only by aircraft or submarines. Mining, however, was "incidental" to the carrier aircraft's main employment of bombing and torpedo attack. In contrast, "the long range land plane bomber is a very useful tool for minelaying, particularly in enemy territorial waters." He acknowledged that AAF's B-29s had done a very effective job of mine laying in Japanese waters, "as they did in bombing the cities, but [mining] is and should be a Navy responsibility. The Navy should have the tools with which to do it."

Finally, Spruance turned to the Navy's need for the Marine Corps. He was concerned that Senate Bill 2044 did not safeguard fully the right of the Marine Corps to exist in the future: "I have too high an opinion of the Marine Corps, confirmed as a result of our operations together in the Gilberts, Marshalls, and Marianas and at Iwo Jima and Okinawa, to be willing to have any doubt exist on this subject." In general, Spruance concluded, Senate Bill 2044 would require "major revisions" because it did not guarantee for the services—especially the naval services—the weapons they would require to carry out their necessary roles in the next war.³⁹

SPRUANCE IN GREAT BRITAIN

In late October 1946, Admiral Spruance delivered a talk to the Royal United Service Institution. While his account was largely a historical rendition of the Pacific War, it contained all the elements he thought were required for future American naval preparedness. Spruance, for instance, asked the audience to look at the war in the Pacific from a "naval point of view." To him, three things stood out as of particular interest in the development of the "art of naval warfare"; no single one of these things could have won the war, but without any one of them Spruance did not think that the United States would have been as successful "under the conditions as they existed in that ocean." The first was the "great increase" in the strength of the carrier air force. The large number of carriers available by the summer of 1943 gave the United States a "real" strategic air force, one that had great strength and mobility. This strength was great enough not only to overwhelm Japanese island outposts but—supported by the guns of the fast battleships, cruisers, and destroyers—to go "repeatedly" to the coasts of Japan itself. "Its mobility was such that the Japanese never could tell in what part of their far-flung empire it would strike them next."40

The second point was the improvement in the American ability to make amphibious landings against strong opposition. The many new types of landing ships and craft and improved techniques of naval gunfire and air support allowed the United States to land on and capture the bases needed. The third major factor was the capacity to provide logistic support at ever increasing distances from Pearl Harbor. "In the last analysis, it was our fleet strength which enabled us to move across the Pacific, to isolate the Japanese island positions we had selected for capture, to furnish the gunfire and air support for the landings, and to ensure the security of communications to our rear." Spruance asserted that as American forces got closer to Japan, continuous fleet support in advanced areas became more and more necessary; in fact, he thought, the foundations of U.S. operations were logistics. "Through the agency of our mobile service squadrons, built up from small beginnings, we were able to give our fleet the logistic support it needed when and where it was required, whether at sea or at advanced bases which moved across the Pacific as the fleet itself moved."41

Spruance wanted to be clear, however, that the war against Japan had not been won by naval might alone. Without the troops, both Army and Marine, that stormed ashore and captured islands, the United States would have been faced with a war of stalemate or of "exchanging raids on outposts[:]... It still takes the infantryman to capture and hold territory." Moreover, Spruance noted the "important factor" of the incendiary raids by the B-29s from the Marianas, raids that effected such "great destruction" on Japanese cities. Further, the "use of the atomic bombs on Hiroshima and Nagasaki was probably the deciding factor in causing the Japanese government to acknowledge their defeat." Thus, Spruance thought that modern global war required the coordinated use of all arms and weapons, backed by the full economic and industrial resources of the nation, and he thought that future studies of World War II would emphasize the importance that sea power played in bringing about the defeat of Italy, Germany, and then Japan. 42 Spruance was claiming, in other words, that the formula for future American national security—if there was to be such a thing—would be continuation of what the United States had done in the Second World War. Any future war would have the same general outlines as the last one.

SPRUANCE AT THE NATIONAL WAR COLLEGE

Spruance was back on the lecture circuit in early January 1947, this time presenting at the National War College on the "Future Strategic Role of Naval Forces." Spruance quickly went to his main focus—maintenance of the Navy as an "efficient fighting force" that might be the "strong right arm" of national policy. In terms of the future role of the Navy, this, to Spruance, meant more than ever that the lessons of the past had to be studied, but in conjunction with scientific and technological changes that would impact future naval weapons and tactics.⁴³

Spruance described the primary function of the Navy in time of war as that of gaining and exercising control of sea areas required for the successful prosecution of the war and denying to the enemy those areas it needed. Neither goal could be entirely fulfilled, because submarines and aircraft had made previously safe and secure anchorages and harbors dangerous. Also, aircraft, mines, long-range guns, and torpedo boats had all extended the distance to seaward at which control could be exercised from land. As an example from the Pacific War, Spruance noted that Japan had been able to use the Strait of Tsushima and the Sea of Japan for communications right up to the end of the war. Still, Spruance saw the necessity of sea control as long as the bulk of the world's commerce had to be moved by surface vessels. As access to the sea had been "progressively" denied to Japan, its insular empire had "withered" and been brought near the point of "economic death."

In terms of world politics, Spruance contended that the United States was an insular nation; its access to most other nations was by sea. However, he argued, World War II left the United States in a new situation, with armies of occupation in Germany, Austria, Italy, Japan, and southern Korea, as well as rights to bases in the newly independent Philippines, Micronesia, the Volcanoes, the Ryukyus, and the Aleutians. There was "no question" that the nation's frontiers now extended to Europe and Asia, and as long as this geostrategic situation continued, Spruance saw a need to keep the sea routes open. At present, there was no major naval threat to them, but the "surest way" to encourage competitive naval building was for the United States to allow the Navy to become weak.⁴⁵

Spruance then contended that it was important to extend the front lines as far as possible from the continental United States in order to keep its production facilities intact (especially important given recent developments of long-range aircraft, guided missiles, and atomic bombs), extend its areas of sea control, and, by doing so, deny sea control to an enemy nation. Spruance returned to the idea that in naval warfare, bases had to be pushed forward if distant sea areas were to be brought under control; no matter how mobile and long-ranged naval forces were, they were still highly dependent on logistical support. While most logistical aspects of naval operations could now be done at sea, advanced bases were still necessary for repairing ships and organizing cargo for distribution to the fleet.⁴⁶

Spruance told the students that in selecting amphibious objectives for the extension of sea control, it was important to combine sites for airfields with "extensive" and protected anchorages—though in the Pacific some sites had no

harbors at all, others only "minor" harbors, and others excellent harbors but only "moderately good" terrain for airfields. There had to be at least one airfield for local protection. However, both fleet and shore-based air support was important for "continuing" sea control, once seized. The war in the Pacific had "proved" that without fleet support "no outlying insular position could be held for long against assault by properly equipped and trained amphibious forces." Spruance thought, then, that the destruction of an enemy's naval power was still the first consideration in naval warfare: "This has always been true, and I can see no possibility of a change in this conception. A study of naval history will show, I think, that any country whose fleet was not ready and anxious to fight its opponent's fleet to destruction generally ended by being defeated at sea."47

An amphibious assault in a sea area controlled by the enemy combined "practically" all types of naval operations. All forces involved had to be protected against attack by enemy submarines and air forces, both en route to and at the objective. Mined waters had to be swept, gun bombardments and air attacks had to be delivered at the objective, searches and patrols had to be conducted, and actions with a major part of the enemy's fleet had to be fought, unless it had already been put out of action.⁴⁸

Along with these actions went denial of sea areas to the enemy. Here, Spruance was thinking of large-scale raids conducted not for permanent occupation but to inflict damage. His World War II examples included strikes by U.S. submarines against Japanese shipping; by American aircraft from shore bases from which they could penetrate enemy-controlled waters; by naval task forces, principally carrier aircraft but sometimes gunships; by China-based AAF units along the China coast and Indonesia; and by naval patrol planes—both sea- and land-based—against shipping in the Yellow Sea, along the coasts of Korea, and in the Strait of Tsushima. Enemy countermeasures had merely drawn more raids by U.S. forces.⁴⁹

Looking to the future, Spruance argued that in any future war the United States would be separated from its opponent by great stretches of ocean to the west and east. Since, he contended, no "great war" had ever been won merely by blows struck from great distances, the United States would have to get close to a distant enemy to deliver decisive blows. He acknowledged that the nation was vulnerable from the Arctic but thought that that region was an Army problem and that seizing it would be, in any case, a waste of energy as it would entail fighting the weather and natural obstacles rather than the enemy. Given these realities, Spruance argued that any likely future war would therefore require sea transportation on a major scale, with strategic bases for refueling, repair, and patrolling at key points along the routes in allied or neutral territory as well as in areas seized from the enemy. The more of these bases that could be obtained by State Department negotiation, the better; Spruance also speculated that the United Nations (UN) might ease the base-availability situation in a future war. The bottom line, nevertheless, was a need for amphibious operations even after the United States "came to grips" with the enemy, to push the war toward the enemy, protect home territory, and get into position to inflict damage on the enemy. Seeing a future war as one of attrition, like the Napoleonic Wars, the American Civil War, and the world wars, Spruance perceived amphibious warfare as a means, along with strategic bombing, to get at the enemy's production facilities and national resources. 50

Spruance now turned to new technical developments in submarines, radar, guided missiles, and atomic energy. He was still hesitant to assess their impact on strategy and tactics. He was reluctant, for instance, to predict changes in submarine and antisubmarine tactics until more was known about increased submerged speed and radius of action of improved boats or countermeasures to them. With respect to radar, however, Spruance argued that improvements would not impact naval tactics much, "other than to clear away some of the fog of war and to permit better handling of forces." ⁵¹

As for guided missiles, he classified Japanese suicide planes as "very effective" weapons. As he had in previous talks, he noted how many rounds of antiaircraft projectiles it had taken to bring down one Japanese plane, but he also pointed out that these weapons had not won the war for Japan. Essentially, Spruance doubted the United States could develop a guided missile with a brain as effective as that of a human pilot and therefore thought that long-range guided missiles would not be "much" of a hazard to ships at sea. If, however, missiles were made more effective against large targets ashore, they could impact future naval warfare. Guided missiles, therefore, were another reason for keeping the enemy at as great a distance as possible so as to minimize the hits American territory might take in a future conflict. ⁵²

He had no doubt, however, that atomic energy would have a "profound" impact on naval warfare. Sounding like some of the student officers in their 1947 theses on the subject, Spruance thought that atomic energy had tremendous potential as a weapon and a system of propulsion. However, its current scarcity as a weapon restricted its use to "concentrated and valuable" targets. Ships at sea, even formations, were not suitable targets, though they might be under critical conditions, such as just before an important sea battle. The use of atomic weapons against harbors and anchorages, on the other hand, had to be given important consideration by the Navy. "The potency of the bomb is so great that a one way flight by the aircraft carrying it to the limit of its range becomes good war."

This meant to Spruance that either U.S. bases and ships at anchorage had to be dispersed or defensive measures against air attack, especially night raids, had to become more effective. "Since we cannot disperse our great cities, I think the night fighter problem must have a much better solution than existed on V-J Day." All of the significant American amphibious operations in the war had produced great concentrations of shipping, in spite of efforts to disperse them. An atomic bomb dropped on such a staging area would have "disastrous" results on the operation. If such bombs were not outlawed by the UN, Spruance thought, the Navy would have to figure out how to keep ship losses to a minimum during an amphibious operation or develop an "airtight" air defense. Here, Spruance was thinking either of increased air transportation of forces and material when airfields were available or cutting advanced-base requirements to bare minimums.⁵⁴

As he had mentioned earlier, Spruance was fascinated by the idea of atomic-propelled ships and how that new technology would increase ships' speed, offensive and defensive capabilities, and sea-keeping qualities. It would also affect logistical requirements, since fuel was the most bulky item that had to be supplied. He did not think that so "radical" a departure as atomic substitution for petroleum could be realized in the near future, and he did not foresee an entirely nuclear-powered navy, but he perceived great operational advantages once the technical problems had been worked out.⁵⁵

Summing up his National War College presentation, Spruance saw plenty of changes in weapons, methods, and procedures in naval warfare but no change in the future role of the Navy from gaining and exercising control of the sea and denying it to the enemy: "This will continue as long as geography makes the United States an insular power and so long as the surface of the sea remains the great highway connecting the nations of the world."56

In 1946, Admiral Spruance, following Admiral Pye's lead, began the transition of the Naval War College from its reduced wartime condition back to its peacetime status as the service's premier command and staff college. This transition entailed studying the global political and military situation so as to explore what would characterize future naval warfare. The basic assumptions were that the Soviet Union would be the next enemy and that warfare might involve atomic weaponry. To a great degree, however, neither staff, instructors, students, nor guest lecturers thought that future naval warfare would be radically different from previous conflicts. While acknowledging that atomic weapons and Cold War aspects of "war during peace" were earthshaking in one sense, Spruance and his officers fell back on fairly traditional strategic, operational, and tactical concepts to meet these new challenges. While many of them argued that it was a radically new world, they certainly did not see the Cold War and atomic weapons as spelling the end of U.S. naval forces, and they even foresaw naval missions that had a great deal of continuity with the past.⁵⁷

Charged as President of the Naval War College with the strategic reformulation of American naval policy for this atomic and Cold War context, Admiral Spruance digested the lessons of the Second World War, especially from the Pacific, with particular focus on amphibious warfare and on how atomic weapons would change naval ship design, force strategy, and battle tactics. Not only did he dismiss the idea that navies were obsolete, but he saw an even greater role for the Navy in Cold War littoral operations. In summary, Spruance called upon the United States to maintain a balanced operational fleet, an adequate afloat train and shore-base system, and a first-rate merchant marine—all as components of a total, integrated package of American sea power.

Spruance had a difficult charge in this period. In an era of rapid demobilization, domestic reconversion, acrimonious debates over postwar roles and missions, and a foreign policy that was changing in a revolutionary way and at breakneck speed, he needed to translate the lessons of the war into new strategy, tactics, and procedures for employing the fleet against a landlocked enemy with a very alien ideology. Moreover, all of this had to be done on a slim budget and in a way that deterred future war, which was now to be avoided if at all possible, because of the existence of atomic weapons. Strategies providing for the security of the Republic had become infinitely more difficult to formulate and implement.

NOTES

This article is extracted and adapted by the author from various chapters of his *Digesting History: The U.S. Naval War College, the Lessons of World War Two, and Future Naval Warfare, 1945–1947.* The book was published by the Naval War College Press in spring 2010 and is available for sale by the U.S. Government Printing Office, online at bookstore .gpo.gov.

- 1. Hal M. Friedman, *Digesting History: The U.S. Naval War College, the Lessons of World War Two, and Future Naval Warfare,* 1945–1947 (Newport, R.I.: Naval War College Press, 2010).
- 2. John Hattendorf, B. Mitchell Simpson, and John Wadleigh, Sailors and Scholars: The Centennial History of the U.S. Naval War College

- (Newport, R.I.: Naval War College Press), pp. 175–77.
- 3. Ibid., pp. 179-89.
- 4. Ibid., pp. 189-93.
- Thomas Buell, The Quiet Warrior: A Biography of Admiral Raymond A. Spruance
 (Boston: Little, Brown, 1974), pp. 383–86.
- 6. Historians such as Michael Palmer, Richard Hegmann, and John Hattendorf have demonstrated that the Maritime Strategy of 1986 was not created by Secretary of the Navy John Lehman in the early 1980s but was originated in the late 1940s and developed throughout the remainder of the Cold War. The strategy included a relegation of the Pacific to subordinate status, after the Mediterranean and the Persian Gulf; American naval forces were to

keep Soviet forces in the Pacific occupied so they could not reinforce units in Europe and the Middle East; see Michael Palmer, Origins of the Maritime Strategy: The Development of American Naval Strategy, 1945-1955 (Annapolis, Md.: Naval Institute Press, 1990). The strategy continued to develop in the 1950s and 1960s; see Richard Hegmann, "Reconsidering the Evolution of the US Maritime Strategy, 1955-1965," Journal of Strategic Studies 14 (September 1991), pp. 299-336. By the late 1970s, the Navy, especially the Strategic Concepts Branch of the Office of the Chief of Naval Operations (OPNAV) in Washington, D.C., as well as OPNAV's Strategic Studies Group and the Naval War College's Center for Naval Warfare Studies (the latter two groups located in Newport), was resurrecting the northern and western Pacific as regions of American naval power projection that would be critical in preventing the movement of Soviet reinforcements from the USSR's Far Eastern maritime provinces to Europe in case of a war with the North Atlantic Treaty Organization (NATO); see John Hattendorf, ed., U.S. Naval Strategy in the 1970s: Selected Documents, Newport Paper 30 (Newport, R.I.: Naval War College Press, 2007), and The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986, Newport Paper 19 (Newport, R.I.: Naval War College Press, 2004).

- 7. Buell, Quiet Warrior, pp. 386-90.
- 8. Moreover, a narrative account is in order, since this is fairly new territory, historiographically speaking. While there are seminal works about the Naval War College in the interwar era and its impact on the Pacific War, there are few on its post-1945 period. The interwar works include Edward Miller, War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945 (Annapolis, Md.: Naval Institute Press, 1991); and Michael Vlahos, The Blue Sword: The Naval War College and the American Mission, 1919-1941 (Newport, R.I.: Naval War College Press, 1980). A recent work that looks at the interwar period as a prelude to the Pacific War is Douglas Smith, Carrier Battles: Command Decision in Harm's Way (Annapolis, Md.: Naval Institute Press, 2006).

The available works on the postwar period tend to be organizational histories and studies of the College; examples are J. S. Hurlburt, "War Gaming at the Naval War College, 1969-1989," Naval War College Review [hereafter NWCR] 42 (Summer 1989), pp. 46-51; Hattendorf, Simpson, and Wadleigh, Sailors and Scholars; Nepier Smith, "Historical Analysis of the Organizational Success of the Naval War College during the Twenty-five Years following the Second World War," Naval War College Advanced Research Project, 1974, cited in Hattendorf, Simpson, and Wadleigh, Sailors and Scholars, p. 248; Philip Crowl, "Education versus Training at the Naval War College: 1884-1972," NWCR 26 (November-December 1973), pp. 2-10; and James Barber, "The School of Naval Warfare," NWCR 21 (April 1969), pp. 89-96. When strategic in nature, they examine the College's role in a limited chronological sense. Some focus very early in the Cold War, such as Robert Fisher, "The U.S. Navy's Search for a Strategy, 1945-1947," NWCR 48 (Summer 1995), pp. 73-86. Others restrict themselves to much later in that conflict: Hattendorf, Evolution of the Navy's Maritime Strategy, and U.S. Naval Strategy in the 1970s; Robert H. Gile, Global War Game: Second Series, 1984-1988, Newport Paper 20 (Newport, R.I.: Naval War College Press, 2004); Bud Hay and Bob Gile, Global War Game: The First Five Years, Newport Paper 4 (Newport, R.I.: Naval War College Press, 1993); David Rosenberg, "Being 'Red': The Challenge of Taking the Soviet Side in War Games at the Naval War College," NWCR 41 (Winter 1988), pp. 81-93; Robert Wood, "The Conceptual Framework for Strategic Development at the Naval War College," NWCR 40 (Spring 1987), pp. 4-16; James Barber, "Mahan and Naval Strategy in the Nuclear Age: A Lecture Delivered at the Naval War College," NWCR 24 (March 1972), pp. 78-88; and Donald White, "Admiral Richard L. Conolly: A Perspective on His Notions of Strategy," NWCR 24 (November 1971), pp. 73-79. For an example of this type of literature from the post-Cold War period, see Kenneth Watman, "Global 2000," NWCR 54 (Spring 2001), pp. 75-88. In addition, there are papers on American naval strategy in a Cold War context written at the time under Naval War College auspices, originally either lectures by staff members or guests, or theses by students. These articles numbered in the dozens during the Cold War, but a sample

from the 1950s and 1960s includes Robert Carney, "Role of the Navy in a Future War," NWCR 6 (June 1954), pp. 1-12; George Phelan, "Sea Power and Strategies for the Control of the Seas," NWCR 6 (June 1954), pp. 15-36; James Field, "Seapower and Military Strategy Today," NWCR 8 (April 1956), pp. 21-39, "Origins of Maritime Strategy and the Development of Sea Power," NWCR 7 (March 1955), pp. 1-23, and "The Influence of Sea Power on Modern Strategy," NWCR 10 (September 1957), pp. 31-52; J. F. McInteer, "The Significance of Seapower to the United States," NWCR 12 (September 1959), pp. 1-32; Joseph Bredestege, "Limited Nuclear War at Sea," NWCR 19 (February 1967), pp. 4–31; and Harry James, "An Analysis of Limited Maritime War," NWCR 19 (February 1967), pp. 33-74. A study of Admiral Spruance in the immediate postwar period complements these sources. So far, there is no monograph that treats the Naval War College's contribution to strategic policy throughout the entire Cold War.

- 9. Spruance, "United States as a Sea Power: Address Delivered by Admiral R. A. Spruance, USN, President, Naval War College to the Alumni of Brown University," 17 June 1946, folder 2, box 4a, record group [hereafter RG] 28, Naval Historical Collection, Naval War College, Newport, R.I., p. 1. The assessment that follows draws on this source.
- 10. Ibid., pp. 1-2.
- 11. Ibid., pp. 2-3.
- 12. Ibid.
- 13. Ibid.
- 14. Ibid., pp. 3-4.
- 15. Ibid., p. 4.
- 16. Ibid., pp. 4-5.
- 17. Ibid., pp. 5-6.
- 18. Ibid.
- 19. Ibid., p. 6.
- 20. Ibid.
- 21. Ibid., pp. 6-7.
- 22. Ibid.
- 23. Spruance, "Address Delivered by Admiral R. A. Spruance, USN, at Newburgh, N.Y., on 4 July 1946," folder 2, box 4a, RG 28, Naval

- Historical Collection, Naval War College, Newport, R.I., pp. 1–6.
- 24. Ibid., pp. 6-7.
- 25. Ibid.
- 26. Ibid., pp. 7–10.
- 27. Spruance, "Statement Prepared by Admiral R. A. Spruance, USN, for Delivery before Senate Naval Affairs Committee, Washington, D.C.," 10 July 1946, folder 2, box 4a, RG 28, Naval Historical Collection, Naval War College, Newport, R.I., pp. 1–2. The summary of this address draws on this source.
- 28. For Navy Department views on coordination rather than unification at this time, see Vincent Davis, Postwar Defense Policy and the U.S. Navy, 1943–1946 (Chapel Hill: Univ. of North Carolina Press, 1966), pp. 207–59; Palmer, Origins of the Maritime Strategy, pp. 28–59; Jeffrey Dorwart, Eberstadt and Forrestal: A National Security Partnership, 1909–1949 (College Station: Texas A&M Univ. Press, 1991), pp. 90–148; and Jeffrey Barlow, Revolt of the Admirals: The Fight for Naval Aviation, 1945–1950 (Washington, D.C.: Naval Historical Center, 1994), pp. 23–130.
- 29. Spruance, "Statement," 10 July 1946, pp. 3-4.
- 30. Ibid., pp. 4-5.
- 31. Ibid., pp. 5-6.
- 32. Ibid., pp. 6-7.
- 33. Ibid.
- 34. Ibid., pp. 7-8.
- 35. Ibid.
- 36. Ibid., pp. 9-10. While Spruance was quite accurate about Midway, he was forgetting or ignoring the later superb performances by the AAF against Japanese shipping—including warships-using skip-bombing tactics. For the AAF at Midway, see Gordon Prange, Miracle at Midway (New York: McGraw-Hill, 1982), pp. 172-73, 176, and 224-28; for the development of skip-bombing tactics, see Donald Goldstein, "Ennis C. Whitehead: Aerospace Commander and Pioneer" (PhD diss., Univ. of Denver, 1970), pp. 103-104 and 123-38; and Thomas Griffith, Mac-Arthur's Airman: General George C. Kenney and the War in the Southwestern Pacific (Lawrence: Univ. Press of Kansas, 1998), p. 82.

- 37. Spruance, "Statement," 10 July 1946, pp. 10-11. Again, Spruance's testimony was selective; a recent account of the Iwo Jima operation argues from primary sources that the seizure of the island might not have been necessary at all had the Navy and the Army Air Forces cooperated in conducting the B-29 raids. More specifically, carriers could have provided escort fighters to the heavy bombers. Unfortunately, neither service was willing to cooperate with the other; the compromise solution was to have the Marines assault the heavily defended island so that the AAF could operate P-51 Mustangs from Iwo. See Robert Burrel, The Ghosts of Iwo Jima (College Station: Texas A&M Univ. Press, 2006).
- 38. Spruance, "Statement," 10 July 1946, pp. 11–12.
- 39. Ibid., pp. 12-13.
- 40. Spruance, "Lecture Delivered by Admiral R. A. Spruance, U.S.N., before the Royal United Service Institution on 30 October 1946," folder 2, box 4a, RG 28, Naval Historical Collection, Naval War College, Newport, R.I., pp. 1–29.
- 41. Ibid.
- 42. Ibid., pp. 30-31.

- 43. Spruance, "Future Strategic Role of Naval Forces," 8 January 1947, folder 14, box 2, series 1, Spruance Papers, Naval Historical Collection, Naval War College, Newport, R.I., pp. 1–3. The assessment that follows draws on this source.
- 44. Ibid., pp. 3–5.
- 45. Ibid., pp. 5–7.
- 46. Ibid., pp. 7–9.
- 47. Ibid., pp. 7-10.
- 48. Ibid., pp. 10-12.
- 49. Ibid.
- 50. Ibid., pp. 12-15.
- 51. Ibid., pp. 15-16.
- 52. Ibid., pp. 16-18.
- 53. Ibid. See Friedman, *Digesting History*, chaps. 9, 11.
- 54. Spruance, "Future Strategic Role of Naval Forces," pp. 16–18.
- 55. Ibid., pp. 18–19.
- 56. Ibid.
- 57. See Friedman, conclusion to *Digesting History*.