

NAVAL WAR COLLEGE REVIEW



WINTER 1991

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Our cover: The nuclear-powered guided missile cruiser U.S.S *Bainbridge* (CGN 25) in the Mediterranean Sea. Photo by Don Koralewski, PH2, U.S. Navy, courtesy of the Department of Defense Still Media Records Center, Washington, D.C.

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President's Notes

During the last 25 years, the United States has been the leading actor on the international stage. Responding to direct threats to global and regional peace and stability, American policymakers and military forces have been employed throughout the world to protect our interests and those of our friends and allies.

While we did not have open hostilities there, a great deal of our energies were directed toward Europe in containing the Soviet Union and maintaining the delicate balance between NATO and the Warsaw Pact. Recent events in that theater reveal that our political and defense policies have been most successful. The crumbling of the Berlin Wall and the rush of Central European satellites to cast aside communist governments are ample evidence of our victory in the Cold War.

Asia has also demanded an enormous amount of our attention. The United States long involvement in Vietnam at such great cost in blood and treasure is without doubt our most dominant and expensive episode since the Korean

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War. The shifting of the economic center of gravity and our major trade partners from Europe to East Asia has also served to focus our thoughts toward this area of the globe.

The Middle East and Southwest Asia have been of major concern to all Americans over the past two and a half decades. The Arab-Israeli conflict, wars between India and Pakistan and between Iran and Iraq, the Soviet invasion of Afghanistan, the seizure of our embassy in Iran and the Beirut bombing of the Marine compound, terrorism and the West's energy needs, and the Iraqi invasion of Kuwait are just some of the primary factors that have riveted the United States attention to this critical region.

Africa has also produced its share of problems for the United States. Events in South Africa have called for a great deal of our political and diplomatic energies, while Colonel Khadafi's active support of terrorism and war against his neighbors have required military vigilance as well as economic and defense assistance to his victims. Civil war in Angola and the great humanitarian needs of Ethiopia and the Sudan have often been on center stage.

While the Cuban problem, recent events in Panama, the long civil wars in El Salvador and Nicaragua, and our operations to stem the "drug flow" to our southern states have caused Americans to take a hard look at Central America and the Caribbean, the relative calm throughout most of Latin America has allowed us, for the most part, to focus our attention elsewhere. The many problem areas throughout the world which have already been discussed simply reinforced this tendency.

Two of our presidents during this century have taken a particularly active interest in Latin America. Franklin D. Roosevelt's "Good Neighbor Policy" and John F. Kennedy's "Alliance for Progress" were major factors in creating a reservoir of good will which, although depleted over the years, can still occasionally be drawn on even today. As a midshipman in 1962, I had the opportunity to take part in an exchange program between the Chilean and United States Naval Academies. The following year, as a newly commissioned ensign, I had the good fortune to spend six months aboard the Argentine three-masted sailing ship *ARA Libertad*. I found both experiences fascinating as well as professionally rewarding. Many wonderful friendships were formed in those days which have endured and been renewed throughout the years. During the summer of 1972, following my own graduation from our Naval War College, I had the opportunity to speak at the Naval War Colleges of Colombia, Ecuador, Peru, Argentina, Uruguay, Brazil and Venezuela. I am certain that I benefited from the good feelings created among the Latin Americans by the policies implemented by the United States during the Roosevelt and Kennedy administrations. The hospitality and friendships which I experienced during these exchange programs were warm and cordial, and I came away from these experiences with the firm conviction that our neighbors to the south wanted to be our friends.

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Latin American navies in particular were very pro-United States at that time and, in my judgment, remain so. Much of the equipment employed then by the Latin American naval forces was of U.S. origin. Ships and aircraft for the most part had been procured in this country, and consequently the United States was relied on for spare parts and schooling. It was unusual to encounter an officer of the grade of lieutenant or above who had not been to the U.S. for some technical education or tactical training. This is no longer the case. Restrictions placed on our ability to provide military equipment, and in some cases training, to Latin American countries have caused them to look elsewhere. Many younger Latin officers now go to Europe for technical schooling since a great deal of their modern hardware comes from our NATO allies. This has served to lessen our influence throughout the region.

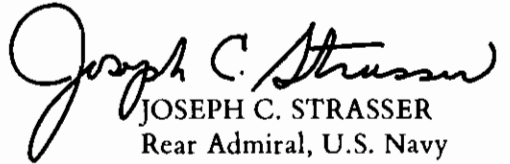
President Bush's recent trip to several Latin American countries sent a strong signal of United States interest in the area. This trip included visits to Brazil, Uruguay, Argentina and Chile, all of which have recently experienced peaceful, democratic changes of government, as well as to Venezuela, which has a long experience of tranquil governmental transition; and it shows that even during a time of great change in Europe and the Soviet Union, and while managing a crisis of global import in the Arabian Gulf arena, the president felt it important to demonstrate the vital nature of United States relations with our hemispheric partners.

Over the years, and despite the previously mentioned restrictions, the U.S. Navy has worked hard to maintain a close relationship with its Latin American counterparts. Since 1959, naval units from the United States have circumnavigated South America on an annual basis. During these Unitas cruises, bilateral and multilateral exercises are conducted to hone the abilities of all participants to operate together and, should it be necessary, to contribute in a combined way to hemispheric defense.

In October we completed the nineteenth in a series of Inter-American War Games. The control team, composed of representatives from all participants, assembled in Newport, while active game players worked at their respective naval war colleges throughout the Americas. This exercise is of great value in promoting hemispheric solidarity and increases the confidence of all participants in their ability to communicate and operate together. This year's Inter-American War Game will be hosted by the Argentine Naval War College.

Experiences such as these, and the exchange programs in which I was fortunate enough to participate and which are still ongoing today, as well as attendance at one another's naval war colleges and other schools (which will be the subject of a future President's Notes) all serve to strengthen the ties between the navies and the nations of the Americas. There is no doubt that the United States has global interests which must be carefully managed

if we are to enjoy the peace, security and stability which we all desire. It is equally certain that events within our own hemisphere will have a tremendous impact on our future well-being. We as a nation and a navy must continue to dedicate ourselves to keeping close ties with our friends in this hemisphere.

A handwritten signature in black ink that reads "Joseph C. Strasser". The signature is written in a cursive style with a large initial "J".

JOSEPH C. STRASSER
Rear Admiral, U.S. Navy
President, Naval War College

U.S. Naval Strategy 1890-1945

George W. Baer

In 1890 Captain Alfred T. Mahan published *The Influence of Sea Power upon History, 1660-1783*. That same year the secretary of the navy, Benjamin Tracy, published a report calling for an offensive battle fleet, and Congress passed legislation authorizing the construction of three first-line battleships. Both events were prompted by the concepts of sea power and offensive sea control.

Mahan and Rear Admiral Stephen B. Luce at the Naval War College sought to change the way Americans thought about national security and the way the navy fought its battles. Luce considered naval warfare to be a science. A month before Mahan arrived at the Naval War College, Luce told a class that the navy needed a “master mind” to expose the principles of “the science of naval warfare under steam.”¹ Mahan was his man. Mahan knew, however, that he would be unconvincing if he simply declared his ideas *a priori*, and so, applying history, he developed his theories within a broad concept of sea power. History for Mahan, as Donald Schurman observed, was “a military exercise that yielded some scholarly insights; not a scholarly search that yielded some military results.”² He used history to popularize the idea of sea power as the basis of national strategy, and he used it to illustrate offensive sea control, based upon principles of naval warfare.

Mahan defined sea power in ways that were broadly social—not only military. His famous list of its six elements, human and natural geography, manpower and morale, institutions of government and national character, was a net assessment of a strategic culture, a culture with its own practices. The most important of these practices was the wartime struggle for control of the sea.

Such a struggle differed radically from the existing U.S. notions for the practice of naval war, which were the defense of one’s own harbors and the destruction, through raiding, of the enemy’s commerce. Mahan declared that

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a new maritime age was at hand, an age of concentrated battle fleets. The old navy of dispersed cruisers could not stand up to an enemy battle fleet that could ignore coastal batteries and monitors waiting in harbors, an enemy that could establish a blockade beyond the reach of those coastal defenders. An adversary in command of the sea could violate the Monroe Doctrine, put a coaling station in the Caribbean, and control everyone's access to the prospective isthmian canal. Mahan believed that such a threat could be challenged only by a concentrated U.S. battle fleet. Clearly, in war a navy's main job was to fight the enemy's navy.

Thus, he connected the concepts of sea power and sea control. We must note here that the connection was, and is, conjectural, for there is no set style of naval strategy for either a maritime or a continental culture. Navies are artificial, and they are contingent. There are other ways to meet enemies at sea, other ways to protect one's maritime interests. Much depends on the circumstance.

Still, Mahan was addressing at least one real institutional problem in 1890. Moving into the era of steam, steel and big guns, the navy no longer knew how to think of itself. Luce and Mahan tried to correct this conceptual confusion in order to prevent the navy from sinking into a strategic limbo. Navies are not created overnight, and in time of peace or in the face of political indifference, the navy must maintain its cohesion and corporate purpose *as a fighting force*. Without a purpose and an operational doctrine, it will be without direction and unable to size its force. The concept of sea power and the doctrine of sea control gave the navy its direction—at least up to a point.

During times when there was no clear political guidance, when sea power did not animate American strategic culture, the navy could not be certain it was gauging the national interest accurately. Neither could it judge accurately the support it could count on from the nation. Sailors are happiest when concentrating on the specifics of operations, and from time to time the navy's attention gravitated too heavily to those parts of the strategic equation over which it did have control, that is, to the *way* the navy actually used its strength as a fighting service, and to its ships and their operations. When that happened, there was the tendency to separate force from policy. Over time, the concept of sea power, even to Mahan himself, became equated with naval strength, losing its grander cultural and economic dimensions, and hence its political value for determining strategy.

On the first page of his famous book, Mahan notes that "the history of sea power, while embracing in its broad sweep all that tends to make a people great upon the sea or by the sea, is largely a military history." But strength is not strategy, and the navy could not function for long without a reliable purpose. That purpose had to originate from political guidance, and that was why it was always important for the navy to recall Mahan's initial purpose:

to put the navy in a strategic context. It was for this reason Mahan aligned operations with culture, geography and economics.

Mahan's goal, then, was to give the navy both operational and political characteristics. He wanted his countrymen to understand that the navy expressed the nation's basic interests. Sea power defined a maritime nation's security and prosperity in terms of competition—and it was the navy's job to mediate. Maritime commerce, Mahan said, was inherently competitive. Competition would lead to expansion, which would lead to war. War would be waged on the seas, and often, afloat or ashore, for pieces of land vital to sea communication. Sea power, therefore, included both the means of protection and the national interests to be protected. From this reasoning, which critics found circular, Mahan was able to include deployment instructions for capital ships in his doctrine of sea control.

Still, there was a sense of changing times. The three *Indiana*-class battleships Congress authorized in 1890 were for coastal and regional defense—from the mouth of the St. Lawrence down to the Windward Islands and over to Panama, to prevent establishment of any enemy coaling base in the Caribbean. They were meant to concentrate before meeting an enemy force, and to meet that enemy force offshore. To that extent Congress acknowledged the emerging strategy of forward deployed fleet operations. Congress explicitly designated the new vessels as “sea-going coast-line” battleships, thus making it clear to the navy that while they could be concentrated offshore, they were not to be used as a long-endurance battle fleet, fit for action in distant waters.³

Of course the navy had long been active around the globe in the protection of American citizens and their trade. Small squadrons of gunboats and cruisers were stationed around the world, based in friendly foreign ports to avoid the burdens and costs of colonies.⁴ In time of war, those cruisers were to operate singly as commerce raiders. There was nothing grand in all this. What protected American citizens' freedom was not U.S. naval strength, but the country's size, its isolation and the balance of power in Europe, which restrained transatlantic ambitions in that continent. These, all beyond the U.S. government's control, were more effective guarantors of Americans' freedom than their navy was or could be.

Britain, the greatest naval power, did the duty of securing trade and maintaining the status quo in the Western Hemisphere. As the century turned, only around 14 percent of U.S. overseas trade was carried by ships flying the U.S. flag. The merchant fleet in 1900 was the same size as it had been in 1807.⁵ There was little government interest to encourage its growth—a bad sign for a maritime nation.

Security and prosperity, the breadth of the oceans and the continent, had bred complacency. That state of mind was what Mahan and his coadjutors, Luce, Rear Admiral Henry Taylor, Professor James Soley, and secretaries of the navy Benjamin Tracy (1889–1893) and Hilary Herbert (1893–1897) set out

to change. The United States, they said, had to prepare for a period of intense state-sponsored maritime competition. Fleet action was the core of future naval warfare. The United States must therefore establish a fleet at full strength *in peacetime*. They sought, in short, to change operations from dispersion to concentration, and to project the new fleet onto the blue water.

Secretary Tracy, under the inspiration of Mahan and Luce, spelled out the mode in his report of 1889 (published 1890): "The defense of the United States absolutely requires the creation of a fighting force. . . . We must have a fleet of battle-ships that will beat off the enemy's fleet on its approach, for it is not to be tolerated that the United States, with its population, its revenue, and its trade, is to submit to attack upon the threshold of its harbors. Finally, we must be able to divert an enemy's force from our coast by threatening his own, for a war, though defensive in principle, may be conducted most effectively by being offensive in its operations."⁶

Offensive operations would return the horse to the front of the cart. And the economic stranglehold came after, not before, the defeat of the offshore battle fleet that required concentration. Those cruisers on distant station, Mahan said scornfully, were like policemen on single beats, unable to overcome a massed opponent.⁷ Everything depended on destroying the keystone of the enemy navy, its fleet. Once the opposing fleet was sunk, sea control followed, the wide commons lay open, commerce could be conducted or interdicted, blockades imposed, and the navy could move at will.

It was an article of Mahanian faith that naval necessities would impel all navies to follow the principle of concentration. Mahan's was a world of strategic similars. The enemy's purpose, his concept of operations, and his force structure were expected to be the mirror-image of one's own. That simplified naval thinking.

When set in the vivid descriptions of Mahan's histories (for which he was elected president of the American Historical Association), sea power doctrine, joining purpose and means, gave the public an explanation of why a great navy would fight, and how, and where.⁸ By these lights, naval officers could deduce the navy's function even when no foe was evident and determine its force structure. Sea power so thoroughly mixed patriotism, a formula for prosperity and security, and the certainties of history with principles of warfare, that "it seemed to obviate the need for further intellectual effort."⁹ The navy would be a *distant* shield, and this was an additional popular attraction for the argument of forward deployment.

It was interesting to note how the doctrine of offensive sea control commended itself to the army. In 1897 Lieutenant General John Schofield, formerly Commanding General, United States Army, interpreted its coast protection mission in Mahanian terms: "In a country having the situation of the United States, the Navy is the *aggressive* arm of the national military power. . . . For this purpose entire freedom of action is essential. . . . Hence

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arises one of the most important functions of land defense: to give the aggressive arm secure bases of operation at all the great seaports where Navy yards or depots are located. . . . Foreign conquest and permanent occupation are not part of the policy of this country."¹⁰

War with Spain a year later, and subsequent U.S. control of the islands athwart important sea lanes, transformed the U.S. status in the world. But war takes people and nations in unexpected directions. A war of liberation in the Caribbean ended with the United States becoming an imperial power in the Far East.

The war confirmed the new naval strategy. Offensively committed U.S. warships won two decisive battles—both in enemy waters. Victory off Santiago de Cuba validated fleet action and the use of the battleship as a gun platform as opposed to a ram.¹¹ It gave the United States undisputed command of the sea in the Caribbean, the main combat theater. Local sea control enabled the United States to prevent Spanish reinforcement of Cuba. That control, as part of a global strategy, brought victory for the United States. Command of the sea permitted the navy to threaten the Spanish coast, and concentration of a U.S. squadron, an offensive counterthreat in the Atlantic, compelled the Spanish government to recall a squadron it had sent to defeat Dewey in Manila Bay, on the other side of the world.¹²

The U.S. Navy served a national maritime strategy. In the war with Spain, it followed classic lines, not only isolating the foe, but also supporting any army ashore. U.S. sea control prevented Spain from supporting its overseas possessions, and the U.S. Navy transported troops at will to attack Cuba and later to conquer the Philippines.¹³

Mahan's principle of fleet concentration prevailed, and there was no widening of the war. Dewey's squadron shared Manila Bay with ships of the navies of all the great naval powers except Russia. Those states decided to stand aside, and Spain's loss of her unruly Asian colony went unchallenged.

The theory of sea power, then, was found to give meaning to the annexation not only of the Philippines, but of Guam and Hawaii and, in the Atlantic, Puerto Rico. Island holdings denied bases and coaling stations to other states, and in turn gave U.S. ships extended range. Annexed territories became part of the claim and burden of empire. As they had ultimately to be defended by sea, they required a navy with a durable fleet. The country's strategy turned to extended power projection. The navy wanted to eliminate the distinction between coastal and oceanic battleships. In 1908 President Theodore Roosevelt solemnized these developments. He declared the navy must be "foot-loose," gave it a formal fleet organization, and sent it on a cruise around the world.¹⁴

At the turn of the century, however, a one-ocean battle fleet proved inadequate to cover two oceans. To keep the fleet together, the navy had to choose between basing the entire fleet either in the Atlantic to counter

Europeans perceived to be menacing the Caribbean, or in the Pacific to protect the Open Door and the Philippines. Sea power doctrine pointed both ways, Ronald Spector has noted: "In truth, the Navy was caught between two of its own dogmas: its commitment to the strategic 'truths' of Mahan, which demanded concentration at the point of greatest danger [the Atlantic], and its belief that economic rivalry was the all important issue in international relations [the Pacific]." ¹⁵

The decision was made to defend against the perceived political threat of the European fleets in the Atlantic and thus not to support commerce in the Pacific. Security prevailed over prosperity. Stephen Luce had spotted the trend setting in, even before the Spanish war. In 1897 he reviewed Mahan's third book, *The Interest of America in Sea Power, Present and Future*. "Mahan has allowed the views of a naval strategist to dominate those of the political economist. . . . Sea power, in its military sense, is the off-spring, not the parent of commerce." ¹⁶

Sea power, of course, had many parents. And strategy is a dependent art. It bridges operations and purpose. If policy is absent, strategists must deduce one, or do without. In 1903, for instance, the navy secretary asked the General Board for advice on a building program of "such strength for the Navy as seems to the Board essential to the interests of the country." ¹⁷ The secretary did not state what those interests were, or who the enemy was, or might be. The General Board, in turn, wanted to avoid political embroilment. Naturally concerned with the navy's fighting force, it fell back on identifying sea power with naval strength, keeping the focus on operations. Strength in itself would serve, if it was assumed that all other maritime states were at least potential foes. Good as this was for suggesting a force structure, it was not a true strategic deduction.

The ambiguity of "sea power" allows open doors of thought, yet a social theory, a social description, which is part of sea power doctrine, even one which predicts competition and combat, even one which contains simultaneously an adjunctive parallel doctrine of operations, is not the same as strategy. The connection proposed may, or may not, be valid, depending upon the specific circumstances. The navalists, like dogmatists of any period, were wrong to imagine that they had the all-time key. Nonetheless, ends and means did seem to be related in sea power synthesis at the turn of the century and, the more that this was so, suggested to the navy that it could take its purpose as given. That in turn made much further strategic thinking seem unnecessary. Certainly this was so when navies appeared to be operationally similar. The main variable became the strength each side could put at the point of decisive battle. ¹⁸

The political leaders in Washington did little to impose distinctions or create adjustive mechanisms to ensure an interaction between the different elements of strategy, shifting political ends, and changing military means. The

very comprehensiveness of sea power doctrine seemed to make many of these distinctions unnecessary.

A result was that the General Board's recommendation in 1903, responding to the secretary's request, was for forty-eight first-class battleships, a two-ocean fleet, with a balanced array of supporting ships. The recommendation was made without knowledge of why the force might be used, against whom it might be used, or what building program Congress might accept. The General Board simply followed the conventional navalist wisdom that assumed war was inevitable, and therefore, the country should build to surpass the capabilities of other navies.¹⁹ Japan's growing naval strength might hold Hawaii and the Philippines hostage. A European power might sail into the Caribbean. Without an isthmian canal to swing the fleet, prudence required a two-ocean fleet.

But these were hypotheses, and neither the administration nor Congress was in a mood to honor such an extravagant request. On the other hand, President Theodore Roosevelt, and Taft after him, encouraged the force emphasis. They used the navy for display; showing the flag became, as Seward Livermore said, almost a national habit, with demonstrations substituting for diplomatic achievements.²⁰ This was most conspicuous when Roosevelt, in 1907, ordered the sixteen battleships of the Atlantic Fleet to sail around the world as a test of, and to demonstrate visible proof of, strategic mobility. Upon their return their white and buff exteriors were painted over with wartime gray.²¹

War Plan Black of 1913, for a war with Germany, like its contemporary War Plan Orange for a war with Japan, sublimely iterated contemporary sea power concepts. Plan Black envisioned war erupting over an inevitable German expansion into the western hemisphere. To prevent that, the U.S. battle line would move against an approaching German battle fleet (upon which, in Mahanian logic, all German plans must rest) and defeat it as it entered the Caribbean. This, of course, involved a very narrow reading of the international scene and (like the plans of other navies) mistook entirely the nature of the war to come. War Plan Black has been described as "surrealistic."²² In 1913 it was incredible to image that the German government, tied to Europe and surrounded by continental foes, would, or could, dispatch thousands of men and the major part of its fleet to seize an island in the West Indies where it risked engagement with the entire U.S. battle fleet. A navy study said the Germans would have to bring their coal from Europe, and estimated the fleet would require 97 colliers—and an advance base in the Caribbean, since refueling could not be done at sea.²³

That contemporary reality entered so slightly into the navy's war planning in 1913 shows the danger of institutional hermetics. The military cannot detach itself from the political world. International affairs have too many dimensions. Governments may decide to avoid war, decide, for example, not

to use their warships. Governments may have allies that constrain them, or assist them. Governments may seek ends through means other than command of the sea. Threat assessment is not an abstracted calculus. Bean-counting is not strategy.

On the other hand, it misses the point to dismiss War Plan Black as preposterous. Its purpose was to assure U.S. strategic independence and regional hegemony. It followed a doctrine of operations that reigned in all the great navies. Any officer on the General Board, and President Wilson and Secretary Daniels as well—and the members of the naval staffs of Great Britain, France, Germany, and Japan—would have been astounded had they been told in 1913 that in four years' time the United States would voluntarily intervene in an overseas war, and as part of a coalition; that the commanding officers of the battleships of the Atlantic Fleet would never even see the German High Seas Fleet; and that the U.S. Navy, practicing defensive sea control measures of convoy and mining, would operate primarily as a transport service. It would have astonished them had it been suggested that when a German force did approach the American shore it would be underwater, that an army would cross the ocean from west to east, unmet by any surface fleet, and that the navy's main task would be to move safely (with British help) 2,000,000 U.S. soldiers to another continent. Such political, military, and technological prospects simply were not envisioned by the U.S. government in 1913, or by any other government.

But what if Germany won a European war? From that perspective War Plan Black made sense, for it supported the nation's strategic independence and defended the Monroe Doctrine. Strategic independence was President Wilson's aim when he proposed the Naval Bill of 1916, taking the lead in the cause of naval expansion. Wilson did not know how or when he might use this force. His purpose was to be ready, regardless of how the war ended, to back up his policies. For this he needed a big navy. "Let us," Wilson said, "build a bigger Navy than hers [Great Britain] and do what we please."²⁴

The navy was asked to build the largest navy afloat. The General Board replied: "Defense from invasion is not the only function of a Navy. It must protect our sea-borne commerce and drive that of the enemy from the sea. The best way to accomplish all these objects is to find and defeat the hostile fleet or any detachments at a distance from our coast sufficiently great to prevent interruption of our normal course of national life."²⁵

That was sea power talking. The Board asked for ten dreadnoughts with 16-inch batteries, six battle cruisers, ten scout cruisers, fifty destroyers and, indicative of the navy's prudent diversity, sixty-seven submarines for defensive coastal duty. Spurred by news of the Battle of Jutland which reminded everyone of great ships and fleet battles, Congress gave the navy what it wanted. When construction was complete in 1925, the government

would find itself in a new position of world authority and independence, however the war ended.²⁶

Neither the operational nor the political experiences of the brief eighteen months of U.S. belligerency caused the uniformed leaders of the navy to alter their prewar positions. By and large they treated transport and escort as unusual missions that were unlikely to be repeated. Officers did not draw the conclusion that mining and convoying—operationally defensive, although in the interest of a strategic offensive—had changed the means of winning sea control from offensive action by capital ships. That the Germans had found a way around the battle fleet and revived a war of raiding did not much concern the navy. Conceptually, it could be argued there was no need to rethink sea control doctrine. German raiders were beaten in a maritime environment that could be defined *as if* the High Seas Fleet had been decisively beaten, for, as long as it was held in port, it did not exist as a surface opposition. At the same time, Arthur Hezlet reminds us that “the defeat of the U-boat was not because the *guerre de course* could not by nature be decisive: it was because the Allies were able to be strong everywhere and make a gigantic effort.”²⁷ In itself a form of sea power, this general and dominant allied maritime strength also undercut the strategic influence the Germans had hoped to derive by keeping the High Seas Fleet in being.

Naval planners in 1918 were certain that the true Mahanian challenge lay ahead. Great fleets were still afloat. Few officers believed that the end of hostilities would usher in an era of peace.²⁸ Naval power remained the pillar of American security. In the postwar world competition would continue, and, in a world of powerful fleets, the capital ship strategy remained intact.²⁹ A report from the Atlantic Fleet in January 1919 read: “The best way to destroy commerce is not to attack it directly, but first to destroy the forces that defend it. . . . The principal [intermediate] objective is the destruction of the enemy’s main force.”³⁰ Navies still existed to fight other navies. The U.S. Navy, however, by its concentration on the inevitable, neglected to consider that in the intermediate future, Great Britain and Japan could not be expected to challenge the United States over trade, whatever the size of their fleets.³¹

Strength did, however, have political value, and Wilson used the insistence on parity to force the British into compliance with his new world order. The League of Nations would not work if the navy of one state dominated it. The Royal Navy, for instance, could imperil the Monroe doctrine should Great Britain claim to be acting in the name of the League. So Wilson’s naval construction program was a form of blackmail, threatening the British with a vastly expensive arms race. The same tactic was used to influence Congress. The only alternative to international cooperation and collective security, said Wilson, was an endless competition in naval arms.

Congress rejected the proposition. The idea of a strong navy in the service of collective security died when the Senate refused to endorse American

membership in the League. No one in Congress took note of Wilson's claim that the alternative was an expanded independent force. No one outside the Navy Department viewed Great Britain or Japan as military or commercial threats sufficient to justify the enlarged building program, and so it was abandoned. Sea power doctrine appeared to be unraveling; membership in the Navy League, founded in 1902, dropped off; and in 1921, the year of the Washington Conference, the Navy League suspended publication of its journal, *Sea Power*.³² The postwar navy did not know which way to turn.

In 1919, for instance, the Joint Army-Navy Board took another look at War Plan Orange. Unwilling to act without instruction, the Board announced that it could not plan without a definition of national policy. What were the country's interests in the Far East? Did they require a decisive defeat of Japan or a limited and perhaps only a defensive war? Was it simply too costly to hold the Philippines? "These questions," wrote a navy member of the planning committee, "are not for the War and Navy Departments to answer, but for the State Department."³³

An answer was never given.³⁴ Captain Frank Schofield, a major naval planner, said at the Navy Academy in 1922: "It has therefore been necessary for the Navy to make its own estimate of national policies and to revise these as events justified."³⁵ The navy declared that Japan was its most probable enemy, and in mid-1921, to support Japanese exclusion, the Open Door, the integrity of China, U.S. control of the Philippines and Guam, and the coming struggle for Pacific supremacy, the navy ordered the bulk of the battle fleet to the west coast. The State Department and Congress were unimpressed, and accordingly, postwar budgets did not give the navy what it sought: The navy had deduced incorrectly; Japan was not an enemy of the United States!

In 1921 the administration turned the navy's assumptions upside down. The question of what to do about the navy was political, and it received a political answer. Harding, Coolidge, and Hoover used the navy as an instrument of policy to limit arms, not win a war. If the purpose of battles was to reduce the strength of other navies, that could be done in peacetime as well as wartime, and more efficiently by agreement than by sinking ships. At the Washington Conference of 1921-1922, and its successors, the Geneva Conference of 1927 and the London Naval Arms Limitation Conference of 1931 (and, prospectively, the aborted Second London Naval Conference of 1935) the symmetry of battle fleet doctrine was used as the means to ration ships. A common view of naval warfare among the three major naval powers made agreement possible. Relative positions of naval strength could be determined and assigned, or so the diplomats thought. The General Board said there was no yardstick of naval power, no "naval unit" by which to compare combatant values of the different classes of ships.³⁶ This did not concern the political authorities. Harding simply excluded naval officers from

the official delegation to the Washington conference and rejected the navy's strategic assessment.³⁷

Naval disarmament and arms limitation required shifts in policy which many officers believed undermined the force base of sea power. At the Washington Conference the secretary of state, Charles Evans Hughes, proposed scrapping seventy capital ships worldwide and declared: "Preparation for offensive naval war will stop now." The chief U.S. delegate wrote that his delegation "started with the proposition that the United States would not be sufficiently interested in the open door or the preservation of Chinese integrity to go to war about them, and that Japan realized this probably better than the average American did, and that our naval program was very doubtful any way, because of the very strong opposition in this country to the immense expense involved. Therefore the first point in their minds was that we were not throwing away any weapon with which we could threaten Japan."³⁸

To the navy, however, the battleships he was talking about were those upon which depended the navy's Pacific war plan to defend the Open Door and the Pacific islands. Even worse, from the navy's perspective, the United States agreed at Washington not to establish fortified bases in the Philippines, at Guam, or in the Aleutians. This was the *quid pro quo* given to Japan for accepting a capital ship figure below that of Great Britain and the United States. That conceded Japan's effective regional domination. In return, Japan was to cooperate in arms limitation and (on other treaties signed at Washington) maintaining Pacific stability and Chinese integrity. Deprived of forward bases, the navy had to drop its plan for a swift offensive to the western Pacific, the "Through Ticket to Manila" on which it and the army had been working since the turn of the century.

Rear Admiral William V. Pratt, then a maverick on the General Board, defended the Washington treaties by arguing that a strictly naval view was restrictive. The navy, he wrote, "is first, the statesman's tool, and second, the warrior's weapon."³⁹ Pratt argued that a stabilized security environment was a valid substitute for more ships. He tried to convince his fellow officers that they could still have a theory of sea power, even with limited naval strength, if they understood sea power as proportional and provisional, not absolute, and if political action protected the navy's relative position. Pratt's fellow officers, fearing destruction of the force, accused Pratt of selling out to political expediency.

"The relationship existing between national and naval policy is one that is not always fully understood," Pratt countered. "Sea power and naval strength are not entirely synonymous terms."⁴⁰ The treaty agreement, Pratt was arguing, encouraged cooperation, and thus assured economic access and free trade more effectively than the threat or even use of naval force. Pratt was adding intentions to the calculus of capabilities, making a broader political

assessment. He had a point, and his opponents found it hard to make the case for force as an instrument to pursue the national interests when the government claimed no foes, at a time of definite and not unfavorable ratios, and when all countries declared an end to the search for strategic advantage, stressing peace and cooperation.

The dimension of force structure remained, however. In fact it was now codified by the treaties. "For the first time in the history of our country," the secretary of the navy, Edwin Denby, wrote in his annual report for 1922, "the Navy and Congress have a definite naval policy and building and maintenance standard to work to, a standard which is proportionate to our position as a world power," by which he meant battleship parity with Great Britain. In this sentence one can see a continuation of the definition of sea power as warship strength, a sense confirmed by the race in cruisers that was settled, after much bitterness, by the London Naval Treaty of 1930.

Hoover had no interest in naval force beyond its sacrificial value. Early in his administration he stated the limit of his concern. "Are our defenses strong enough to prevent a successful landing of foreign soldiers on the continental United States and ultimately on the Western Hemisphere?"⁴¹ The London Naval Conference was called to resolve the bad feeling between Great Britain and the United States. Arms limitation agreements were mechanisms of adjustment for the balance of power. The navy won acceptance of quantitative parity with the British in all classes, burying that old bone at last. However, it translated the other conference results—extension of the battleship moratorium, cruiser limits, and smaller numbers overall—as fewer ships and no new bases. CNO Admiral Charles Frederick Hughes and the General Board, represented by Admiral Hilary P. Jones, thought the President gave up too much. The United States had specific requirements in two oceans, possibly against two enemies, which could not be met after the cut in forces. Pratt, on the other hand, commander in chief of the U.S. Fleet and leading delegate to the London conference, thought "risks for peace" could be made safely. The British would cooperate and hold to the treaty agreements.⁴²

The London treaty was the high-water mark of the belief that the way to reduce the causes of war was to control the forces of war. It was a belief that reversed reality, for, in truth, arms limitation is the result of self-restraint, not the cause. Self-restraint existed in 1930, hence, the treaties. It disappeared almost immediately thereafter. All subsequent efforts at disarmament and collective security failed. When the London treaty expired in 1936 the world environment was so transformed that to most countries it seemed that an arms race, if not war, was the only way to security.

The gamble was with Japan. The United States hoped that by bringing the Japanese into the Washington and London treaties, at a ratio inferior to Britain and the United States, but high enough to permit its maritime defense and even regional domination, the Japanese would endorse a Pacific status

quo, guarantee the integrity of China, and permit Americans to retire into isolationism and disarmament.⁴³ This solution was good for only as long as Japan continued to abide by the treaty agreements.

For forty years War Plan Orange had kept the navy's focus on war in the western Pacific, and its Mahanian lineage justified a big fleet. On the other hand, Orange had no political justification, was without the means of fulfillment, and until the end of the 1930s was kept alive only by the navy's deduction of what the country's interests were and its sea power doctrine.⁴⁴

Yet the Pacific war turned out to be an Orange war. In this instance alone, the navy's mirror-imaging was correct. The navy reasoned correctly that naval superiority had to be won in order to blockade and bomb the Japanese home islands (invasion was not, in the 1930s, even considered) and that a strategy of progressive advance across the islands of the central Pacific was essential.⁴⁵ An offensive war could not be conducted directly from Hawaii. A 1935 revision reflected a maneuver which showed the fleet could not cross the ocean until it denied central Pacific bases to Japan. In the exercise, a U.S. battle fleet was "destroyed" in a decisive battle off Midway, after severe attrition by "enemy" submarines operating from forward bases.⁴⁶ Plan Orange was the way the navy planned and practiced for war. Nonetheless, in the 1930s Orange remained doctrinal and inductive. It could not be a true strategy until the United States had a policy and the navy the operational capability for action in the western Pacific. Until then, all was unsettled.

In 1937 the Joint Board concluded that Orange was "unsound in general," and "wholly inapplicable." To compromise, the navy kept its plan for a measured move west, but with no timetable. This in effect acknowledged the prospective loss of Guam and the Philippines.⁴⁷ In 1939 Rainbow Five turned military attention to the Atlantic, proposing coalition action for the projection of "the armed forces of the United States to the Eastern Atlantic and to either or both of the African or European Continents, as rapidly as possible, consistent with [hemispheric defense], in order to effect the decisive defeat of Germany, or Italy, or both."⁴⁸ But no strategic decision was made, and the General Board, in its first "Are We Ready?" report at the end of August 1939 said the navy was "NOT READY to meet a serious EMERGENCY." The next year Roosevelt ordered the U.S. fleet from California to Hawaii, but no one could tell its commander in chief why it was there, for how long, or for what it should prepare. All that Admiral J. O. Richardson could say was that his fleet was not ready and that, as he wrote CNO Admiral Harold Stark, "I know of no flag officer who wholeheartedly endorses the present ORANGE plan."⁴⁹

What else could the navy do? Stark pushed Roosevelt for a declaration. The agents of foreign policy, Stark told the administration at the end of 1940, need to know "the National Objective," need answers to the fundamental questions: "Where should we fight the war, and for what objective. That

is to say," he continued, "until the question concerning our final military objective is authoritatively answered, I cannot determine the scale or the nature of the effort which the Navy may be called upon to exert in the Far East, the Pacific, and the Atlantic."⁵⁰ Roosevelt hid his hand. Stark drew his own conclusions, reflecting Rainbow Five. Stark's "Plan Dog" became the cornerstone of the strategy by which the allies won the war.⁵¹ What Stark did was turn *strategic* attention from matters of assistance to matters of war, from the Pacific to the Atlantic, and from hemisphere defense to an overseas offensive war taken onto the continent of Europe, in alliance with the British. These were momentous changes indeed. The head of the navy reversed the Pacific orientation of the army and the navy and, in the midst of a national climate of independence and neutrality, proposed to enter a coalition war whose strategic framework was already firmly established.

Unfortunately for the strategists, while the point of the Atlantic offensive was clear, the meaning of "defense" in the Pacific was not. Did Plan Dog mean defense of the status quo in Asia, akin to recreating the Washington system, with Japan told, or forced, to leave European colonies alone, and support given to China? Or did it mean a pull-back to the Alaska-Hawaii-Panama triangle, giving Japan freedom of action west of Hawaii, conceding Asia to Japan? Akira Iriye noted that it was impossible to reconcile the two positions, an Asian status quo (more or less the stated policy) and a contracted defense perimeter so as to give primary attention and resource allocation to Europe (Plan Dog).⁵²

Roosevelt decided to go part way with both. Because of the weakness of the Pacific fleet, the political choice was not as clear as Stark's memorandum suggested. Russell Weigley has pointed out that policy decisions do not have to await military readiness. Sometimes, in the interests of large principles and broad political considerations, they may run the risk of war if a state is confident it will, in the long run, win.⁵³ This was, more or less, what Roosevelt was doing in 1940 and 1941. The navy was left with the task, as Admiral Ernest J. King told the Atlantic Fleet when he took command, of "Making the Best of What We Have."⁵⁴

After Pearl Harbor, U.S. strategy drew on an outpouring of popular support based on hatred and revenge. Solidarity made possible the voluntary sacrifice demanded by total war. So intense was the shared passion that once the war began the government did not even specify war aims. The phrase "unconditional surrender," introduced in 1943, was enough. Roosevelt employed this formula without consulting his military advisers and made it the basis of the Allied war effort without study of its meaning for the conduct of the war.⁵⁵ It was a slogan, really, without strategic content or limitation. At the same time, total war compelled the armed forces and the nation to utmost exertion, and gave the military forces immense freedom. All kinds of conceptual and practical options opened that heretofore had been closed

by neutrality, treaties and parsimony. The only restraints to military and naval action were political considerations that were part of coalition warfare, and the availability of means. In both theaters the navy dispersed its ships as needed, its submarines, destroyers, and task forces, increasingly confident that at the point of contact, in the chase, in the convoy, in the battle, the United States had superior concentration to command the sea.

The allied plan called for the defeat of Germany first. Germany was the strongest opponent, endangering the most valued allies, threatening the areas most important to the United States, and the foe against which American force most readily could be brought to bear.⁵⁶ In the Atlantic, the navy sought local sea control—safety for the convoys and the amphibious invasion forces. It faced no hostile battle fleet there, and as German invasion was not a danger, there was little need there for U.S. battleships. As in the previous war, destruction of the submarines was a secondary goal. Further, because Germany had no oceanic commerce left to sink, the U.S. Navy put only a handful of submarines in the Atlantic, and then only briefly.

In the Atlantic, the United States followed the classic maritime strategy of an insular state detached from a main continental theater of combat. It projected power from a distance, kept the sea lanes open to its friends, and supported its allies already engaged on the ground. It protected the U.S. war economy. And, when it was ready, at places of its own choosing, and over the seas, it committed troops to the war on land.

The sea campaign was against the U-boats. Hitler, who had little strategic understanding of sea power, began his defense on the shore. Grand Admiral Erich Raeder had drawn plans for a great surface force, but Hitler was confident he could win a continental war without sea power and brought Germany into war at least a half-dozen years before the fleet could be ready. Thus, the burden of naval warfare was left to Admiral Karl Dönitz and his submarines.⁵⁷

Dönitz's strategy was simple: to sink more cargo vessels than the enemy could produce. "The *sinking of ships*," he wrote, "was the only thing that mattered."⁵⁸ To his critics, this was a misguided attention to quantity rather than to quality. Dönitz, however, posited tonnage destruction as the decisive factor. He sought to destroy enemy cargo vessels quickly, and until 1943 Germany was winning the battle of the Atlantic because Great Britain could not replace her losses. But the United States made up for those losses, and Dönitz, who never had enough attack submarines, could not overcome the flood of new ships from across the Atlantic.

For the submarine offensive begun against the coastal traffic of the United States in 1942, however, the U.S. Navy, despite its undeclared participation in the Atlantic war since the previous autumn, was "materially and mentally" unprepared.⁵⁹ Here was Mahan's nightmare come true. A European power (in the form of not more than a dozen U-boats) attacked, unopposed, the

main corridor of U.S. maritime commerce. It was like a blockade in which the navy could not find the enemy, resulting in the navy's inability to control the sea directly off its own shore. Marc Milner states a clear truth about the navy in the 1930s: "The greatest weakness of the USN's readiness for war in 1939 lay in its failure to allow for defence of maritime trade short of a decisive Mahanist-style battle between main fleets. Although its First World War experience was almost exclusively in small ships, guarding merchant vessels and chasing submarines, this aspect of naval war was almost wholly neglected in the interwar years. While American neglect of trade defence can be traced to many things, it is at least evidence that America was not a maritime empire in the traditional sense, or she would not have been able to indulge in such neglect."⁶⁰

At first Admiral King was willing to risk losses in order to gain faster voyages for individual ships—to move at least part of the cargoes of ores and oil through. He did not want to commit to convoy until there were enough escorts for both transatlantic and coastal traffic, but the first of many destroyer escorts was not launched until February 1943. Nonetheless, convoy was the answer, not mainly to destroy the predator, but to save his prey. After an expensive four-month delay, King took the essential first step and started coastal convoys.⁶¹

Convoys worked. They removed or protected the prey, and in the target-thinned environment, Dönitz, discouraged, moved away from the American coast. And so did sophisticated allied antisubmarine warfare. Code-breaking, air patrols, radio detection devices, and radar played increasingly important roles in locating and running down the enemy in mid-ocean. The three North Atlantic allies worked closely together.⁶² Even though new U-boats emerged, the United States was building more ships than the Germans could sink.

The allies won the tonnage battle in the second quarter of 1943, defeating Dönitz on his own terms. And *that*—not pursuit of the submarines or the wolf packs—was the essence of the North Atlantic strategy.⁶³ First things first; tonnage was the key to winning the war, in all theaters. This led to the greatest ship-building program in U.S. history, the *sine qua non* of victory. The ship construction program, which yielded 5,777 freighters and tankers, expressed what sea power meant to the United States in those years. Once the war began, the country fully met every definition of a maritime nation. In May 1943 Dönitz declared he had lost the Battle of the Atlantic.

Use of the Atlantic and the Mediterranean permitted the invasion of Europe, and that was the point of it all—the ultimate power projection. But the contribution of an amphibious fleet with which to make that invasion had to wait on the construction of merchant ships and escorts. "The most unstable element in the logistical process," wrote the historians of that process, "was not the capacity to produce, but the capacity to deliver fighting power to the firing line. . . . Failure to make provision in 1941 and 1942 for

a large and versatile fleet of amphibious shipping would, until late 1944, constitute the most persistent and restrictive single limitation on a war in which all the principal avenues of advance lay over water.”⁶⁴ By 1944, blooded in North Africa, Sicily, and Italy, the U.S. Navy was ready. It could transport the troops: 7,639,491 were embarked from U.S. ports to all theaters during the war. The record of security and mobility with which this enormous task was accomplished is a great tribute to the armed services and an unparalleled expression of sea power.

Getting troops and supplies ashore was the navy’s last mission. But until ports were seized and put into operation, landings had to be made across the beach. General George Marshall, Army Chief of Staff, said in 1943: “Prior to the present war I never heard of any landing-craft except a rubber boat. Now I think about little else.”⁶⁵ Lessons learned in each amphibious operation were applied to the next. Air superiority was a critical factor in every case. The Normandy invasion of June 1944 took place from a coalition armada under British command of 5,000 ships and craft, supported by 3,500 heavy bombers, 2,300 medium and light bombers and 5,000 fighters. A total of 2,479 U.S. Navy ships and craft were used by the American assault force. No larger fleet ever was, or ever will be, assembled, or a larger amphibious operation attempted, for its great advantage was to have near the objective an indestructible land-base, Great Britain (an island itself to be sustained by sea power). The millionth American soldier was put ashore in France in less than a month after D-day, on the Fourth of July 1944.

The landings of such a war machine are all the more remarkable when one recalls that at the very moment of the Normandy invasion, the United States was engaged in a tremendous assault on Saipan in the Marianas, the key to Japan’s inner defense ring. The two campaigns were of comparable strategic importance in exposing the enemy homelands and opening up the final stage of the war against both enemies. That two such enormous offensives could be conducted simultaneously, on opposite sides of the globe, against two entirely separate and powerful enemies, would have seemed impossible two years before. Such was the result of the country’s astonishing war mobilization and the value of its command of the seas.

Japan had gone to war with limited aims and a simple defensive strategy. It was committed to a land war in Asia, to continental expansion. For that it needed a resource base, which it could get from maritime expansion. The problem was in holding this maritime empire. A fortified island defense perimeter would guarantee regional control and compel the United States, the only remaining Western power capable of action after the war in Europe, to concede the western Pacific. Japan, in short, had limited goals, anticipating a brief war leading to a satisfactory peace settlement.

Both Japan’s policy and its defensive strategy were deeply flawed. First, the United States was neither intimidated nor resigned, and Pearl Harbor

turned the war against Japan to one fueled by emotion, by hatred and vengeance without restraint. The United States would concede nothing, and the Japanese found themselves in a total war. Second, the Americans took the offensive before the barrier was set in place. Instead of the prewar plan that called for the rollback of Japan after the defeat of Germany, King was unequivocal: action at once, to keep the Japanese from consolidating their line. His insistence on simultaneous offensives, King's biographer stated, was "the most important contribution to victory he would make in the Second World War."⁶⁶ Third, neither Japan's economy nor its forces were strong enough to hold the ring. Static island fortresses, even with air bases, did not constitute an impenetrable barrier unless they were supported by local command of the sea. Land-based air was not an alternative defense. Half the aircraft destroyed by American carrier planes were hit on the ground.

The Japanese naval force was stretched too thin to command the seas or cover the immense perimeter. Nor was it able to prevail when force was concentrated. Either it failed to follow through initial tactical advantage, or it was overwhelmed by a larger, better organized concentration of force. Together, all this destroyed Japan's strategy of static defense. And once gone, Japan was doomed. Its plans assumed a battle of annihilation, not a war of attrition. Warships were built for decisive battle, not defense of sea lanes, transport, or antisubmarine warfare,⁶⁷ and so Japan's lifelines were exposed. That was why Prime Minister General Hideki Tojo gave such significance to the U.S. submarine attrition campaign.

The submarine, which the navy designated in 1930 for fleet support, was instantly redefined after Pearl Harbor as a weapon of unrestricted warfare against all Japanese ships and sent to maraud virtually at will.⁶⁸ Its stealth and dispersal—the very opposite of joined battle by massed force—turned around the expected progression of battle, or at least radically foreshortened it. The United States put Japan's supply lines under attack at the very beginning of the war; a war of interdiction began while the enemy surface force was still afloat. The navy made the *guerre de course* as important as a fleet engagement. Submariners insisted that this was in accord with the broader fundamentals of sea power. Philip M. Morse, opening the official "A Survey of Subsurface Warfare in World War II," published in 1946, wrote: "Though the introduction of the submarine changed the tactical picture, it did not change the rules of grand strategy outlined by Mahan."⁶⁹ Certainly Tojo was right when he said that the destruction of merchant shipping was one of the three principal factors in Japan's defeat.⁷⁰ "Japan lost the Pacific War," Theodore Roscoe wrote, "on the date that her merchant losses exceeded all possibility of replacement."⁷¹

Tojo's other two explanations of Japan's defeat further illustrate the dimensions of U.S. forward deployment for offensive sea control and its swift adaptation of strategy and forces to the circumstances of war. One was the

practice of leapfrogging, of slipping through the chain, bypassing island strongholds, leaving Japanese barricade forces to wither uncontested, while the offensive pressed on toward positions within the perimeter to junctions at which to choke the home islands, or to bases to subject them to direct attack. Submarines, carriers, and amphibious operations all applied to the strategy of offensive sea control against an enemy dependent on the sea, maintaining superiority at the decisive points of action while applying the "remorseless, steady pressure" of which Mahan wrote, "cutting the resources of the enemy" while maintaining one's own.⁷²

The third item on Tojo's list was the ability of fast-carrier task forces and task groups to conduct protracted operations at sea. Mobility was the advantage carriers had over land bases, mobility was what was needed in ocean reaches, and sustained mobility meant the ability to keep up the pressure. The carrier force moved from place to place, from island to island, swinging from theater to theater, without rest, its dive bombers and fighters striking in the center, then in the south and then in the center again. Such mobility supported the whipsaw approach enshrined in the dual-strategy of two offensives: General Douglas MacArthur's from the south and Admiral Chester Nimitz's across the central Pacific towards the Marianas following War Plan Orange's island reduction strategy.

It has taken time to establish the value of carriers, to develop a doctrine of use comparable to validation of the battleship fifty years before by the battle fleet. Decisions were made from experiences drawn from the carriers afloat, which before 1938 numbered only three or four.⁷³ The concept of the carrier as the core of a separate offensive striking force, the nucleus of a new tactical formation, as opposed to a supporting spotter force, was established in the famous Fleet Problem IX of 1929. The *Saratoga* made an all-night 30-knot dash to a position 140 miles off the west coast of Panama, launched seventy planes before dawn in a surprise attack, and thirteen in a second strike, and without interference "destroyed" the locks and airfields of the Pacific side of the canal. Almost all of her aircraft were recovered back on *Saratoga's* deck. One of the authors of the plan recalls that Admiral Pratt, in charge of the force, called the strike "the most brilliantly conceived and most effectively executed naval operation in our history."⁷⁴

It hardly mattered that the "enemy" fleet had already gotten through the canal. The exercise summed up a decade of thinking about carrier use. It established the possibility of carrier groups operating in advance of the battle line and was tested in the exercise the following year when the carrier appeared as a tactical unit in the force organization for the first time—the basic step to what was to become, in the war, the fast carrier task force, operating independently from the battle line. The exercise of 1929 confirmed for Orange war planners that naval aviation could play, and must play, a central part in protecting a westward fleet movement. Whether the carriers

should be large or small, concentrated or dispersed, was subject to debate. But the main point was established. Carrier air power was an offensive force, part of the offensive sea control mission, part of an evolving definition of sea power as naval strength.

In light of this it seems almost churlish to note that had the exercise off Panama been war, the 78 planes that returned to the *Saratoga's* deck would have found her underwater, having been "sunk" several times that morning, twice by battleship fire, once by a submarine, and once by planes from her sister ship *Lexington*, which had found her undefended. This last action would have been anomalous, as the *Lexington* herself had previously been put "out of action" by battleships and then "destroyed" by friendly planes that mistook her for the *Saratoga*.⁷⁵ Yet this information is important. The vulnerability of the platform remained the weak point in carrier doctrine.

It was the entirely unexpected destruction of the battle line at Pearl Harbor, by the largest carrier strike ever yet launched, that catapulted the carrier into the role it played in the Pacific war. The carriers (fortuitously saved), the heavy cruisers, and some submarines were the only remaining force in the Pacific. The way to a new force doctrine opened in a morning. In war, as in biological evolution, changes are often considered adaptive leaps, although in war, as probably in evolution, "punctuated equilibrium" is most often a dramatically noticed summation of many changes—with change still in progress. There was a real jump here, though, as well as a consolidation. When the battleships that were commissioned after Pearl Harbor joined the fleet, they were sent to protect the carriers. In December 1941 the navy had 8 carriers with 521 planes aboard. On V-J Day, only four years later, naval aviation commanded 41,272 planes and had 99 aircraft carriers afloat, bearing altogether about 4,000 aircraft on their decks. Amphibious operations from Guadalcanal to Iwo Jima and Okinawa were undertaken in large measure to seize, secure, or establish land air fields. A carrier is a mobile air field. The Pacific offensive won command of the sea thanks to naval air.

Sustained mobility, the essence of the navy's Pacific operations, was made possible by the 2,930 ships and craft of the indefatigable service squadrons which kept troops and warships supplied so that they, above all the fast-carrier task forces, could conduct campaign after campaign as, in effect, base support came to them.⁷⁶ Here was the greatest forward naval deployment possible, the self-supplying fleet. Thereafter, a powerful U.S. force could go to any sea and stay on any station as long as needed, so long as it had sufficient mobile service support. This was the foundation of the navy's postwar claim to strategic value: global flexibility.

These and many other material, tactical, and strategic innovations were beyond Japanese capabilities to withstand. Neither side had foreseen so many doctrinal and operational asymmetries. The Americans made changes quickly, seizing advantages. The Japanese government lacked comparable adaptability,

just as the Japanese society and economy lacked the productive base and manpower reserve to oppose the onslaught. In this greatest of all naval wars, in the working experience of great campaign after great campaign, the navy's offensive sea control took many forms of both dispersal and concentration of force.

Above all, the navy now claimed that all the world's elements were connected to sea power. To control the sea the navy had to project its force not only upon, but also under, above, and from the water's surface. An offensive naval air force, operations in direct support of land battles and against naval targets ashore, and attack submarines on detached missions identified a new triphibious service.

In the war, King told a Senate committee in 1946, the navy had dealt with: "(1) seaborne objectives, (2) with land objectives that can be reached from the sea, (3) with movement of ground forces overseas and establishing them on shore, (4) with movement of ground elements of air forces overseas, and last but not least, (5) in keeping the seaways clear and open for the line of supply to all forces overseas—ground, sea, and air."⁷⁷ Here was the foundation of a true maritime strategy, a reintegrating definition of sea power, and of the navy's strategic mission.

Nimitz confirmed this to the same Senate committee: "Fleets do not exist only to fight other fleets and to contest with them the command of the sea. Actually, command of the sea is only the means to an end. Wars cannot be concluded by naval action alone or by air action alone. Wars are conducted and concluded by the combined action of sea, land, air, diplomatic, and economic effort."⁷⁸

Sea power was reexpressed in terms of new weapons of naval warfare, with doctrines reconstituted to match them, as a national, offensive, maritime strategy, with missions against the land. The question was: In the postwar world did those missions count? If they did not, the navy might be reduced to an escort and transport force, as it had been in 1917-18. As King and Nimitz spoke, the future of the offensive navy was being called into question. The service had outdone itself in the war. The context of its former deductions no longer existed. The maritime security of the United States and its trade was assured. There was no foe at sea. In 1945, maintaining an offensive naval strength no longer seemed necessary. Two weeks after the apotheosis on Tokyo Bay, the secretary of the navy appeared before the House Committee on Naval Affairs and asked the question Congress wanted answered: "Why should we maintain any Navy after this war?"⁷⁹

The country was suffering from a new kind of insecurity, from a global threat emanating from a foe beyond the navy's reach. Neither King nor Nimitz had shown how the navy might be used against the continental might of the Soviet Union.

Fifty years before, the navy had made power projection the basis of American strategic culture.⁸⁰ After 1945 the air force and the army took this claim away, took up the role of strategic defense and adopted the principles by which offensive sea control had operated, applying them to their own missions and weapon systems. After 1945 "air power" advocates appropriated Mahan's phrases, asserting that air and space were the wide commons, the great highways of the world. Security was found in an offensive strategy of fleets of the air. The navy was no longer the first line of defense. Permanent readiness was vested in bombers. Army divisions were forward deployed overseas. Sea control meant nothing to an air power advocate. The enemy was deep inside the world's largest landmass. The air force could win the war quickly, cheaply, and at a distance, in the manner of Mahan. For an air power advocate, or an army general, the United States was again a continental state, facing a continental enemy.

Postwar naval strategic thinking luffed, crimped by lack of practice. Admiral Arleigh Burke noted the cost of King's reluctance (when CNO during the war) to talk even to his staff about general policies. "As a result, people in the Navy did not know very much about strategy. . . . That's why we did not have any organization to lay out the Navy's case or defend ourselves. . . . We suffered from a lack of knowledge within the Navy of what the Navy was all about and how the Navy was going to be run."⁸¹ Few naval officers wanted to get involved in planning or public relations, and fewer still in the interservice disputes. In the Naval War College's copy of Vincent Davis's *The Admirals Lobby*, at the place where the author argues for a strong public relations officer in the navy, a reader wrote: "A sailor's place is on his ship, a ship's place is at sea."

That was the situation a year after the war. Popular interest in sea power had waned. No one could say what the navy was going to do, or whether the United States should really be considered a maritime country after all. It was not only the size and composition of the navy that was in question, but the role of the service itself. Form would follow function. The navy had to find a way to participate in an air war and a land war against the Soviet Union, or it might lose its air arm to the air force, and its marines to the army. King had adumbrated a diversified navy when he described the capture of Okinawa. "During the three months that this operation was in progress our Pacific Fleet—the greatest naval force ever assembled in the history of the world—was engaged in a continuous battle which for sustained intensity has never been equalled in naval history; yet at this time the Japanese Navy had virtually ceased to exist—we were fighting an island, not an enemy fleet."⁸² With the defeat of Japan, the only possible threat to the United States was the Soviet Union. What remained for sea power against that continental state? In 1946 the navy's future as an offensive force depended on its ability to answer that question.

Notes

1. Rear Admiral Stephen B. Luce, "On the Study of Naval Warfare as a Science," *U.S. Naval Institute Proceedings*, v. 12, no. 4, 1986, p. 546.
2. Donald M. Schurman, "Mahan Revisited" in John B. Hattendorf and Robert S. Jordan, eds., *Maritime Strategy and the Balance of Power: Britain and America in the Twentieth Century* (New York: St. Martin's, 1989), pp. 103-106.
3. Harold and Margaret Sprout, *The Rise of American Naval Power, 1776-1918* (Princeton: Princeton Univ. Press, 1946), pp. 207-212, and Norman Friedman, *U.S. Battleships: An Illustrated Design History* (Annapolis: Naval Institute Press, 1985), pp. 23-30. Thus Robert Seager called the Naval Act of 1890 "a culmination and a beginning." Robert Seager II, "Ten Years before Mahan: The Unofficial Case for the New Navy, 1880-1890," *Mississippi Valley Historical Review*, v. 40, no. 3, 1953, p. 511. The first battleships, appropriated in 1886 and commissioned in 1895, were ordered to meet a shift in naval balance in the hemisphere, as Chile, Argentina, and Brazil acquired modern warships from Europe, at a time when American vessels were, in Admiral George Dewey's words, "the laughing stock of the nations." They were in effect part of an arms race caused by advances in naval engineering. John D. Reilly, Jr. and Robert L. Scheina, *American Battleships, 1886-1923: Predreadnought Design and Construction* (Annapolis: Naval Institute Press, 1980), p. 21. Dewey's quote is from *Autobiography of George Dewey* (New York: Scribner's, 1913), pp. 162-163.
4. C.I. Hamilton, "Naval Power and Diplomacy in the Nineteenth Century," *Journal of Strategic Studies*, v. 3, no. 1, 1980, pp. 77-88. For a good survey of the "old navy," just before Mahan, in which Mahan served, see Kenneth J. Hagan, *American Gunboat Diplomacy and the Old Navy, 1877-1889* (Westport: Greenwood Press, 1973).
5. H. David Bess and Martin T. Farris, *U.S. Maritime Policy: History and Prospects* (New York: Praeger, 1981), p. 7.
6. On Tracy see Benjamin Franklin Cooling, *Benjamin Franklin Tracy: Father of the American Fighting Navy* (Hamden: Archon, 1973), pp. 72-78 and, on his connection with Mahan and the navalists, Walter R. Herrick, Jr., *The American Naval Revolution* (Baton Rouge: Louisiana State Univ. Press, 1966).
7. Alfred T. Mahan, *Naval Strategy* (Boston: Little, Brown, 1918), p. 5.
8. Mahan of course was pulling together ideas present but undeveloped in naval circles, as Elting E. Morison says in *The War of Ideas: The United States Navy, 1870-1890* (Colorado Springs: U.S. Air Force Academy, 1969), p. 8. See also Peter Karsten, *The Naval Aristocracy: The Golden Age of Annapolis and the Emergence of Modern American Navalism* (New York: Free Press, 1972), p. 326, and Robert Seager II, *Alfred Thayer Mahan: The Man and His Letters* (Annapolis: Naval Institute Press, 1977), pp. 160-190, 197-200.
9. Vincent Davis, *The Admirals Lobby* (Chapel Hill: Univ. of N.C. Press, 1967), p. 113. Russell Weigley makes a further point. A decisive sea battle of machines promised many fewer casualties than a series of land battles between masses of men. "Among the many reasons for the vogue of Mahan," Weigley wrote, "one surely was that he promised a way to relatively anesthetic victory in war." Violence would be confined, or so popular expectation was led to believe, to a single battle offshore, unheard and unseen. Russell Weigley, *The American Way of War: United States Military Strategy and Policy* (Bloomington: Indiana Univ. Press, 1977), p. 192.
10. Graham A. Cosmas, *An Army for Empire: The United States Army in the Spanish-American War* (Columbia: Univ. of Missouri Press, 1971), p. 8.
11. Wayne P. Hughes, Jr., *Fleet Tactics: Theory and Practice* (Annapolis: Naval Institute Press, 1986), pp. 58-62.
12. The best book on the war with Spain is David F. Trask, *The War with Spain in 1898* (New York: Macmillan, 1981), with pp. 72-96 for naval plans and preparations. Had the superior Spanish relief squadron arrived in the Philippines, Dewey would have had to give up his position in Manila Bay. *Ibid.*, pp. 375-377, and Robert Seager II and Doris Maguire, eds., *Letters and Papers of Alfred Thayer Mahan: Volume III, 1902-1904* (Annapolis: Naval Institute Press, 1975), pp. 445-447. Mahan claimed that Dewey could have returned and destroyed the Spanish reinforcements when the two monitors sent to reinforce him arrived. Alfred T. Mahan, *Lessons of the War with Spain* (Boston: Little, Brown, 1899), pp. 34-35. But it is more likely that the Spaniards might have destroyed those unseaworthy vessels before Dewey could join up with them.
13. Mahan gives full recognition to the importance of this dimension in his *Lessons of the War with Spain*.
14. Friedman, *U.S. Battleships*, pp. 30, 37-42; Emanuel Raymond Lewis, *Seacoast Fortifications of the United States* (Washington: Smithsonian Institution Press, 1970), p. 99, and Gordon C. O'Gara, *Theodore Roosevelt and the Rise of the Modern Navy* (Princeton: Princeton Univ. Press, 1943), p. 71.
15. Ronald Spector, *Admiral of the New Empire: The Life and Career of George Dewey* (Baton Rouge: Louisiana State Univ. Press, 1974), p. 149.

16. Quoted in John D. Hayes, "The Influence of Modern Sea Power, 1945-1970," U.S. Naval Institute Proceedings, May 1971, pp. 279-280. The correct citation, *The Critic*, January 1898, is given in *The Writings of Stephen B. Luce*, eds. John D. Hayes and John B. Hattendorf (Newport: Naval War College Press, 1975), pp. 216-217.

17. Albert G. Stillson, "Military Policy Without Political Guidance: Theodore Roosevelt's Navy," *Military Affairs*, v. 26, no. 1, 1961, p. 23.

18. See Paul Y. Hammond, *Organizing for Peace: The American Military Establishment in the Twentieth Century* (Princeton: Princeton Univ. Press, 1961), p. 83.

19. See Stillson, "Military Policy without Political Guidance: Theodore Roosevelt's Navy," pp. 18-31.

20. Seward W. Livermore, "The American Navy as a Factor in World Politics, 1903-1913," *American Historical Review*, v. 63, no. 4, 1958, p. 879. Also, Richard D. Challener, *Admirals, Generals, and American Foreign Policy, 1898-1914* (Princeton: Princeton Univ. Press, 1973), pp. 111-117.

21. Roosevelt told his Secretary of State in July 1907: "In the first place I think it will have a pacific effect to show that it can be done; and in the next place, after talking thoroly over the situation with the navy board I became convinced that it is absolutely necessary for us to try in time of peace to see just what we could do in the way of putting a big battle fleet in the Pacific, and not make the experiment in time of war." Elting E. Morison, ed., *The Letters of Theodore Roosevelt: Volume V, The Big Stick, 1905-1907* (Cambridge: Harvard Univ. Press, 1952), p. 717.

22. Holger H. Herwig and David F. Trask, "Naval Operations Plans between Germany and the USA, 1898-1913: A Study of Strategic Planning in the Age of Imperialism" in *The War Plans of the Great Powers, 1880-1914*, ed. Paul M. Kennedy (London: Allen & Unwin, 1979), p. 62.

23. John H. Maurer, "Fuel and the Battle Fleet: Coal, Oil, and American Naval Strategy, 1898-1925," *Naval War College Review*, November-December, 1981, pp. 66-67.

24. Arthur S. Link, *Woodrow Wilson and the Progressive Era, 1910-1917* (New York: Harper, 1954), p. 190.

25. Letter of 30 July 1915. *Annual Report of the Navy Department for the Fiscal Year 1915* (Washington: U.S. Govt. Print. Off., 1916), pp. 73-74.

26. William R. Braisted, *The United States Navy in the Pacific, 1909-1922* (Austin: Univ. of Texas Press, 1971), pp. 201-202.

27. Arthur Hezlet, *The Submarine and Seapower* (New York: Stein and Day, 1967), p. 106.

28. Rear Admiral William Sims, wartime liaison in London, and Captain William Pratt, Assistant Chief of Naval Operations in Washington, were exceptions in thinking that wartime cooperation could continue. They approved parity with Great Britain, but thought rivalry was unnecessary.

29. None thought this more strongly than William Benson, CNO until September 1919. The country, he said in 1919, was "on the threshold of the keenest and most active commercial competition that the world has ever seen." A year later, as head of the Shipping Board, he was convinced his task was to conduct a "fierce and final competition" with Britain for the world's trade. Jeffery J. Safford, "Anglo-American Maritime Relations during the Two World Wars: A Comparative Analysis," *American Neptune*, no. 41, 1981, p. 268, and Mary Klachko with David F. Trask, *Admiral William Shepherd Benson, First Chief of Naval Operations* (Annapolis: Naval Institute Press, 1987), p. 183.

30. Memorandum by Cdr. W. S. Pye. General Board Study Serial No. 894, pp. 420-426.

31. Even when this was understood, "Red" war games continued to be played at the Naval War College, mainly for instructional convenience, it is true, to help officers think about war against a slightly stronger naval power and to familiarize them with the Atlantic, but keeping alive for many years the sea power sense that the Royal Navy posed a possible threat. As late as 1938 there was a Blue-Red game, culminating in the final decisive "Battle of Sable Island." Norman Friedman, *U.S. Cruisers: An Illustrated Design History* (Annapolis: Naval Institute Press, 1980), p. 10; Michael Vlahos, *The Blue Sword: The Naval War College and the American Mission, 1919-1941* (Newport, R.I.: Naval War College Press, 1980), pp. 99-112; William R. Braisted, "On the American Red and Red-Orange Plans, 1919-1939" in *Naval Warfare in the Twentieth Century, 1900-1945: Essays in Honour of Arthur Marder*, ed. Gerald Jordan (London: Croom, Helm, 1977), pp. 167-185; and John B. Hattendorf, B. Mitchell Simpson III, and John R. Wadleigh, *Sailors and Scholars: The Centennial History of the U.S. Naval War College* (Newport, R.I.: Naval War College Press, 1984), p. 164.

32. Armin Rappaport, *The Navy League of the United States* (Detroit: Wayne State Univ. Press, 1962), p. 61.

33. Louis Morton, "War Plan ORANGE: Evolution of a Strategy," *World Politics*, v. 11, no. 2, 1959, p. 224.

34. William R. Braisted, *The United States Navy in the Pacific, 1909-1922*, pp. 526-527, and Lawrence H. Douglas, "Robert Edward Coontz, 1 November 1919-21 July 1923," in R.W. Love, Jr., ed., *The Chiefs of Naval Operations* (Annapolis: Naval Institute Press, 1980), p. 29.

35. Lecture of 14 October 1922. Naval War College Archives, Record Group 8.

36. Raymond G. O'Connor, "The 'Yardstick' and Naval Disarmament in the 1920's" in his *War, Diplomacy, and History: Papers and Reviews* (n.p., Univ. Press of America, 1979), p. 104.
37. Kenneth McDonald shows that timing was all-important for an agreement, that the administration's ratios were just as arbitrary as the General Board's, and to get the freeze, the administration had to make a bold, stop-now, proposal. J. Kenneth McDonald, "The Washington Conference and the Naval Balance of Power, 1921-2," in Hattendorf and Jordan, eds., *Maritime Strategy and the Balance of Power*, pp. 209-210. But the administration handled the navy roughly. Robert Albion reported what he called "one of the most amazing incidents in the history of the Navy Department," when civilian authority in the person of Assistant Secretary Theodore Roosevelt, Jr. appeared before the General Board, who was preparing advice for the conference, and told it either to cut down its figures "or we will tear the heart out of your Navy." Robert G. Albion, *Makers of Naval Policy, 1789-1947*, ed. Rowena Reed (Annapolis: Naval Institute Press, 1980), p. 230.
38. Quoted in Braisted, *The United States Navy in the Pacific, 1909-1922*, p. 595.
39. Rear Admiral William V. Pratt, "Naval Policy and Its Relation to World Politics," U.S. Naval Institute *Proceedings*, v. 49, no. 7, 1923, p. 1084.
40. W. V. Pratt, "Naval Policy and Its Relation to World Politics," p. 1073. See also Gerald W. Wheeler, *Admiral William Veazie Pratt, U.S. Navy* (Washington: Dept. of the Navy, 1974), pp. 185-186.
41. *The Memoirs of Herbert Hoover: The Cabinet and the Presidency, 1920-1933* (New York: Macmillan, 1952), p. 338.
42. Gerald E. Wheeler, "Naval Diplomacy in the Interwar Years," in *Versatile Guardian: Research in Naval History*, ed. Richard A. von Doenhoff (Washington: Howard Univ. Press, 1979), pp. 45-46, and Craig Symonds, "William Veazie Pratt," in *The Chiefs of Naval Operations*, ed. Love, pp. 76-77.
43. Raymond O'Connor suggests Hoover also may have viewed Japan as a bulwark against Soviet aggression in China, thanks to its acknowledgement in London of China's territorial integrity. Raymond G. O'Connor, *Perilous Equilibrium: The United States and the London Naval Conference of 1930* (Lawrence: Univ. of Kansas Press, 1962), p. 83.
44. The navy's main mission, through all this, it is important to note—more important than defense of the Canal or the Philippines—remained long-range coastal defense of the United States. Defined in Mahanian terms, this was based on the principle of meeting the invader offshore. The question was, how far offshore? Harbor protection was the province of the army's coastal artillery. During the 1930s, the navy's responsibility for defense beyond the range of army batteries was challenged by air power advocates in the army who claimed that their land-based aircraft could better prevent enemy ships from nearing the coast than the navy could. This was a claim for a strategic as well as a support function for air power. It was not accepted by the high command of either service, but on the other hand, the army did not give up the claim, either. A controversy smoldered, unresolved, through the 1920s and 1930s over who had authority for offshore defense. This did not affect blue-water planning, however. See John F. Shiner, "The Air Corps, the Navy, and Coast Defense, 1919-1941," *Military Affairs*, v. 45, no. 3, 1981, pp. 113-121.
45. See Thomas Hone and Mark David Mandeles, "Managerial Style in the Interwar Navy," *Naval War College Review*, September-October, 1980, pp. 88-90, 98; Edward S. Miller, "War Plan Orange, 1897-1941: The Blue Thrust through the Pacific," *Naval History: The Seventh Symposium of the U.S. Naval Academy*, ed. William B. Cogar (Wilmington: Scholarly Resources, 1988), pp. 239-248; and Michael Vlahos, "Wargaming, an Enforcer of Strategic Realism: 1919-1942," *Naval War College Review*, March-April, 1986, pp. 7-22. Michael Vlahos looked at 136 war games and chart maneuvers played in this period in Newport. One hundred and twenty-seven simulated a war with Japan. Vlahos, *The Blue Sword*, p. 143. Waldo Heinrichs quotes a graduate who said that in the 1930s the War College substituted a Red game (against the British) every now and then "just to be able to say we weren't always fighting the Orange Fleet." Heinrichs, "The Role of the United States Navy," p. 203. Michael Doyle has argued that the navy was lukewarm to Orange because of its unsolvable problems and held on to it largely to keep open to other strategic possibilities, such as British cooperation. Michael K. Doyle, "The U.S. Navy and War Plan Orange, 1933-1940: Making Necessity a Virtue," *Naval War College Review*, May-June 1980, pp. 49-63.
46. The exercise is described in Stephen E. Pelz, *Race to Pearl Harbor: The Failure of the Second London Naval Conference and the Onset of World War II* (Cambridge: Harvard Univ. Press, 1974), p. 198. On the other hand, the navy signally failed to integrate into its operational plans the fine theoretical work done within the Marine Corps on amphibious doctrine, or support the Marines' amphibious exercises with transports and logistics. Jeter A. Isely and Philip A. Crowl, *The U.S. Marines and Amphibious War: Its Theory, and Its Practice in the Pacific* (Princeton: Princeton Univ. Press, 1951), pp. 14-71.
47. Louis Morton, *The United States Army in World War II. The War in the Pacific. Strategy and Command: The First Two Years* (Washington: Dept. of the Army, 1962), p. 39; John Major, "William Daniel Leahy, 2 January 1937-1 August 1939," *The Chiefs of Naval Operations*, ed. Love, p. 105; and Louis Morton, "War Plan ORANGE: Evolution of a Strategy," *World Politics*, v. 11, no. 2, 1959, pp. 247-248.

48. Maurice Matloff and Edwin M. Snell, *Strategic Planning for Coalition Warfare, 1941-1942* (Washington: Dept. of the Army, 1953), p. 8.
49. J.O. Richardson, *On the Treadmill to Pearl Harbor* (Washington: Dept. of the Navy, 1973), pp. 307-333 and *Pearl Harbor Attack: Hearings. . . . Seventy-Ninth Congress* (Washington: U.S. Govt. Print. Off., 1946), Pt. 14, pp. 933, 940, 986. The decision to keep the fleet at Hawaii is discussed in Robert J. Quinlan, "The United States Fleet: Diplomacy, Strategy, and the Allocation of Ships (1940-1941)," *American Civil-Military Decisions*, ed. Harold Stein, (Birmingham: Univ. of Alabama Press, 1963), pp. 153-201.
50. For Stark's famous memorandum see *Strategic Planning in the United States Navy: Its Evolution and its Execution, 1891-1945* (Wilmington: Scholarly Resources, 1977), microfilm reel 5.
51. As such, Stark's memorandum earned Louis Morton's judgment as "perhaps the most important single document in the development of World War II strategy." Louis Morton, "Germany First: The Basic Concept of Allied Strategy in World War II" in Kent R. Greenfield, ed., *Command Decisions* (New York: Harcourt, Brace, 1959), p. 26.
52. Akira Iriye, *The Origins of the Second World War in Asia and the Pacific* (London: Longman, 1987), pp. 122-123.
53. Russell Weigley, "The Role of the War Department and the Army" in eds. Borg and Okamoto, *Pearl Harbor as History*, p. 188.
54. This memorandum is printed in Samuel Eliot Morison, *The Battle of the Atlantic, September 1939-May 1943* (Boston: Little, Brown, 1950), pp. 52-53.
55. Maurice Matloff and Edwin M. Snell, *Strategic Planning for Coalition Warfare, 1941-1942* (Washington: Dept. of the Army, 1953), p. 380.
56. For the logistical advantages see Robert W. Coakley and Richard M. Leighton, *Global Logistics and Strategy, 1943-1945* (Washington: U.S. Govt. Print. Off., 1968), p. 800.
57. The overall naval campaign is detailed in Michael Salewski, *Die deutsche Seekriegsleitung, 1935-1945* (2 vols.) (Frankfurt am Main: Bernard & Graefe, 1970, 1975).
58. Karl Dönitz, *Memoirs: Ten Years and Twenty Days*, trans. R. H. Stevens (Cleveland: World, 1959), pp. 13-16, 150, 228 and J. P. Mallmann Showell, *The German Navy in World War Two* (Annapolis: Naval Institute Press, 1979), pp. 32-33.
59. Samuel Eliot Morison, *History of United States Naval Operations in World War II: Volume I, The Battle of the Atlantic, September 1939-May 1943* (Boston: Little, Brown, 1950), p. 200.
60. Marc Milner, "Anglo-American Naval Co-operation in the Second World War, 1939-1945," in eds. Hatendorf and Jordan, *Maritime Strategy and the Balance of Power*, p. 246.
61. Robert William Love, Jr., "Ernest Joseph King, 26 March 1942-15 December 1945," *The Chiefs of Naval Operations*, ed. Love, p. 154 gives this reasoning for King's delay. There is a useful discussion of the costs and benefits of independents vs. convoys based on the experience of this period by the Operations Evaluation Group in Charles M. Sternhell and Alan M. Thorndike, *Antisubmarine Warfare in World War II* (Washington: Dept. of the Navy, 1946), pp. 93-112. An indictment of King's failure during this period to pursue an offensive ASW capability based on technological innovation is leveled by Montgomery C. Meigs, *Slide Rules and Submarines: American Scientists and Subsurface Warfare in World War II* (Washington: National Defense Univ. Press, 1990), chaps. 2-3. See also Eliot A. Cohen, "Learning Failure: American Antisubmarine Warfare in the Atlantic, 1942" in Eliot A. Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: Free Press, 1990), chap. 4.
62. The partnership with Canada deserves notice. Very early the RCN urged convoys on King, but its own failures in the mid-Atlantic air-gap in late 1941 suggested to King that he should hold off until he had a strong escort force available. This seems to have been a false analogy in King's mind between inshore and oceanic antisubmarine escorts. Along the coast, aircraft found it easy to help. After the convoy issue was sorted out and a central shipping control established, all went well, and naval cooperation with the Canadians developed into a special kind of "special relationship." Marc Milner, "Anglo-American Naval Cooperation," pp. 252-254, and *idem.*, "RCN-USN, 1939-1945: Some Reflections on the Origins of a New Alliance," *Naval History: The Seventh Symposium of the U.S. Naval Academy*, ed. William B. Cogar (Wilmington: Scholarly Resources, 1988), pp. 276-283.
63. The story is told by Frederic C. Lane, *Ships for Victory: A History of Shipbuilding under the U.S. Maritime Commission in World War II* (Baltimore: Johns Hopkins Press, 1951). See also Terry Hughes and John Costello, *The Battle of the Atlantic* (New York: Dial, 1977), chap. 14, "Winning the War with Ships."
64. Richard M. Leighton and Robert W. Coakley, *Global Logistics and Strategy, 1940-1943* (Washington: Dept. of the Army, 1955), pp. 208, 712.
65. Robert E. Sherwood, *Roosevelt and Hopkins: An Intimate History* (New York: Harper, 1948), pp. 783-784.
66. Buell, *Master of Sea Power*, p. 189.
67. Rear Admiral Toshiyuki Tokoi, "Thoughts on Japan's Naval Defeat," U.S. Naval Institute *Proceedings*, October 1960, pp. 68-75.

68. Clay Blair, Jr., *Silent Victory: The U.S. Submarine War Against Japan* (New York: Lippincott, 1963), pp. 361-362; Richard Dean Burns, "Regulating Submarine Warfare, 1921-1941: A Case Study in Arms Control and Limited War," *Military Affairs*, v. 35, no. 2, 1971, p. 59; J. E. Talbot, "Weapons Development, War Planning, and Policy: The U.S. Navy and the Submarine, 1917-1941," *Naval War College Review*, May-June 1984, pp. 56, 59 and Robert E. Kuenne, *The Attack Submarine: A Study in Strategy* (New Haven: Yale Univ. Press, 1965), p. 156. Doctrine of 1939 declared: "The primary task of the submarine is to attack enemy heavy ships."

69. Philip M. Morse, "The Antisubmarine Problem" in Office of Scientific Research and Development, *Summary Technical Report of Division 6, NDRC: Volume I, A Survey of Subsurface Warfare in World War II* (Washington: U.S. Dept. of the Navy, 1946), p. 7.

70. Samuel Eliot Morison, *The Two Ocean War* (Boston: Little, Brown, 1963), p. 282. Submarines sank 201 warships (in contrast to 161 sunk by carrier air and 112 by surface vessels and 1,113 cargo ships (twice all other causes combined), at a very low loss. The Joint Army-Navy Assessment Committee, *Japanese Naval and Merchant Shipping Losses During World War II by All Causes* (Washington: U.S. Govt. Print. Off., 1947), p. vii.

71. Theodore Roscoe, *United States Submarine Operations in World War II* (Annapolis: Naval Institute Press, 1949), p. 491.

72. Mahan's idea of sea power in this quotation is according to his concept of position, not just engagement, "supporting war in scenes where it does not appear itself, or appears only in the background, and striking open blows at rare intervals. . . ." Morse's point quoted above applies to the strategy of offensive sea control. Mahan's words are found in *The Influence of Sea Power Upon History, 1660-1783* (Boston: Little, Brown, 1890), p. 209.

73. In light of the criticism that the navy doctrinally slighted the carriers in favor of the battleship in the 1920s and 1930s, see the evidence in the following articles by Thomas C. Hone, which show that the navy in fact promoted diversity and ran by good management within its budgetary and treaty limits: "Battleships vs. Aircraft Carriers: The Patterns of U.S. Navy Operating Expenditures, 1932-1941," *Military Affairs*, v. 41, no. 3, 1977, pp. 133-141; "Spending Patterns of the United States Navy, 1921-1941," *Armed Forces and Society*, v. 8, no. 3, 1982, pp. 443-462; "The Effectiveness of the 'Washington Treaty' Navy," *Naval War College Review*, November-December 1979, pp. 35-59; and Mark David Mandeles, "Managerial Style in the Interwar Navy: A Reappraisal," *Naval War College Review*, September-October, 1980, pp. 88-101; and "Interwar Innovation in Three Navies: U.S. Navy, Royal Navy, Imperial Japanese Navy," *Naval War College Review*, Spring 1987, pp. 63-83.

74. Eugene E. Wilcox, *Slipstream, the Autobiography of an Air Craftsman* (New York: McGraw Hill, 1950), p. 148. See also Wilcox's Columbia University Oral History Research Office Naval History Project interview of 1962, "The Gift of Foresight," pp. 377-411.

75. Two renditions of this exercise are found in Charles M. Melhoru, *Two-Block Fox: The Rise of the Aircraft Carrier, 1911-1929* (Annapolis: Naval Institute Press, 1974), pp. 113-115 and Norman Polmar, *Aircraft Carriers* (Garden City: Doubleday, 1969), pp. 54-60.

76. The story is best told in Worrall Reed Carter, *Beans, Bullets, and Black Oil: The Story of Fleet Logistics Afloat in the Pacific During World War II* (Washington: U.S. Govt. Print. Off., 1953). "Nick" Carter commanded Service Squadron Ten, the largest of the mobile squadrons, and the main "distributor" in the battle zones. It should not be assumed from this that shore bases were irrelevant. Quite the contrary. Shore support is always preferred if it is available. It was just that bases could be more distant than ever before from the actual naval action. As Admiral Spruance wrote in his introduction to Carter's book, shore bases in the south and southwest Pacific "continued to be close enough to the fighting front to remain practically their full usefulness." *Ibid.*, p. viii. For some later examples of this point, see Barry M. Blechman and Robert G. Weinland, "Why Coaling Stations are Necessary in the Nuclear Age," *International Security*, v. 2, no. 2, 1977, pp. 88-99.

77. Hearings before the Committee on Naval Affairs, U.S. Senate, 79th Congress, 2nd sess., on S. 2044, *Unification of the Armed Forces*, 1946, p. 142.

78. *Ibid.*, p. 79.

79. House of Representatives, 49th Congress, 1st session, Committee on Naval Affairs, Hearing on House Concurrent Resolution 80, *Composition of the Postwar Navy*, 1945, p. 1164.

80. Bradley S. Klein, "Hegemony and Strategic Culture: American Power Projection and Alliance Defence Politics," *Review of International Studies*, v. 14, no. 2, 1988, pp. 133-148, explicitly traces its roots to Mahan.

81. Arleigh Burke, "A Study of OP-23 and its Role in the Unification Debates of 1949," *Reminiscences of Admiral Arleigh B. Burke, USN (Ret.), Special Series on OP-23* (Annapolis: Oral History Office of the U.S. Naval Institute), v. III, 1981, p. 146, and v. IV, 1983, pp. 472-482. King's CominCh staff had been tiny, never more than 600 officers and men. Julius A. Furer, *Administration of the Navy Department in World War II* (Washington: Dept. of the Navy, 1959), p. 130.

82. Ernest J. King, *U.S. Navy at War, 1941-1945: Official Reports to the Secretary of the Navy* (Washington: Dept. of the Navy, 1946), pp. 169-170, and testimony in 1949, "The National Defense Program—Unification and Strategy," *Hearings before the Committee on Armed Services, House of Representatives*, 81st Congress, 1st session, 1949, p. 251.



"Helplessness induces hopelessness, and history attests that loss of hope, not loss of lives, is what decides the issue of war."

B. H. Liddell Hart: *Strategy*
New York, Praeger, 1967, p. 202

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As a rule, a major operation of war across sea should not be attempted, unless naval superiority for an adequate period is probable. The reason is that already given, that the main movement of a war should be closely knit by steps linked one with another, which cannot be if the navy cannot command the sea.

Naval Strategy
A. T. Mahan (1911)
Little, Brown (1918), p. 218

The Search for an American Submarine Strategy and Design, 1916-1936

Gary E. Weir

A devastating comparison of the latest American submarines with some captured German U-boats after World War I caused a design and strategy debate in the U.S. Navy which led eventually to a complete redefinition of the American submarine's place in war.

In 1919, American naval officers had yet to define for themselves the proper role of submarines. Drawing on some of the lessons offered by the Great War, during the 1920s Naval War College problems called for submarines to operate by divisions or sections, usually in direct support of the fleet, discouraging individual offense unless an exceptional opportunity presented itself. If their seakeeping qualities allowed it, the submarines' missions were to gather intelligence, to locate enemy supply lines, and to disrupt enemy communications. Attacks upon enemy warships or merchant vessels independent of the surface fleet or of an impending surface action were never seriously considered. Those submarines unable to keep up with the fleet were relegated to coastal defense.¹

Unfortunately, neither the navy nor American private industry could produce a technically reliable "fleet submarine" capable of keeping up with a surface force beyond 17 or 18 knots in the best conditions. This meant American submarines could not fulfill the close fleet support role assigned to them.²

Since American submarine technology could not meet the fleet's demands, some submariners suggested basing the fleet's demands on what the submarines could do. The state of the technology thus began to drive the strategy, rather than the converse.³

Beginning in 1928, those officers certain of the submarine's offensive potential wanted to abandon the burden of direct battle-fleet support in order to pursue independent offensive operations. Submarine commanders like

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Thomas Withers suggested emulating German technology and taking advantage of German operational experience. Some planners favored this move in view of the navy's postwar responsibilities in Asia and the Pacific.⁴ A reliable, long-range submarine could present a significant and economical threat to Japanese warships and supply ships, while providing welcome support to the heavily burdened naval forces of the United States in the Far East.

Thus, where hitherto strategy had determined the nature of the ship, the opposite became true for submarines.

U-boats and S-boats

When the navy compared the German U-boats surrendered after the First World War to the American S-class, the superiority of the former precipitated a crisis. The S-class, the latest and most advanced of the navy's submarines, would soon be entering service in great numbers. It was already evident that they would suffer debilitating technical problems. The New London Ship and Engine Manufacturing Company (Nelseco), a subsidiary of Electric Boat Company, the navy's largest private prime contractor, had provided defective diesel engines for more than half of the class.⁵ Experience with the new submarines demonstrated that they also suffered from destructive periscope vibration, terrible habitability, flawed torpedo tube shutters, and scores of other problems which frequently kept them out of service.

In November 1918, under the direction of Rear Admiral S. S. Robison, commander of Squadron 3 of the Atlantic Fleet Patrol Force, the navy began to collect information on the technical quality and performance of the vessels of the Imperial German Navy. For his report, compiled for the benefit of the technical bureaus, Robison and his assistant, Captain A. J. Hepburn, inspected the latest class of U-boats of each type. The *U-164* and *U-124* gave Robison experience with standard patrol submarines, the *UB-148* provided an example of a coastal vessel, while the *UC-105* minelayer completed the picture of German U-boat capabilities.⁶ The submarine force in Europe borrowed these four boats from the British and took them to Portland, near Dorset, on 12 December 1918 for almost three weeks. It was what the American submariners discovered in those three weeks that rocked the U.S. submarine establishment and opened a twenty-year debate between the operational forces, the technical bureaus, and the General Board.

In February 1919, two months before Robison filed his report, Commander Emory Land (CC) of the Bureau of Construction and Repair (BUC&R) anticipated the admiral's findings and sent a letter to the secretary of the navy regarding the importance of gaining firsthand knowledge of the captured German submarines.⁷ Land had served on the Doddridge Standardization

Board, which in the autumn of 1917 had confirmed the S-class as the standard American submarine design.⁸In July 1918 he was assigned to the staff of Admiral Sims, commander of U.S. naval forces in Europe. Immediately after the war, he toured German and Austrian shipyards. He also, of course, learned of the results of the U-boat inspections. In his letter to the secretary, Land could barely avoid using superlatives to describe the findings of the diesel, periscope, and hull tests. He was impressed as well by the cruising range of which these boats were capable. In one flight of admiration and envy he stated, "The diesel engines on these submarines are superior to any other diesel engines in any other submarines in commission in the world." He also lauded German double-hull construction for its resistance to depth charges and assured the secretary that he could not list all the superior features of the U-boat in the brief space afforded by a letter.

Two days after he sent this letter, in testimony before the navy's General Board, Land stated that bringing some of the captured U-boats to the United States was a necessity.⁹Accordingly, in the spring of 1919 the navy approved the temporary acquisition of six German submarines to allow both the technical bureaus and the operators to take complete advantage of the advances made by their former adversary: the *U-111* was a standard patrol submarine, or "Ms-boat," of approximately the same displacement as the S-class; both the *U-117* and the *UC-97* were minelayers, the first displacing over 1,000 tons and the latter 474 tons; the *UB-88* and *UB-148* performed coastal patrol roles, while the larger *U-140* was one of the long-range U-cruisers.¹⁰

The *U-111* and *UB-148* underwent tests supervised by the Board of Inspection and Survey which included standardization trials on the surface with varying combinations of engine and electric motor propulsion. The board also conducted submerged trials, torpedo firing trials, depth tests for hull strength, turning circles, as well as other tests to evaluate each vessel's submergence and maneuvering capabilities.¹¹ The U-boat Plans Committee, which arranged for the transfer of the six U-boats from England, specified that these experiments, especially on the *U-111*, should follow the regimen prescribed by the contract for the American submarine *S-2*. Captain Thomas Hart, chairman of the committee, and the next senior member, Commander Emory Land, knew all too well that the S-class would not fare well in comparison with the U-boat. But they did not anticipate the intense debate that followed.¹²

The Stirling Letter

The sense of urgency and frustration over the condition of the submarine fleet reached a climax in 1921 with a letter written to the secretary of the navy by Captain Yates Stirling, Jr., then commandant of the Philadelphia Navy Yard.¹³In this controversial letter, Stirling roundly condemned the

quality of American submarines and their ability to make a positive contribution to the navy's mission in a future war. American submarines, he declared, suffered from a litany of technical problems which rendered them totally unsuitable for service. These difficulties ranged from diesel and motor malfunctions through severe periscope vibration to poorly designed air compressors and ventilation systems.

The navy had to become more deeply involved in the design and construction of these vessels, if only to counter the risk of falling victim to a private sector monopoly. From Stirling's viewpoint, the navy had at its disposal, in the captured German U-boats, the perfect instruments for modernization. The S-class demonstrated that the navy and private industry had failed to produce a wartime equal to vessels like the *U-53*, a 700 ton M-sub with superior seakeeping qualities. Extensive reconsideration of current designs and, perhaps, a reevaluation of the navy's system for administering the submarine program were in order.

Stirling went on to criticize the Bureau of Construction and Repair for not taking full advantage of the opportunity to study and record the lessons offered by German technology. He accused the bureau of recommending the U-boats for early destruction despite pleas from the operating forces for more time to study and thoroughly incorporate German systems in the deficient S-class. Clearly, he meant to throw down the gauntlet and question the capability of the bureaus to design submarines and exploit new ideas.

The Stirling letter prompted a storm of protest from the technical bureaus and the General Board. Admiral David Taylor, chief of BUC&R, dissected Stirling's note in response to the secretary of the navy's request for an opinion, and pointed out that in most instances Stirling's expose contradicted matters of record.¹⁴ Taylor assured the secretary that BUC&R had indeed made a careful study of the U-boats and had every intention of incorporating the latest in German technology in future designs.

That Taylor's very comprehensive response to Stirling did not end the matter illustrates the extent to which Stirling's observations struck a chord among the various activities responsible for submarine operation and design. When the General Board called a hearing on Stirling's claims, it turned into a testimonial by the operating forces on the utter inadequacy of the navy's submarines and clearly revealed the considerable diversity of opinion on the board and at the technical bureaus.

Before the General Board, Captain Stirling acknowledged that BUC&R had indeed recorded the specifications of the captured U-boats. But he persisted in his criticism and read selections from critical reports on the S-class solicited by him from ten of the most experienced submarine officers in the navy, including Captain Hart and Lieutenant Commanders Daubin and Gibson, who had extensive firsthand experience with the U-boats. Stirling then drove home his central theme by blaming the methods employed by the

navy to develop submarine designs for a record of mediocrity and failure. The real problem, he charged, lay with the bureaus. As Captain Hart pointed out, it had taken far too long to convince the technical bureaus of the need to examine and learn from the U-boats; the bureaus illustrated just how far removed they were from the cutting edge of submarine technology by the low priority initially given to obtaining these vessels for research in the United States.¹⁵

The controversy created by Stirling's letter and his testimony before the General Board illustrated the gulf between the technical bureaus and the operational submarine forces. The bureaus had in fact taken advantage of the captured U-boats in order to improve the design and systems of American submarines. Although the Bureau of Engineering (BUENG) displayed a greater flexibility in this regard than did BUC&R, both saw the importance of educating themselves in the latest German technology. Shut out of this process, the operational officers had not benefitted from the bureaus' evaluation of German technology. Concerned about the lamentable characteristics of the S-class and the possibility that the bureaus did not appreciate the insights provided by the U-boats, Stirling and those who supported him took action. In their estimation, the United States not only lagged behind in the quality of its submarines, but also the lack of communication between the designers and operators presented the navy's submarine program with a considerable obstacle.

Stirling advanced a solution to this predicament which paralleled the creation of the Bureau of Aeronautics for an equally new form of technology first applied to military purposes during the war: he recommended the establishment of a Bureau of Submarines, which would focus command authority, available money, and all the technological expertise in a single agency in order to produce the best possible undersea weapon for the navy. In the absence of such a bureau, said Stirling, submariners would have to go begging for money because those at the Navy Department naturally assumed "that they are better fitted to dispense it to the prodigal son than he would be to dispense it himself."¹⁶

Stirling contended that a Bureau of Submarines would overcome the natural reluctance of the other bureaus to abandon or revise a prized creation (like the S-class design), and that such a bureau would not hesitate to copy all or part of the *U-111* and its sister boats if the state of American technology made these decisions necessary. Thus, the development of a seaworthy submarine to fulfill the assigned mission would finally take a much higher priority within the navy.¹⁷

In its report to the secretary of the navy, the General Board did not enthusiastically embrace Stirling's suggestions.¹⁸ It defended the S-class as the best design the navy could have generated during the war, and it stated that new insights gained from the U-boats could have a positive influence on the

future of both the S and the even newer V types if this proved financially feasible.¹⁹ The board attributed the propulsion problems in the S-class to an unhealthy dependence upon Electric Boat, and it encouraged more navy participation in submarine design and development without going so far as to suggest the need for a Bureau of Submarines. Along with the upgrading of facilities on both coasts for repair and overhaul, the board also authorized the creation of a school for all enlisted personnel working with submarines.

A Consensus in Three Stages

Between 1922 and 1931, the navy did little about submarines but debate the various issues essential to their design and construction. Without a central authority and adequate support, only time and constant debate could distill diversity of opinion down to an acceptable modern design.

The insights gained from the surrendered German U-boats came after the war, when the S-class designs were already in production. Applying these insights to boats still under construction or already in commission proved awkward, even for the most determined.

A lack of appropriations for new construction, the submarine's low priority in the face of severe financial cutbacks mandated by Congress, and the influence of the interwar disarmament conferences only exacerbated these conditions. The submariners did not have the political clout which brought the aviators their own bureau after World War One, so the level of appropriations and the number of contracts declined. After the Portsmouth Navy Yard, the Electric Boat Company, and the Lake Torpedo Boat Company completed the last of the 51 S-class boats in 1925, the so-called V-class provided the only new work offered to the submarine construction industry for many years, outside of standard overhaul or re-engining jobs. The navy kept its own yards alive in this environment by awarding the *V-1* through *V-5* and the *V-7* and *V-8* to Portsmouth, with the *V-6* going to Mare Island Naval Shipyard. The private sector did not see another contract for new construction until Electric Boat laid the keel of the U.S.S. *Cuttlefish* (SS-171; V-9) in 1931.

During this difficult interval for both the navy and industry, the first stage of a consensus began to emerge from the many and varied viewpoints on submarine strategy and design. In April 1927, one of the key figures in this process, Admiral H. A. Wiley, then chairman of the General Board, sensed the possibility of a broad accord on design and strategy based on the characteristics of the larger German Ms-boats. He instructed BUC&R and BUENG to explore a 1500 ton type and promoted the 1175 ton *U-135* design as a basis for the discussion of specific characteristics. The latter was the first of a class of larger Ms-boats built by the Germans at the Imperial Naval Shipyard in Danzig between 1916 and 1918. Rear Admiral G. H. Rock,

assistant chief of BUC&R, objected to purchasing foreign plans or using foreign vessels as prototypes. He also resisted experimenting with the 1500 ton type and felt strongly that the General Board should first define all of the military characteristics for new submarines before the bureau went to work on the design. However, as the General Board held the authority to determine general submarine characteristics, the technical bureaus took Wiley's suggestion seriously.

Shortly thereafter the Submarine Officers' Conference (SOC) followed Admiral Wiley's lead, adopting the *U-135* as the standard for the future.²⁰ Most of the officers present at the 2 June 1927 meeting of the SOC agreed on an all-purpose design of 900 to 1400 tons displacement. At 1175 tons, the *U-135* fulfilled this requirement, giving the navy a reliable prototype to copy. Lieutenant Commander H. T. Smith of BUENG, a participant in the conference, even suggested building a duplicate of the *U-135* for testing and evaluation before any new designs were considered for construction.²¹

Eight months later, the accepted wisdom that submarines functioned most effectively either in coastal defense or tied directly to the battle fleet came under fire. In February 1928 Commander Thomas Withers, commander of Submarine Division Four, openly challenged both of these roles by questioning the prudence of allowing a quest for a "fleet submarine" with greater speed to adversely affect the habitability and submerged performance of American boats.²² More than any other vessel, the submarine's very restricted internal spaces insured that any attempt to increase speed with larger engines and motors would have a profound impact upon other ship characteristics. The awkward maneuvering of the first six V-boats while submerged illustrated the validity of this criticism. Withers argued that submarines, unable to perform reliably on the surface at speeds approaching 20 knots, could not serve in the role assigned them.²³ Their slower pace drastically increased the vulnerability of a fleet, while contributing little to the effectiveness of the capital ships in action. Withers also contended that submarine commanders preferred to operate independently. Indulging this preference would allow the navy to exploit the submarine's stealth to best advantage against enemy warships, a priority which would not eliminate intelligence-gathering as a secondary mission.

Withers' approach was strongly supported by Admiral Wiley, who, having set the stage for a reconsideration of submarine design, left the General Board in November 1927 to become commander in chief of the U.S. Fleet.²⁴

Moving to the Naval War College in 1930, Withers refined his ideas on submarine strategy and urged the navy to permit its submarines to operate independently and aggressively. He suggested employing submarines independently, in combined attack and reconnaissance missions. Rather than making exceptional speed the vital factor, Withers suggested that improved reliability, better habitability, and longer range would serve the navy better.

The awkward attempts at perfecting a "fleet boat," exemplified by the three 2,000 ton behemoths which spearheaded the V-class in 1921, should give way to smaller vessels capable of 15 knots on the surface, ninety days at sea, and a 12,000 mile range with satisfactory economy and dependability. Withers felt that a boat of approximately 900 tons could accomplish these ends with great practical benefit for the navy.²⁵

In a letter to Secretary of the Navy Charles Adams, the president of the Naval War College supported Withers' viewpoint.²⁶ Research and study at the Naval War College demonstrated that working in conjunction with the fleet represented the least important of the submarine's missions. The submarine was better utilized in an independent, offensive role with a secondary intelligence-gathering task.

Sensing their liberation from strategic confinement and the possibility of revising existing designs, the operating forces welcomed Withers' ideas. Furthermore, his strategy was compatible with the position adopted by the SOC. Thus, for the first time in nearly ten years of postwar deliberations on submarine characteristics, the perspectives of strategists at the Naval War College and the opinions of the submariners coincided on the significant points of mission and displacement. In his testimony before the General Board, Rear Admiral F. H. Schofield, the navy's director of war plans, supported the submarine characteristics suggested by Commander Withers and agreed with the SOC that the *U-135* design should serve as a basis for discussion.²⁷

The navy now seemed ready to recast the role of the submarine and to work with a displacement which would guarantee acceptable habitability, maneuverability, speed, and reliability, all within the limitations of American diesel technology.²⁸ Thanks to Withers, Wiley, and the SOC, the last two V-boats, the *V-8* and *V-9*, would display characteristics vastly different from the first vessels of their class, which represented the final attempt to achieve the large, classic "fleet submarine."²⁹

Between 1928 and 1936 the process of developing the standard American submarine entered its second stage in the combining of the 1175 ton *U-135* design with the greater size and range of the German U-cruisers. The latter, such as the 1,930 ton *U-140*, provided valuable practical examples of vessels designed for range, dependability, and solo operations.³⁰ The appeal of these characteristics and those of the *U-135* suggested a compromise American design which would owe its displacement and power plant to the *U-135* and its space and habitability to the *U-140*.³¹

In September 1930, BUC&R proposed designs for the U.S.S. *Cachalot* (*V-8*) and *Cuttlefish* (*V-9*) based on improvements in the *U-135* design. After carefully examining the U-boat design, BUC&R came to the conclusion that the Germans must have built a vessel about forty tons heavier than the weight specified in the plans. If the bureau had remained completely faithful to the original German concept, ideal crew and storage spaces would shrink, and

the boat's small size would impede access to the propulsion plant for overhaul and repair.³² The original design displacement would also inhibit both comfort in the tropics and the vessel's seakeeping qualities.

Thus, the designers at BUC&R developed their own variations on the *U-135* type. As an added incentive for pursuing the intermediate displacement, the London Naval Treaty agreements stipulated a limit of 52,700 for total operational submarine tonnage. If 1175-1200 ton boats could successfully incorporate the elements now considered most important, then the navy could build many more of the vessels and still remain within the limits of the treaty.³³

Four schemes emerged from BUC&R deliberations over just how to adapt this intermediate design for American service in the *V-8* and *9*. In the first variation, the original concept changed very little save for an increase in the diameter of the inner hull in order to secure greater living and storage space in addition to greater submerged stability. In the second scheme, the bureau provided more control room space, increased accommodations for crew and refrigeration, and better accessibility to the engine. In both of these plans, designated schemes A and B, BUC&R suggested using the Bureau-M.A.N. engines built at the New York Navy Yard to insure reliability and long service with a minimum of repair and overhaul time.³⁴

Scheme C incorporated most of the features of schemes A and B, but the Bureau-M.A.N. engines were replaced by new light-weight diesels developed by the Germans after the war. BUENG, however, considered these new engines risky and experimental when compared to the New York Navy Yard's well-tested product.

As its last design, scheme D, BUC&R offered the 1560 ton *V-7*, under construction since June 1930, as a control factor in the process of selection.

None of these proposed designs regarded the submarine as an auxiliary to the surface fleet. Rather than speed, BUC&R now chose a slightly increased size to assure general utility, improved seakeeping qualities, a 17 knot surface speed, reliability, habitability, and a minimum radius of 7,500 miles.

Although the design seemed complete at 1200 tons, the SOC persisted in its advocacy of a slightly larger vessel to further enhance seakeeping and habitability. In addition, many officers felt that the diverse missions assigned to the submarine required more than one type. Thus, in the third and final stage of building a consensus within the navy, the technical bureaus, the SOC, and the General Board compared the relative merits of the 1200 ton designs, larger models of 1450 to 1750 tons proposed by the SOC, and the ever-present proposals for coastal defense and minelaying boats.³⁵

The argument of the operational officers for a larger alternative or variety of types did not endanger the growing consensus as much as it revealed a dogged attachment to the traditional division of responsibility between the coastal and fleet submarine. In reports to the General Board made in February 1934, both Commander Sherwood Pickering, inspector of machinery at

Groton, and Lieutenant Commander C. W. Styer, prospective commanding officer of the *Cuttlefish* (V-9) and member of the SOC, discussed fleet, minelayer, cruiser, and coastal submarines.³⁶ Their analyses of these various types revealed that both officers envisioned vessels of 1500 tons performing every task save coastal defense. Thus, although the image of the submarine as a coastal defense vessel had clearly survived the revision in 1930 of the submarine's primary role, the prevailing opinion among operational commanders assigned nearly every major operational function to the design which had evolved from a synthesis of the *U-135's* characteristics with those of the larger U-cruiser.

The 1500 ton design quickly assumed the primary place within the submarine community as the best size and configuration to satisfy the navy's desire for reliability, range, and habitability.³⁷ In March 1936, the General Board's final recommendations for the 1937 construction program specified 1450 tons as the "minimum compatible with a proper balance of the required military characteristics to meet the intended employment of the submarine."³⁸ At last, the debate was over. The success of the resulting design, the *Salmon - Sargo* class, testified to the wisdom of the final consensus achieved within the navy by 1936.³⁹

Observations

In the final analysis, the advanced state of German submarine technology and the intense American desire to surpass wartime U-boat performance provided the catalyst for a thorough reevaluation of the submarine's mission and design after the Great War. Once Stirling, Withers, and others initiated the technical debate and provided a potent antithesis to current strategic wisdom, leaders like H. A. Wiley provided a favorable environment for a new strategic and technical synthesis for the American submarine.

In this involved process of strategic revision and technical change also lay the roots of the unrestricted submarine warfare policy against Japan officially adopted shortly after the attack on Pearl Harbor. American interwar naval planners judiciously avoided suggesting that the navy's submarines should attack merchant vessels; the United States did not want to face the same charges levelled against the Germans during the First World War. But in a national emergency, would the navy prove reluctant to direct its offensive submarine strategy and its new, reliable and effective submarines against enemy merchant vessels as well as warships?

In 1961, Professor Samuel Flagg Bemis traced the origins of the American unrestricted submarine warfare decision back to 1940, and J. E. Talbott has since argued that support for this type of warfare existed within the navy as far back as 1937. In fact, the revisionist thinking of the American submarine community in the late 1920s and the designs developed as operational

expressions of these views contributed to a very favorable environment within the navy for unrestricted submarine warfare a full decade before Pearl Harbor. Although limited by international law to attacks on enemy warships, the participants in the navy's interwar fleet problems and Naval War College exercises recognized the readiness of possible adversaries to use a submarine *guerre de course*.⁴⁰ In these games, American officers playing the part of the "Orange" or "Red" enemy found themselves planning to defend against an American *guerre de course* or actually executing a strategy of this type against the United States. During this period, American naval planning for these exercises evolved from complete prohibition against sinking commercial vessels to approved operations against enemy-escorted convoys, beginning with Naval War College Joint Problem No. 1 of 1926 and ending with Fleet Problem XIII of 1932.⁴¹ In spite of national policy and international agreements, ideas and experiences such as these laid the foundation for submarine operations against the Japanese merchant fleet. As is so often the case, rather than detached prewar discussions of proper behavior, the nature of the conflict and the capability of the navy's submarines determined the degree and manner of commitment.

By the time the Seventy Percent Expansion Act of 1940 signalled the end of America's commitment to the restrictions imposed by the London Treaty of 1930, the navy knew exactly what kind of submarine it wanted to build in quantity.⁴² The success of the *Salmon - Sargo* design precipitated the mass production of the *Gato* and *Drum* classes which commenced in 1940. The navy would enter World War Two with a much better idea of the submarine's nature and mission than it had in 1919.

Notes

1. Naval War College Operations Problems, 1923 through 1927, boxes 14 and 15, Strategic Plans Division Records, U.S. Navy Operational Archives, Washington Navy Yard (OA).

For an interesting discussion of the proper use of submarines, see "Submarine," a lecture delivered by Captain George C. Day, USN, at the Naval War College, 16 Feb 1923, box 3, Lectures and Speeches Series 1, Strategic Plans Division Records, OA.

Occasionally American naval analysts seemed to reject the commercial war option employed by the Germans during the First World War as distasteful, leaving scouting, harbor defense, and mine-laying as the only honorable options open to the submarine arm of the navy. In the speech cited above, Captain Day said, "As to what submarines can do, or may be permitted to do, against enemy lines of communication and trade is a most difficult question. What they can do the Germans showed, but it is not in any way likely that we will ever use them in that way." (p. 5) It was as if the strategy were objectively dishonorable, or the environment created by the disarmament conference in 1921-22 had rendered it so.

A few at the Naval War College interpreted the U-boat war against commerce as an act of desperation by the Imperial Navy: the U-boat was only modestly effective against warships, so merchantmen were the best alternative targets. As true warships, submarines were considered best employed as scouts, screens for the surface fleet, or coastal defenders. There is a great deal of discussion about the operational, mechanical, and technological limits of the submarine, but virtually no appeal for a greater R&D effort to enable the submarine to play an expanded role. For example, "Types and Missions of Surface Vessels, Submarines, and Aircraft," by Captain Lewis Cox, USN, 4-5 Mar 1930, box 3, Lectures and Speeches Series 1, Strategic Plans Division Records, OA.

2. Not even the first three V-class submarines of 2,000 tons surface displacement could reliably sustain 20 knots on the surface. A "fleet submarine" was defined as a submersible capable of a sustained surface speed of 21 knots under any conditions which the big surface vessels could weather. Operating with the surface fleet would require not only high speed but also a periscope capable of allowing a clear view for the submarine captain from a depth of thirty feet. The boat would also need excellent maneuverability, seakeeping qualities, and endurance. Commander John Alden, USN (Ret.), *The Fleet Submarine in the U.S. Navy* (Annapolis, Naval Institute, 1979), 5.

3. For an excellent discussion of technology's role in modifying present-day strategy, see Commander D. Conley, RN, "The Impact of Technological Change Upon Naval Policy," *RUSI Journal*, 133, #2 (Summer 1988), 35-40.

4. The London Conference of 1930 placed a limit of 52,700 tons on American, British, and Japanese submarines, but none of the disarmament conferences succeeded in abolishing the vessels as a type. The British supported abolition because the submarine posed the greatest threat to the tenuous mastery of the seas held by the Royal Navy. Consequently, the British submarine force faced a particularly difficult challenge as interwar governments strove for disarmament and budget reductions and the Royal Navy placed its priorities elsewhere. See David Henry, "British Submarine Policy, 1918-1939," in *Technical Change and British Naval Policy, 1860-1939*, Bryan Ranft, ed. (London: Hodder and Stoughton, 1977), 80-107.

5. G. E. Weir, "The Navy, Industry, and Diesel Propulsion for American Submarines 1914-1940," *Naval Engineers Journal*, 101 #2 (May 1989), 207-219.

6. Rear Admiral S.S. Robison to Commander, U.S. Naval Forces Operating in European Waters, 15 Jan 1919, series 1, file 1, box 1, Submarines/Undersea Warfare Division (Subs/UWD), OA. The term "technical bureaus" is used here to denote the Bureaus of Construction and Repair, Engineering, and Ordnance. In the Imperial German Navy, the prefix UB stood for coastal defense submarines displacing approximately 100 to 500 tons depending upon the vessel's vintage. A UC prefix designated a submarine minelayer.

7. Commander E. S. Land to Secretary of the Navy via the Chief of Bureau of Construction and Repair and the CNO, #28766-177 of 4 Feb 1919, box 2767, Secretary of the Navy General Correspondence 1916-1926 (SECNAV GENCORR 1916-26), RG-80, National Archives, Washington, D.C. (NA). The designation "CC" stood for Construction Corps. This group, which existed between 1859 and 1940, was composed of highly skilled engineering officers attached as needed to the Bureau of Construction and Repair and the Bureau of Engineering. When these two bureaus combined to form the Bureau of Ships in June of 1940, these officers were redesignated engineering duty officers (EDOs). For an excellent general discussion of the CC, see Rear Admiral J. A. Furer, USN, *Administration of the Navy Department in World War Two* (Washington, D.C.: GPO, 1959), 215ff.

8. In October 1917 the Doddridge Board met to review the recommendations of the Stirling Standardization Board, which preceded it, and to establish officially the characteristics for future submarines. Chaired by retired Commander J. S. Doddridge, this board included some of the navy's best submarine engineers and commanding officers, such as Emory Land and Commander C. W. Nimitz, representing the Atlantic Submarine Force.

S-Class characteristics follow.

Electric Boat Design (S-1, S-18-41)

Displacement: 854 tons normal

Design depth: 200 feet

Design speed: Surface, 14.5 knots; Submerged, 11 knots

Engines: 1200 BHP Nelsco

Motors: 1500 BHP Electro Dynamic

Lake Torpedo Boat Company Design (S-2)

Displacement: 800 tons normal

Design depth: 200 feet

Design speed: Surface, 15 knots; Submerged, 11 knots

Engines: 1800 BHP Busch-Sulzer

Motors: 1200 BHP Diehl

Navy Design (S-3-17) (built at Portsmouth NSY and at Lake after the navy rejected the S-2 design for mass production as inferior to the S-1 and S-3)

Displacement: 875 tons normal

Design depth: 200 feet

Design speed: Surface, 15 knots; Submerged, 11 knots

Engines: 1400 (after S-4, 1000) BHP Nelsco, Bu-MAN, or Busch-Sulzer

Motors: 1200 BHP Westinghouse

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Postwar Variations Built by Lake (adapted for greater range and larger engines without encouraging results)

S-42 through 47:

Displacement: 906 tons normal

Design depth: 200 feet

Design speed: Surface, 14.5 knots; Submerged, 11 knots

Engines: 1400 BHP Nelseco

Motors: 1200 BHP Electro-Dynamic

S-48 through 51:

Displacement: 903 tons normal

Design depth: 200 feet

Design speed: Surface, 14.5 knots; Submerged, 11 knots

Engines: 1800 BHP Busch-Sulzer

Motors: 1500 BHP Ridgeway

9. Testimony on Fleet Submarine Design by Commander Emory Land, 6 Feb 1919, volume 1, page 59ff., General Board Hearings, OA.

10. The design of the German M_s-boat quickly took shape in 1914 after the outbreak of World War One. Early vessels of this design displaced roughly 700 to 800 tons, very much like the American S-class. Beginning with the U-43, built at the Imperial Shipyard at Danzig, the M_s type went through many variations and functioned as the standard German wartime submarine. The M_s designation is an abbreviation for "mobilization." For further information see E. Rossler, *Geschichte des deutschen Ubootbaus* (Munich: J. F. Lehmanns Verlag, 1975). The UB-88 and 148 were between 510-523 tons surface displacement, and the U-140 was of 1930 tons surface displacement.

11. Memorandum from the Assistant for Material to the Director of Naval Intelligence, Subject: German Submarines, 27 May 1924, series 1, file 3, box 1, Subs/UWD, OA.

12. Plans Committee to CNO, #28766-177:16 1/2 of 12 May 1919, box 2767, SECNAV GENCORR 1916-26, RG-80, NA.

13. Captain Yates Stirling, Jr. to Secretary of the Navy, 28 Mar 1921, series 1, file 3, box 3, Subs/UWD, OA.

14. BUC&R to Secretary of the Navy, 18 May 1921, box 109, 420-15, General Board Subject Files 1900-47, RG-80, NA. For the perspective of one of the BUC&R naval constructors intimately involved with submarine design, construction, and the attention paid by BUC&R to the German advances in the field, see "Memo for the File," by Naval Constructor H. S. Howard, 14 Apr 1921, box 1254, Correspondence Regarding Ships 1916-1925, BUC&R, RG-19, NA.

15. "Situation Relative to Submarines," 30 Jun 1921, General Board Hearings of 1921, vol. 2, pp. 304ff., Scholarly Resources Microfilm, OA. Captain Thomas Hart was an early supporter of the efforts by Stirling to push BUC&R into paying greater attention to the design and performance of the German U-boats: Stirling to Hart, 13 Apr 1921; Hart to Stirling (with enclosed remarks on Stirling's letter of 28 Mar 1921), 22 Apr 1921; Stirling to Hart, 28 Apr 1921 (folder 19, box 4, Papers of Admiral T.C. Hart, OA). See also James Leutze, *A Different Kind of Victory: A Biography of Admiral Thomas C. Hart* (Annapolis: Naval Institute Press, 1981).

16. *Ibid.*

17. "Situation Relative to Submarines," 1 Jul 1921, General Board Hearings of 1921, vol. 2, pp. 356ff., Scholarly Resources Microfilm, OA.

18. General Board to Secretary of the Navy, 25 Jul 1921, box 109, 420-15, General Board Subject Files 1900-47, RG-80, NA.

19. The first three V-class submarines were the successors to the navy's first generation of "fleet submarines," the 1107 ton T-class. The prevailing desire of many major naval strategists to have the submarine operate with the battle fleet gave birth to the T-class design with its projected high surface speed and improved seakeeping qualities for blue water missions. Begun in 1916 and 1917, the T-class design called for a 20 knot surface speed provided by Nelseco diesels which could generate 1100 horsepower at 375 RPM. By November 1921, the diesels in the T-2 exhibited excessive vibration at the planned surface speed of 20 knots and, in time, all three vessels displayed many of the same problems which tormented the Nelseco powered S-boats.

Because their Nelseco propulsion systems could not supply sufficiently reliable power, the navy decided to retire Submarine Division Fifteen's three T-class boats by 1925.

The V-1 through 3 (SS-163/165; U.S.S. *Barracuda*, *Bass*, and *Bonita*) displaced 2,000 tons and had a design speed of 21 knots which was rarely reached, even in the best of conditions.

The V-4 (SS-166; U.S.S. *Argonaut*) was the only attempt made by the U.S. Navy to copy the large German U-boat minelayers of World War One. She displaced 2710 tons, and the V-5 and 6 (SS-167/168; U.S.S. *Narwhal* and *Nautilus*) were 2730 ton attempts to adapt this larger design to conventional submarine patrol duties. All three of these submarines were armed with two 6-inch guns each. The V-7 (SS-169; U.S.S. *Dolphin*) was the smallest yet of the V-boats at 1560 tons. See Alden, *Fleet Submarine*, 25-37.

20. The Submarine Officers' Conference, an advisory committee composed of experienced submariners, came into existence in 1926.

21. Submarine Design and Building, 2 Jun 1927, file 4, series 2, box 5, Subs/UWD, OA; William Manchester, *The Arms of Krupp* (Boston: Little, Brown and Company, 1968), pp. 352-354. At this session of the conference, the officers fully realized the difficulty of reproducing the U-135. Krupp had formed I.v.S. (*Ingenieur-Kantoor voor Scheepsbouw*) [Engineering Office for Shipbuilding] in The Hague to continue many of its projects which were prohibited by the Versailles Treaty. With the approval and cooperation of Admiral Paul Behncke, leader of the *Marineleitung* of the early Weimar Republic, a U-boat office was created at I.v.S. by the navy and thirty Krupp engineers from the *Germania*werft shipyard in Kiel. As a representative of this Dutch company, Dr. Regenbogen, a diesel engineer and part of the wartime leadership at *Krupp-Germania*werft, offered to sell different German submarine plans to the U.S. Navy. However, this firm did not have a complete set of plans because the Imperial German Naval Office awarded the larger Ms design to the Imperial Shipyard at Danzig, and the plans disappeared after the war, presumably destroyed by the Military Commission in control of the area around Danzig. Furthermore, affiliation with Regenbogen and cooperation in construction between his firm and PNSY or Electric Boat posed considerable obstacles in terms of technology, experience, materials, and technique. The U-135 was never copied, but it did serve as a basis for discussion in the process of consensus-building within the navy.

22. Commander Thomas Withers, Commander Submarine Division Four, to Secretary of the Navy, 3 Feb 1928, box 109, 420-15, General Board Subject Files 1900-47, RG-80, NA.

A new development which must have encouraged Withers was the improvement in radio communication for submarines in the 1920s. By 1923 submarine radios were deemed reliable up to 300 miles. In a test in the fall of 1922, the R-22 communicated with a boat off Block Island from a location off Cape Hatteras without any difficulty. Awash, a submarine could receive messages with a high degree of success, but sending was difficult. During the 1927-28 period, when Withers began to question the accepted wisdom about submarine strategy, NRL developed high-frequency radio transmitters for submarines. The model XB crystal-controlled high-frequency transmitter allowed communication on the surface over ranges between 200 and 500 miles depending on location and atmospheric conditions. The submerged range of the XB and its successor XK (1929) was about eighty miles. Between 1930 and 1932, the navy equipped twenty S-boats with the Model TAR transmitter, which was capable of both low and high frequency transmissions. See "Submarines" by Captain George C. Day, USN, 16 Feb 1923, box 3, Lectures and Speeches Series 1, Strategic Plans Division Records, OA; and Louis A. Gebhard, *Evolution of Radio-Electronics and Contributions of the Naval Research Laboratory* (Washington, D.C.: NRL, 1979), pp. 55-57.

Submerged reception and transmission proved a bit more difficult, but progress was made. In January 1920, an S-class submarine received German transmissions from Europe while submerged fourteen feet off New London, Ct. By 1930 it was sixty-four feet, and the navy was experimenting with periscope and loop antennas, abandoning the old "French coil" type secured to the bridge wings during World War One. See BUSHIPS to CNO, Subject: Underwater Reception of Radio Signals, 25 Oct 1940, box 4, Confidential Correspondence Regarding Research and Design of Radio and Other Communications Apparatus, BUENG, RG-19, NA.

23. Design Surface Speeds:

V-1/3 = 21 knots (rarely performed at more than 17 knots in spite of ambitious expectations)

V-4 = 15 knots (minelayer)

V-5/9 = 17 knots

The V-7 through 9 could not perform at their design speed in anything but ideal conditions. Many of the V-boats never met these requirements at all.

24. Admiral H. A. Wiley, Commander in Chief, U.S. Fleet, to Secretary of the Navy, 1 Apr 1928, box 109, 420-15, General Board Subject Files 1900-47, RG-80, NA.

25. "Design of Submarines" by Commander Thomas Withers, 14 Aug 1930, box 111, 420-15, General Board Subject Files 1900-47, RG-80, NA. Withers also resurrected the concept of a central authority governing submarine matters by suggesting a design control office both to standardize American submarines and force industry to keep to the spirit, if not the letter, of the designs as defined by the technical bureaus and the General Board. Commander Thomas Withers to Secretary of the Navy, 14 Aug 1930, series 1, file 6, box 4, Subs/UWD, OA.

The immediate precursor of the *Gato* class of World War Two and the end-product of the interwar debate, the *Salmon-Sargo* design (1936-37) was lighter than the V-1 by nearly 500 tons but provided a

submarine captain with slightly greater surface cruising range (11,000 miles at 10 knots), extended submerged endurance (adaptable to a fuel capacity 18,000 gallons greater than the *V-1*), and improved habitability, as well as enhanced seakeeping qualities and submerged handling. The USS *Salmon* (SS-182) was also 33 feet shorter than the *V-1*. See Alden, *Fleet Submarine*, 25, 65, 68.

26. Rear Admiral Harris Laning, President, Naval War College to Secretary of the Navy, 29 Aug 1930, box 111, 420-15, General Board Subject Files 1900-47, RG-80, NA.

27. "Military Characteristics for Submarines," 9 May 1928, General Board Hearings of 1928, vol. 1, p. 145, Scholarly Resources Microfilm, OA.

28. The S and V-class boats were constantly confronted by a plague of vibration and breakage problems with their diesel engines which significantly reduced their operational value. See G. E. Weir, "The Navy, Industry, and Diesel Propulsion for American Submarines 1914-1940," *Naval Engineers Journal*, 101 #2 (May 1989), 207-219.

29. "Building Program 1929—Submarines," 1 Apr 1927, General Board Hearings of 1927, vol 1, pp. 67ff, Scholarly Resources Microfilm, OA.

30. The Imperial German Navy's U-cruisers varied in size from 2158 tons (*U-142/150* & *U-173/200*) to 1930 tons (*U-139/141*) to a displacement of 1512 tons (*U-151/157*, which included the converted commercial-U-boat *Deutschland*). The Germans experimented with various propulsion arrangements and torpedo tube configurations. The United States used much of this technology, but could match neither the seakeeping qualities nor the reliable propulsion machinery in the early interwar years.

31. "Military Characteristics for Submarines," 9 May 1928, General Board Hearings of 1928, vol. 1, pp. 129ff., Scholarly Resources Microfilm, OA. American submarine designer Rear Admiral Andrew I. McKee (rank as of 7-1-47) incorporated many of the *U-140*'s characteristics in his design of the *V-7* (SS-169). But this plan was overshadowed by the submarine community's preoccupation with the *U-135*. See Alden, *Fleet Submarine*, 19-21.

32. The remarkable reliability of the M.A.N. diesels in the German U-boats made this access less important to the Germans than to the U.S. Navy.

33. The term "intermediate" is used here to designate a design displacing from 1175 to 1500 tons based on many of the characteristics of the *U-135*, roughly in between the old 800 ton S-class and the much larger 2,000 ton V-class fleet boats. "Submarines *V-8* and *V-9* - Preliminary Design," 15 Sep 1930, box 110, 420-15, General Board Subject Files 1900-47, RG-80, NA; and Admiral George C. Day, Senior Member of the General Board to Secretary of the Navy, 11 Aug 1930, box 111, 420-15, General Board Subject Files 1900-47, RG-80, NA.

34. The navy developed these engines from the M.A.N. machinery which powered Germany's U-boats in the First World War.

35. As it turned out, the surface tonnage of the *V-8* and *9* were 1111 tons and 1130 tons, respectively.

36. Commander Sherwood Pickering to Chairman of the General Board and Lieutenant Commander C. W. Styer to Chairman of the General Board, 10 February 1934 and 8 February 1934 (respectively), box 111, 420-15, General Board Subject Files 1900-47, RG-80, NA.

37. "Comments on Department Submarine Officers' Conference Report of 16 December 1935, subject: Submarines - Characteristics of," 20 Jan 1936, series 1, file 8, box 4, Subs/UWD, OA. This report suggested 1750 tons as the maximum suitable size for the navy's primary submarine design.

38. Chairman General Board to Secretary of the Navy, 13 Mar 1936, box 112, 420-15, General Board Subject Files 1900-47, RG-80, NA.

39. U.S.S. *Salmon*: 1449 tons, 5 officers, 50 enlisted, designed for 21 knots surfaced, 9 submerged. U.S.S. *Sargo*: 1450 tons, 5 officers, 50 enlisted, designed for 20 knots surfaced, 8.75 submerged. Both keels were laid in 1934.

40. Naval War College joint problems were worked out at the college in a war game setting, whereas a fleet problem involved an exercise at sea.

41. United States Fleet Problem VII (March 1927), VIII (April 1928), and XIII (March 1932), Microfilm reels 9, 11, and 14, Records Relating to U.S. Navy Fleet Problems, M964, RG-38, Navy Department Library; Michael A. Palmer, "Undersea Warfare and Maritime Strategy: The American Experience," unpublished paper; J. E. Talbott, "Weapons Development, War Planning and Policy: The U. S. Navy and the Submarine, 1917-1941," *Naval War College Review* 37 (May-June 1984), 53-71; Samuel Flagg Bemis, "Submarine Warfare in the Strategy of American Defense and Diplomacy, 1915-1945," unpublished manuscript, 1961, OA.

42. "Seventy Percent Expansion Act and Submarine Construction Schedules" (SOC Memo), 9 Sep 1940, series 1, file 5, box 2, Subs/UWD, OA. "Shipyard Construction Assignments" (SOC Memo), 9 Jul 1940, series 1, file 5, box 2, Subs/UWD, OA.

Confrontation in the Gulf: Unintended Consequences

Commander William F. Hickman, U.S. Navy

By invading Kuwait, Saddam Hussein has once again become the catalyst of change in the Middle East. As in the case of his decision to invade and annex the oil fields of southwestern Iran in 1980, he may have calculated that he could achieve his 1990 goals in Kuwait quickly; but just as he did not foresee the fanatical response from Iran, he did not foresee that his actions in Kuwait would forge a new coalition of nations to oppose him. The ultimate result is not yet apparent, but what has already become clear is that Saddam's actions will again have serious but completely unintended consequences, both for Iraq and the world.

Peace or Stability?

Peace and stability have historically been elusive concepts in the Middle East. Although the terms have often been used interchangeably, for purposes of this discussion a clear distinction must be drawn between the two. *Peace* should be understood to mean a non-warring state of harmony and freedom from disorder *to which all parties agree*. *Stability*, on the other hand, should be viewed as an enduring condition of a lack of open warfare *to which all parties submit, but need not agree*.

The Middle East, a region rich in cultural and religious significance for much of the world's population, has for centuries been a battleground on which the competing interests of nations, cultures, and religions have clashed. Although peace has long been the overriding goal of the people of the region, successive generations have been unable to settle their disputes and to forge a lasting peace. Open conflict among the competing interests has been so common that the only periods of stability the people of the region have known have been when a dominant military power subdued the disputes through the force of arms.

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With its military forces arrayed in and around the Saudi peninsula, the United States is viewed by some in the area as merely the latest in a long line of dominant military powers attempting to impose its version of stability on the region. From the U.S. perspective, because American forces are not being used to establish regional hegemony, this is an inaccurate characterization. Because American forces are merely one of several military forces in the region and draw their political impact from the coalition, they are not dominant in the historical sense of the Turks, Mongols, or British. Although this perspective may be accepted in the United States, for a significant segment of the population of the Middle East it has little value.

History provides a theme helpful to analysis of the present situation. All of the attempts to impose stability on the region can be viewed as originating either from within or without the region. Since the success of the current attempt to stabilize the region could ultimately depend upon how Arabs view the Iraqi military in Kuwait vis-a-vis the outside forces arrayed to defend Saudi Arabia, this is an important distinction. No militarily dominant occupying power has ever gained the support of the people of the Middle East. All have faced indigenous forces that have stubbornly resisted external intervention and control. As a result, the stability imposed has been successful only so long as the occupying power has been able and willing to maintain garrison forces. For this reason, the stability provided by most external military powers has been relatively short-lived.

The alternative to externally-imposed stability is a resolution generated from within the region itself, either by military domination or by political compromise. Although one of these is the preferred solution of most Arabs, neither offers much reason for hope. Saddam's attempt to stabilize the region by establishing Iraqi hegemony is the latest attempt to establish Arab political unity, all of which have been unable to overcome the divisive forces of tribalism or nationalism and thus have failed to prevent or resolve major conflicts. Indeed, Saddam's efforts to rally mass support for his action have strained the fragile ties of Arab unity nearly beyond repair. By casting himself as an Islamic warrior resisting foreign invasion of the holy lands, as well as attacking the Arab governments who oppose him, he has deepened the divisions of the Arab world. The moderate Arab governments that make up the majority of his regional opposition are beset by increasing internal social and political pressures which are inexorably pushing them toward revolution or, at the very least, systemic change. Because Saddam's appeals may have hastened this process, which would further undermine the status quo, the West's concern for an enduring solution has been heightened.

Against this background the Bush administration has proposed a different approach to stability: collective defense. Testifying before the House Foreign Affairs Committee, Secretary of State James Baker suggested that in view of the unprecedented regional opposition to the acknowledged Iraqi threat,

regional states might agree to a new security structure for the Persian Gulf that would deter Iraq, just as the North Atlantic Treaty Organization had for decades deterred the Soviet Union.¹

In making this proposal the Bush administration was voicing its fundamental belief that collective defense, as practiced by the Western democracies since the end of World War II, might be the key to overcoming the instability of the Middle East. Although the administration has since backed away from the proposal somewhat, it has not altered its view that some form of a collective defense arrangement would be stabilizing. In the administration's view, since peace cannot be achieved, stability, to which all need not agree, seems a good alternative. However commonsensical this approach may seem to Americans, those who live in the Middle East view it differently.

Historical Perspectives and Imperatives

Middle Eastern history is a record of strife and conflict between religions and peoples on a grand scale. For more than two millennia the region has been dominated by a succession of external powers that have left a legacy of bitterness, dissension, and suspicion of outsiders throughout the region.

An underlying but often unarticulated perception that arises from this legacy maintains that the peaceful development of Islamic civilization was interrupted by outside powers. This perception holds that through military dominance the Christian Crusaders, the Central Asian Mongols, and the European colonial powers all retarded the political advancement of the region by attempting to suppress Islam.

Perhaps most importantly, this perception holds that the colonial powers prevented the political unification of the region. Although Arabism as a concept was developed only in the twentieth century, the perception is that such a concept (which could have led to political unification) might have occurred earlier had it not been for the intervention of the colonial powers. Political unification was further prevented when these militarily superior powers carved up the region into artificial states that were easily controlled. By arbitrarily drawing lines on a map, the Christian countries forever divided the people, thus preventing political unification of the region. This perception also holds that when it became clear they could not hold on to the region, the colonial powers created one final European colonial outpost: a home for displaced Jews. In the eyes of many Arabs, the United States has become the latest in a long line of colonial powers through its support for this last European colony.

When the United States first became seriously engaged in the Middle East after World War II, it had a degree of credibility unmatched by European nations, largely because the United States was an unknown quantity. Prior

to the June War of 1967, the Arabs generally perceived the United States as evenhanded in its dealings with the region. Since 1967, though, as it has more openly supported Israel (especially after the 1973 Yom Kippur War), the United States has been viewed increasingly as yet another external power imposing its will on the region through its colony, Israel. For many Arabs, by its unwavering support for Israel the United States has lost its credibility as an honest broker and its ability to influence events in the region.

Arabs subscribing to this singular view of external domination also hold a distinctive perception of stability. For them, stability in the region has been possible only during those periods of history in which the Muslims themselves have been dominant. Strong rulers overcoming the domination of the outside world created the only periods of peace and prosperity that the region has experienced in the Islamic era. In this view, if a resolution to the problems of the region is to be achieved, then Salah al Din, the revered twelfth-century Arab warrior who united the Islamic lands of the central Middle East to successfully oppose the Christian Crusaders, showed how it was to be done.²

This Arab historical perception may be difficult for Westerners to accept, but it is held by large segments of the population throughout the Middle East today. There is a dichotomy, however, for existing alongside this perception is a historical imperative which gives back to the United States a degree of influence it loses as a supporter of Israel.

This historical imperative is that among the political systems of the world, monarchical regimes are an endangered species. Those few that remain are largely concentrated in the Middle East. Since the Egyptian coup d'etat in 1952 a succession of Middle Eastern monarchs have passed into history, most of them violently, and often leaving a radicalized society in their wake.³ By their very nature, monarchies are traditional regimes with a conservative outlook. While they may seek to improve the economic conditions of their subjects, they have a vested interest in the political status quo. For them, the forces which transform societies (e.g., education, political participation, modernization) constitute a threat to their survival. In an era when participation in the political process is increasingly seen as a basic human right, the conservative monarchs and their families deny the trend toward political liberalization in order to secure their continued family rule. Apart from these internal threats, the conservative rulers are also acutely conscious of the possibility of subversion or outright invasion by their neighbors. The result of this dilemma has been that conservative states align themselves strategically with the West. Because the United States is the power most capable of providing military assistance to these states, it gains a degree of influence it could not otherwise obtain.

Strategic Objectives

No matter what may be stated or implied by political leaders, reality dictates that nations (or more correctly, governments of nations) act solely in their perceived self-interest. Whether rooted in history, economics, or political expedience, this self-interest, broadly expressed as strategic objectives, provides the motivation for actions of governments. When the strategic objectives of separate nations coincide, they may work cooperatively toward a common goal. If they differ, some form of conflict, armed or otherwise, becomes inevitable. The net result is that as perceptions of self-interest vary, so do alliances.

Nowhere is this more evident than in the Middle East. For Westerners conditioned to the stable alliances of a bipolar world, the transitory alliances of the Middle East can be very difficult to understand. The reality, though, is that due to the divisiveness of the disputes, the shared perceptions can only be impermanent. In the current Persian Gulf crisis, the strategic alliances that have been formed are possible only because historic distrust and suspicion have been set aside as each government has perceived a threat to its survival. Although each nation is clearly pursuing other strategic objectives, for the purposes of this discussion it is sufficient to focus on how this single shared objective, the most basic of all, shapes the current alliances.

Iraqi officials maintain that Kuwait was invaded because Iraq's economic survival was at stake.⁴ The lengthy but inconclusive war with neighboring Iran had failed to achieve one of Iraq's stated wartime objectives, a reliable economic outlet to the Persian Gulf. Although at war's end Iraq controlled the strategically important Shatt al Arab waterway, because it was clogged with numerous sunken ships and other residue from the war, as well as being heavily silted in its shallow and narrow southern reaches, it was essentially useless without a time-consuming and costly clearing and dredging operation. Because the Shatt had been closed throughout the war, alternative land transport routes to Iraq through Jordan and Kuwait had been developed. These had enabled Iraq to sustain its economy during the war, but were entirely inadequate for postwar needs, for which direct access to the Gulf was required.

More importantly, because the war had left Iraq with a \$60 billion foreign debt, much of it owed to Gulf Arab states, relief from the wartime foreign debt was vital. Accordingly, when Iraq determined that Kuwait was pumping oil from the Rumailia oil field, a field along the common border to which both Iraq and Kuwait lay claim, it demanded a stop.

Thus, when Kuwait did not accede to Iraq's demands on the Rumailia field, for unimpeded access to the Persian Gulf in the vicinity of Bubiyan and Warba, and for debt relief, a perception of impending disaster took root and formed the basis for the decision to invade Kuwait.

The problem with the foregoing economic explanation offered by the Iraqi government is that most outsiders simply do not believe that Saddam Hussein would act solely on economic grounds. His unprovoked attack on Iran in September 1980, his ruthless prosecution of the ensuing war (notably the Scud missile attacks on Iranian cities), and his brutal poison gas attacks on his own Kurdish population make the current effort to cast his invasion of Kuwait in purely economic terms inconceivable to most observers. For them Saddam is simply attempting to use his exceptionally large military to establish regional hegemony.

Saudi Arabia's strategic objective in the current situation is more obvious. Seeing the former Kuwaiti ruling family in exile, the Saudi royal family considers its political, economic and personal survival at stake. What may not be so obvious to Westerners is that to pursue this objective the Saudis were forced to set aside another dearly held strategic objective that had for years formed the basis of the Saudi relationship with the West.

As a traditional, conservative Islamic state entrusted with caring for the holiest sites of Islam, the Saudis have had a vital interest in carefully controlling the intrusion by and the influence of the West on their country. To have the U.S. military available "over-the-horizon" to assist the Saudis in deterring or preventing occupation of the holy lands by Shiite Iran or the atheistic Soviet Union was acceptable, but to allow a Western (and predominantly Christian) military presence on the ground was not. Such a presence would have generated extreme resentment within Saudi Arabia and the Islamic world and could have undercut the legitimacy of the Saudi family itself. This overriding strategic consideration underlay every Saudi security decision for over a decade. When Saddam Hussein invaded Kuwait, however, the basic calculus changed immediately. Legitimacy in the eyes of the Islamic world was of little value if Iraqi forces occupied the country. Face to face with survival, King Fahd set aside his previous objective and appealed to the United States for assistance. The smaller Arab states of the Persian Gulf quickly did the same.

Jordan's actions in support of Iraq may have been something of a surprise for Westerners, but they are easily understandable when it is recognized that King Hussein's personal survival was at risk. Long perceived as friendly and moderate, Jordan and its ruler have been regarded favorably in the West. It is often overlooked, however, that Jordan has become home to hundreds of thousands of displaced Palestinians, who exert significant pressure on the country's political process. As will be discussed below, Saddam's efforts to justify his actions on the basis of opposing Israel play particularly well among this large and rapidly expanding portion of Jordanian society. To oppose such popular sentiment would have set King Hussein apart from his people and clearly threatened his survival.

For the United States, Secretary James Baker outlined four distinct objectives in the current Gulf crisis in testimony before the Senate Foreign Relations Committee.⁵ It was President Bush, however, who clarified the fundamental U.S. strategic objective being pursued: "Our jobs, our way of life, our own freedom and the freedom of friendly nations around the world would suffer if control of the world's great oil reserves fell into the hands of Saddam Hussein."⁶ Guaranteed access to the oil resources of the Persian Gulf has been an enunciated strategic objective of the United States since President Carter's response to the 1979 Soviet invasion of Afghanistan. Although in comparison with its European and Asian trading partners the United States imports relatively little oil from the Persian Gulf, because the U.S. economy is oriented heavily toward international trade, the economies of the other industrialized nations have become crucial components of U.S. national security. Therefore, even if the United States imported virtually no oil from the Gulf, the flow of oil from the region would still be a major component of U.S. national security.

This analysis of the strategic objectives of the major actors in the Gulf crisis may seem simplistic, but the extraordinary response by the world community throughout the crisis demonstrates that it is reasonable. Remembering that above all else governments of nations act in their perceived self-interests, unless there were a reasonably simple, easily articulated common strategic objective, it is extremely unlikely that such unusual alliances would have been formed. Condemnation of the Iraqi aggression was to be expected, but talk is cheap. It is the worldwide commitment of military force and the financial backing to support that force that is unprecedented. Such a commitment, even if only a token gesture, represents a major political risk for the nations involved, which gives a clear indication of the motivator for the action: the perception of a threat to economic survival. Although the Bush administration believes this unique situation has created an opportunity for collective defense to succeed, as will be seen, the impermanence of the shared perception argues against it.

Collective Defense

The essence of a collective defense arrangement is a military alliance against a common threat in which the participants agree to pool their resources to provide a level of defense not attainable by any one nation. While simple in theory, an alliance can be very complicated and difficult to administer because in any grouping of nations there will exist differing strategic perceptions. For an alliance to be enduring, the shared strategic perceptions must be persistent, not transitory.

Collective defense arrangements require both an external focus and internal cohesion. While the perception of a common threat provides the external focus, internal cohesion is not possible without shared basic values and

traditions. In Nato, the collective defense arrangement with which the industrialized West is most familiar, the most basic and important shared value is a commitment to participatory democracy. In most Arab nations of the Middle East this important cohesive factor is missing. These nations are a volatile mixture of traditional conservative monarchies ruled by kings or sheiks (Jordan, Saudi Arabia, United Arab Emirates, Oman, Bahrain, Qatar, Yemen), tyrannical paramilitary states (Iraq, Syria, Libya), and a quasi-democracy governed by a former army officer (Egypt). In none of these societies do the people have a decisive voice in government.

More importantly, because the differences in the political processes of these states are so profound, the animosities between them have prevented practical unity for decades. Even the cohesive factors of a common cultural and religious identity have not been able to overcome the political differences.

On the face of it, the cultural identity, Arabism, could provide a common focus, but it has been singularly unsuccessful in doing so. The most successful proponent of the concept was Egypt's Gamal Abd al-Nassar, who was able to stir the passions of millions of Arabs with his spellbinding oratory; but despite his best efforts to unite all Arabs under one banner, the differences in politics and nationalism proved to be too difficult to overcome. Even Islam, the most powerful cohesive force in the region, has been unable to provide a focus for political unity.

Former Secretary of State George Shultz maintained that alliances are not agreements between rulers or governing elites, but between peoples.⁷ Although he was referring to alliances between democracies, his basic point is applicable to the states of the Middle East. Rulers and governing elites can be eliminated. Unless there is a broad recognition among the population of a country of the value of a collective defense arrangement, it can be repudiated by a new ruling elite, as was the Central Treaty Organization after the 1958 revolution in Iraq.

To further complicate the U.S. view of long-term collective defense possibilities, Saddam Hussein does not provide an external focus sharp enough to support such an arrangement. Despite his invasion of Kuwait, there is no consensus about him in either the Arab or Islamic world. Although most governments and ruling elites have aligned themselves in opposition, there are many Arabs, particularly the Palestinians, for whom Saddam is a modern Salah al Din. Because of this unfocused view, Saddam has had some success in casting himself as the answer to the only threat upon which all Arabs can agree: Israel.

The Wild Card

When discussing the issue of Persian Gulf security, the U.S. government routinely describes a region in danger of being overrun by an invading force

bent on controlling its vast oil resources. From the U.S. perspective, the Soviet Union, revolutionary Iran, and expansionist Ba'athist Iraq have been the villains from which the Gulf Arabs must be protected if they, and the economies of the industrialized world on whom the Gulf states are dependent for oil markets, are to survive. From the Arab perspective, though, discussing the Persian Gulf strategic equation without factoring in Israel is an exercise in futility.

In the Arab world, the broad consensus on Israel transcends differences in philosophy, politics and culture. The Palestinian cause has become a litmus test of Arabism. The refugee camps, the displaced Palestinians, and the occupied territories have defined Arab history since 1967. For the conservative rulers of the Gulf states to divorce themselves from the issue would be to court disaster. Although the effects have not been as dramatic as in Jordan, the large numbers of Palestinians and their supporters resident in the Gulf have had an important effect on the demographics of the region by diluting the populations of the small Gulf Arab states. In 1975, for example, 48.4 percent of the Kuwaiti population of 974,500 were native Kuwaitis. By 1985 the percentage had dropped to only 40.2 percent of a population of over 1,600,000, with non-national Arabs, among them exceptionally large numbers of Palestinians, exceeding natives at 41.2 percent.⁸ By the time of the Iraqi invasion, the demographic trend had driven the percentage of native Kuwaitis even lower.

This combination of political consciousness and demographic change has had major ramifications for the Arab world. In the present Gulf crisis, for example, although the governments of most Arab states are aligned against Iraq, a significant percentage of Arabs support Saddam. This support is most easily seen in states with large Palestinian populations (e.g., Jordan), but it also exists among the populations of the Gulf states and the other frontline Arab states of Egypt and Syria.⁹

As a result, for about half of the Arab world, Saddam Hussein's actions in Kuwait, while regrettable in terms of relations among Arabs, are excusable on broader grounds. For an audience conditioned to view world events through an anti-Israeli lens, Saddam has been successful in shifting the focus of the debate from his actions to the U.S. military presence in the Islamic holy lands. By claiming to stand against the ultimate guarantor of Israeli security, he stirs deep passions among all Arabs; by threatening to attack Israel, he gains respectability.

Unintended Consequences

No matter how clear each nation's objectives may have been at the outset of the Persian Gulf crisis, because of the conflicting interests and concerns discussed above it is impossible to predict with any accuracy the degree of

commitment to those objectives or the ultimate consequences of each nation's actions. Thus, both Iraq and the United States are facing unintended consequences as a result of Saddam's actions.

By invading Kuwait, Saddam stimulated many different reactions. Some he no doubt anticipated, but he clearly did not foresee them all. Saddam has set in motion change that he will have great difficulty controlling.

First, *Saddam's anti-Israeli stance has fostered a renewed fervor among the Palestinians.* Saddam has long sought to be recognized as the leader of the Arab world, an aspiration that has been most strongly opposed by Syria's Hafez al-Asad and Egypt's Hosni Mubarak. If Saddam can co-opt the only issue on which all Arabs agree by acquiring the loyalty of the Palestinians, he can acquire a degree of legitimacy as the primary leader heretofore denied him by al-Asad and Mubarak. Furthermore, the Palestinians gain a new, powerful champion in their drive to regain their homeland.

The unintended consequence of this effort may well be the Israeli reaction. There is no doubt that the Israelis have been watching developments in the Gulf very carefully. The ramifications of an Iraqi victory on the Palestine issue are being vigorously debated among both Palestinians and Israelis. What the Israelis might do about such a development is highly speculative, but given their history of direct response to perceived threats, it is unlikely that they would sit passively while Saddam gained ascendancy.

Second, *despite the appeal of Saddam's anti-Israeli rhetoric, nearly all Arab governments are aligned against him.* Had Saddam foreseen this alignment of Syria, Egypt, and the Gulf states, it is entirely probable that he would have sought some other method of resolving his dispute with Kuwait. Although he has garnered the support of some less significant Arab states, given the long history of animosity in their mutual quest for leadership of the Arab world, to provide Hafez al-Asad and Hosni Mubarak an opportunity to unite the remainder of the Arab states against him is something Saddam would never have knowingly done. As discussed above, the strategic perceptions that underpin the current Arab anti-Iraq alliance may be transitory, but much damage can be done to Iraq's long-term interests before the alliance inevitably shifts once again.

Third, *Saddam was forced to concede to Iran everything for which Iraq had fought in the Iran-Iraq War.* After starting and waging a bloody but inconclusive war with Iran, Saddam felt compelled to secure his eastern border by giving back to Iran 700 square miles of Iranian territory occupied by Iraq during the war and accepting a division of sovereignty over the Shatt al-Arab, a point of principle over which he had waged war.¹⁰ The effect of this action was to declare that the war, which had claimed millions of casualties on both sides, had been of no value. While this freed more troops to face the assembled allied forces in the south, it may also have generated unexpected consequences for Saddam's personal security. Predictably, Iran has trumpeted the Iraqi

concession as a great victory. Despite strict press censorship, how the Iraqi army and public view Saddam's action is very much open to question.¹¹ Although he has routinely eliminated all of his opposition and seems relatively secure at present, it is quite conceivable that some senior officer or group of officers could find his repudiation of millions of deaths sufficient reason to stage a successful coup.

On the opposing side, actions by the United States have also stimulated a number of diverse reactions. Some were anticipated, but, as we shall see, at least one unexpected consequence could make moot the entire allied military effort to protect Saudi Arabia from an Iraqi invasion.

First, *U.S. efforts in the United Nations have raised the possibility of future constraints on U.S. actions.* Had the United States decided to pursue a unilateral military option, an Iraqi invasion might have been forestalled but the Bush administration would have found itself in an extremely difficult diplomatic situation. By working through the Security Council the United States has received international validation and support, but these efforts have also acted as a catalyst for restructuring the United Nations Military Staff Committee, a long-dormant advisory body consisting of senior military officers representing the five permanent members of the Security Council.¹² Although the United States has successfully resisted all efforts to place its forces under international command or control in the current crisis, by the very act of seeking U.N. approval, which strengthened and gave legitimacy to the U.N.'s role in military actions, the United States may have heightened that body's desire to more fully control future military operations, perhaps through a restructured and strengthened military committee.

Second, *the United States' special relationship with Israel is undergoing authentic change.* For the United States, a key factor in the current Persian Gulf crisis has been its unprecedented support of, and de facto military alliance with, a majority of Arab governments. In the early stages of the crisis the United States was successful in divorcing Arab concerns about Israel from the decision to band together to oppose Iraq. Despite Saddam's harsh anti-Israeli rhetoric, the Arab governments aligned against him were generally able to ignore the Israeli factor until Israeli security forces killed a number of Arab demonstrators outside Dome of the Rock and al-Aqsa mosques on Temple Mount, the third-holiest site in Islam. This incident forced the United States to make a stark choice between its traditional diplomatic support of Israel and its newly formed and tenuous alliance with the Arabs. The U.S. votes against Israel in the Security Council created a predictable firestorm of protest in Israel and among its supporters in the United States, but the administration remained firm. There have been previous strains in the U.S.-Israeli relationship, but unlike previous incidents, in this case the U.S. government seems to have judged that its budding alliance with the Arab world is more in its interest than continuing its unconditional support for Israel. It is much

too early to predict what this will mean for either country, but it seems clear that for the first time since 1973, the U.S.-Israeli relationship is undergoing authentic change.

Third, *by going to its aid the United States may have actually made the government of Saudi Arabia less stable.* By asking for U.S. military assistance King Fahd may have prevented an Iraqi attack, but at the same time he may have accelerated the demise of his family's rule. As the protector of the holy cities of Mecca and Medina, the Saudi government is committed to protecting Islam from the unwanted influence of other religions. By calling on Christian nations to protect his rule, Fahd has lost some of his legitimacy as the protector, which in turn could lead to a more important loss of credibility as a sufficiently Islamic leader. Keeping in mind the historical imperative regarding monarchical rulers, the future stability of the Saudi kingdom is very much in doubt, no matter what happens vis-a-vis Saddam Hussein.

U.S. Objectives—Reality Check?

The above discussion inexorably leads to a reassessment of U.S. objectives in the area. The long-standing American practice of perceiving and dealing with current problems in isolation from other issues is a practical method of approaching the world that has served U.S. interests well in other areas. It should be clear by now, however, that in view of the confusing and conflicting interests in the Middle East, such an approach is too simplistic. To be successful, therefore, U.S. objectives must be clarified.

In terms of the current Kuwaiti crisis, a number of questions arise. It is quite possible to push Iraqi forces back and restore the Kuwaiti monarchy, but would that necessarily achieve stability? If Saddam Hussein's military capability is left intact when the forces allied against him withdraw, will the reconstituted state of Kuwait be stable? Having been invaded once, in order to forestall another invasion it is entirely probable that Kuwait would accede to any Iraqi demand. If Kuwait agreed to future Iraqi demands for access to the Gulf or to follow its lead in international affairs, would the United States intercede? If not, could it accept Iraqi hegemony in this form?

Perhaps even more significantly, once Kuwait is restored, the inherently unstable process of political change in that country will begin, with unknown but certainly unintended consequences. In return for maintaining a unified front against Iraq, Sheik Saad al-Sabah, the crown prince and prime minister of the Kuwaiti government-in-exile, has promised to restore democracy to Kuwait once it is again an independent nation. By restoring the 1962 constitution, which was suspended in 1986 after the National Assembly had adopted an alarmingly independent orientation, the al-Sabah family is promising a reconstituted, directly elected, and presumably more independent Kuwaiti National Assembly.¹³ The monarchy will make every attempt to

control this systemic change, but given the history of the previous National Assembly, as well as the history of such efforts throughout the Middle East, once the process begins it develops an impetus of its own which makes it impossible to predict the outcome. If the process leads to a hostile regime, is the United States prepared to accept it?

The most important factor in this clarification of objectives must be a recognition that *the status quo ante cannot be restored*. Despite its importance to the industrialized world, the Middle East is a developing region beset by volatile emotions, systemic conflicts, and untenable governments. Since regional peace must await the maturing of attitudes, stability can be the only reasonable goal. To achieve it, however, the United States must look beyond the near term to carefully assess its long-term interests.

Notes

1. Youssef M. Ibrahim, "Baker Foresees a Long Stay for U.S. Troops in Mideast; Urges a Regional Alliance," *The New York Times*, 5 September 1990, p. A1.
2. Salah al Din (1138-1193), known as Saladin in the West, led a successful campaign which culminated in the capture of Jerusalem in 1187. See Philip K. Hitti, *History of the Arabs*, tenth ed. (New York: St. Martin's Press, 1981), pp. 645-651.
3. King Faruq, Egypt, 1952; King Faisal II, Iraq, 1958; Imam Muhammed el-Badr, Yemen, 1962; King Idris, Libya, 1969; Shah Zahir, Afghanistan, 1973; King Faisal al Saud, Saudi Arabia, 1975 (the only one whose death did not result in a change of the form of government); Muhammed Reza Shah Pahlavi, Iran, 1979; and Sheik Jaber Ahmad al Sabah, Kuwait, 1990.
4. The following description of Iraqi motivations for the invasion was provided by Muhammed al-Mashat, Iraqi Ambassador to the United States, to students of the College of William and Mary at the Brookings Institution, Washington, D.C., 19 September 1990.
5. These are: the immediate, complete, and unconditional withdrawal of all Iraqi forces from Kuwait; the restoration of Kuwait's legitimate government; the protection of American citizens; and a commitment to the security and stability of the Persian Gulf. "America's Stake in the Persian Gulf Crisis," Statement by the Honorable James A. Baker III before the Senate Foreign Relations Committee, Wednesday, September 5, 1990.
6. R.W. Apple, Jr., "Bush Says Iraqi Aggression Threatens Our Way of Life," *The New York Times*, 16 August 1990, p. A14.
7. George Shultz, "Address to the East-West Center and the Pacific and Asian Affairs Council, July 17, 1985," *The Department of State Bulletin*, vol. 85, no. 2102, September 1985, pp. 33-36.
8. J.S. Birks, "The Demographic Challenge in the Arab Gulf," B.R. Pridham, ed., *The Arab Gulf and the Arab World* (New York: Croon Helm, 1988), pp. 146-148.
9. Jill Smolowe, "Me and My Brother Against My Cousin," *Time*, 20 August 1990, pp. 33-36; Otto Friedrich, "He Gives Us A Ray of Hope," *Time*, 27 August 1990, pp. 26-27; Lisa Beyer, "Saddam as the Lesser of Two Evils," *Time*, 15 October 1990, pp. 54-55.
10. Youssef M. Ibrahim, "Iraq Seeks Peace with Iran, Turning Back Spoils of War in Move to End Isolation," *The New York Times*, 16 August 1990, pp. A1, A5.
11. Carl Bernstein, "In the Capital of Dread," *Time*, 8 October 1990, pp. 30-33.
12. Jim Mann and Douglas Jehl, "Bush OKs Bigger U.N. Military Role," *The Los Angeles Times*, 24 October 1990, p. 11; Eric Schmidt, "Revived U.N. Military Panel is Seen as Largely Symbolic," *The New York Times*, 4 November 1990, p. A16; and John D. Morrocco, "U.S. Opposes Formal U.N. Command Role in Middle East," *Aviation Week & Space Technology*, 29 October 1990, p. 23.
13. Youssef M. Ibrahim, "Kuwait Rulers See Democracy Moves," *The New York Times*, 14 October 1990, pp. A1, A13.

The French Navy: Friend or Rival?

Captain William M. Despain, U.S. Navy

An analysis of French naval power reveals a unique set of similarities between French and U.S. Navy strategic commitments and requirements. Conversely, certain elements of French naval power not only compete with, but potentially threaten, U.S. economic and political interests. Is the French Navy a friend or a rival? Is some form of strategic marriage a possibility for the navies of the United States and France, or will French naval power evolve to threaten U.S. national interests, requiring an even greater arm's length policy and wary competition?

On 4 May 1982, an Exocet missile carrying a 364-pound warhead slammed into the hull of the H.M.S. *Sheffield*.¹ The resultant loss of the *Sheffield* not only alerted a shocked Britain to the reality of missile-age naval warfare, but brought to light a curious and heretofore little recognized adeptness in naval power. Both the missile and the aircraft that launched the missile were French-built. With raised eyebrows, observers in world military circles suddenly took note of French naval weaponry and how it was being used. During the Falklands war and the years that followed, it became increasingly evident that not only were many French naval weapons being used by other armed forces of the world, but that the weapons worked devastatingly well.

Then, amid the ensuing hubbub and debate over missiles versus airborne early warning; large versus small-deck aircraft carriers; and submarines versus surface combatants, attention to the French Navy once again lapsed, overshadowed by the Reagan buildup and the cries of "evil empire." After all, traditional military thinking about France generally had been in the context of a land power, not a maritime power, and a fairly independent land power at that.² In the true Mahanian tradition of a maritime strategy, the muscle-flexing U.S. Navy, with its 15 carrier battle groups and its goal of 600 ships, certainly did not require (or desire) any specific reliance on other naval powers for success—least of all on a traditional "land power" such as France.

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As we enter the 1990s, however, the U.S. Navy is no longer thinking in terms of 15 carrier battle groups or 600 ships, but rather is faced with the call to significantly reduce its numbers in both categories. Meanwhile, the French Navy is moving steadily onward with its modernization programs and increased capabilities that include everything from oceanic minesweepers to nuclear aircraft carriers—all supported by a defense budget that has grown more than 7 percent annually since 1986.³

If forward deployment, Alliance support, and deterrent striking power continue to be the mainstays of the U.S. maritime strategy, it may be not only advisable, but necessary, to look anew at the interplay of the Alliance powers in that strategy.

The Elements of French Naval Power

So it was that out of desire to replace Britain as top dog, Bourbon France, placing a large block of irony across the path of history, lent her finances, fighting men and armaments in aid of a rebellion whose ideas and principles would initiate the age of democratic revolution, and together with its drain on the French budget, would bring down the *ancien régime* in the tremendous fall that marked forever the change from the Old World to the modern.⁴

Not perhaps since the days of the American War of Independence has the French Navy enjoyed such preeminence as it does now within the overall defense system of its country.⁵ Inspection of the current French naval order of battle reveals a force in the process of vigorous modernization and oriented toward protecting France's global interests (see French Naval Order of Battle at end of this article). Richard Sharpe states in the foreword to *Jane's Fighting Ships (1989-1990)*, "If the navies of northern Europe seem unable to get their priorities endorsed in the competition for resources with armies and air forces, the same cannot be said of France."⁶

France is investing heavily in naval capabilities.⁷ The French Navy, now with more men than the British Navy has, received a 12.6 percent increase in its 1989 equipment budget. This contrasts sharply with Britain's navy which was recently placed last in service budgetary priorities. There are two forces driving this upward surge in French naval power: strategy and the arms trade.

French Strategy. Not surprisingly, the origins of the naval part of French strategy are deeply rooted in France's intention to remain proprietor of her ultimate security.⁸ After a century of major wars fought in defense of her territory, France pursues her foreign policy goals of national independence, world presence and influence, and solidarity with her allies, regardless of the chafing these singular goals may cause to those allies in terms of a coordinated response to the Soviet threat.

To support those policy goals, France uses her navy in two major ways: as a nuclear deterrent and as a force for conventional action.⁹ In the former role, the navy says that "we do not attempt to win a war, but rather to make it impossible."¹⁰ To this end, the navy has six nuclear-powered ballistic-missile submarines. This is the largest Western fleet of such submarines outside the United States. Completely independent of Nato nuclear response plans, this force maintains at least three submarines within targeting range of Moscow at all times and represents for the Soviets an incalculable "wild card" in any nuclear exchange scenario.¹¹ Aboard its carriers the French Navy also has "prestrategic" forces in the form of air-delivered tactical nuclear weapons, thus providing France with an escalatory capability.

The conventional aspect of French naval power is designed to support numerous and global out-of-area interests.¹² Ranging from their main Indian Ocean base at Djibouti, around to Polynesian possessions, to Caribbean islands and their space center in French Guiana, the French have definite positions, sea lines of communication and trade to protect. Just as most advanced countries, France is heavily dependent on sea trade. Table I shows the percentage of France's raw materials requirements which pass through the Indian Ocean and illustrates particular French interests in that area. To protect and support these interests, the French Navy maintains a true power projection and intervention capability as well as the ability to be "present" around the world. During the most dangerous period of the Iran-Iraq war in the late 1980s, the French deployed a carrier battle group in the Indian Ocean for over twelve months, ranking second only to the United States in number of units deployed in the Persian Gulf at any given time.¹³

**Raw Materials Imported by France
from the Indian Ocean**

Percentage of National Requirements	Product	Country of Origin
100	Zirconium	Australia
96	Tin	Southeast Asia
85	Chromium	Southern Africa Madagascar
55	Rubber	Southeast Asia
32	Coal	Australia South Africa
25	Copper	Southern Africa
21	Manganese	South Africa
16	Platinum	South Africa
30*	Oil	Persian Gulf

*Half of which is transported by sea.

Table I

Source: "The French Military Five-Year Plan," Supplement to *Armees*, 1988, p. 23.

The French continue to build their fleet. During the 1990s they will maintain their strike carrier force, building two new nuclear carriers and replacing carrier-based F-8s and Super-Etendards with their new Rafale fighter. Opting for U.S.-style large-deck launch and recovery mechanisms over short-deck VSTOL technology, the French intend to cover the entire range of carrier activity from presence missions up to and including nuclear strike capability. The French Navy clearly has a global approach, similar in many ways to that of the U.S. Navy.

The French Arms Trade. The global interests that drive French naval activities and harvest a strong and burgeoning naval arms trade are of critical concern to the French defense industry. France has ranked second only to the United States in naval arms sales for the past ten years.¹⁴ Table II shows that over that same period, France outstripped her closest competitor (the Soviet Union) by a margin of almost two to one. Prominent examples of naval export successes include the Exocet and Crotale missiles, a great variety of radars and sonars, the Mirage fighter, and two generations of attack submarines. They have pioneered a market of third-world navies that are far more interested in antiship weapons than in U.S.-style high-technology antiair warfare systems.¹⁵

Value of Exports of Naval Equipment by Major Suppliers Values Are in US \$Million (1985)

	USA	France	USSR	FRG	UK	Italy
1979	1055	1352	1317	250	413	909
1980	2847	1799	1324	506	523	529
1981	2585	2166	716	1010	866	1074
1982	2358	2245	1255	236	1256	839
1983	3024	2197	1323	1137	202	682
1984	1962	2409	875	1905	805	552
1985	2005	2631	832	297	351	289
1986	2229	2648	1359	516	394	253
1987	2787	1598	1246	458	972	141
1988	4004	1413	960	1018	399	327
1979-88	24856	20991	11207	7766	6376	5536

Note: Figures are rounded off.

Table II

Source: Ian Anthony, *The Naval Arms Trade* (SPIRI series *Strategic Issues Papers*), (New York: Oxford Univ. Press, 1990), p. 23.

The French are world leaders in antiship missilery, delivering to more countries than any other competitor. French strategic independence in this field is reflected in its list of antiship missile buyers, not all of whom fall

into the category of U.S. allies (see table III). The unsettling implications of this prolific naval arms trade are no better underscored than by the disabling of the U.S. frigate *Stark* in the Persian Gulf in 1987 by an Iraqi-launched Exocet missile. The lead in antiship weaponry has not only fostered income for France, but the Exocet is a major element in the revolution in naval warfare which provides small ships and aircraft with firepower equivalent to that of large ships.¹⁶

**Recent Air-Launched Antiship
Guided Missile Deliveries**

Buyer	Seller	Designation	Years of delivery	Number delivered
Argentina	France	AM-39 Exocet	1979-86	182
Australia	USA	AGM-84A Harpoon	1976-86	60
Bahrain	UK	Sea Skua	1985-87	24
Brazil	UK	Sea Skua	1985-87	32
Egypt	France	AM-39 Exocet	1982-83	40
FR Germany	UK	Sea Skua	1986-88	50
Greece	Norway	Penguin	1976-81	100
India	UK	Sea Eagle	1983-88	156
India	UK	Sea Skua	1985-88	36
Indonesia	France	AM-39 Exocet	1985-86	10
Iran	USA	AGM-84A Harpoon	1972-75	72
Iraq	China	Hai Ying-2	1987	72
Iraq	France	AM-39 Exocet	1978-88	300
Iraq	France	AS-30 L	1985-88	180
Italy	FRG	Kormoran-1	1980-88	82
Japan	USA	AGM-84A Harpoon	1980-88	100
Kuwait	France	AM-39 Exocet	1983-86	24
Netherlands	USA	AGM-84A Harpoon	1978-84	38
Pakistan	France	AM-39 Exocet	1974-83	72
Peru	France	AM-39 Exocet	1982-87	24
Qatar	France	AM-39 Exocet	1983-84	20
South Africa	France	AM-39 Exocet	1976-80	30
Saudi Arabia	France	AS-15TT	1980-86	220
Saudi Arabia	UK	Sea Eagle	1986-88	200
Saudi Arabia	USA	AGM-84A Harpoon	1986-88	20
Singapore	USA	AGM-84A Harpoon	1985-88	30
Thailand	USA	AGM-84A Harpoon	1987-88	6
Turkey	UK	Sea Skua	1984	36
UAE	France	AM-39 Exocet	1982-84	24
UK	USA	AGM-84A Harpoon	1982	40

This table does not record negotiations or undelivered missiles.

Table III

Source: Ian Anthony, *The Naval Arms Trade* (SPIRI series Strategic Papers), (New York: Oxford Univ. Press, 1990), p. 53.

Additionally, the French are enhancing their naval arms trade by training other countries' submarine crews in exported submarines—a concept once

monopolized by West Germany with her S-209 diesel boats. French-built submarines, sailed by French-trained crews, are now operating in the navies of Portugal, Pakistan, South Africa, and Spain.¹⁷ In 1989 the French courted a number of Southeast Asian countries, including Indonesia, Malaysia, Thailand, and even the Philippines, with submarine acquisition and training programs. What the French offer is a "total package" concept, with outfitting and training programs designed to be technically and economically superior to their competition.¹⁸

Why do the French have this edge in the naval arms trade? It is because their arms industry is deeply intertwined with third-world economies and fueled by French companies. For example, Thomson-CSF, a worldwide electronics conglomerate and the main supplier of weapon systems to the French Navy, ranks fourth in the world in consumer electronics, with a \$6 billion annual turnover.¹⁹ Most significant is the saturation of Thomson equipment in third-world defense systems. One hundred percent of Indonesia's air control system is Thomson equipment. The newest Saudi and Taiwanese frigate radars and sonars are Thomson. Pakistan's submarine combat systems and all of Singapore's air navigation systems are Thomson.²⁰ Thomson employs over 24,000 workers in Southeast Asia—from Singapore to Taiwan. Enlaced in the growing economies of third-world countries, the French have an inside track to armament and defense sales—and, thereby increasing global interests to protect.

The French naval arms trade can work either for or against the U.S. Navy. In the possession of third-world adversaries, such as Iraq, the venomous French-built antiship missiles cannot be ignored. On the other hand, with France as an ally, the secrets of the Exocet are as well known to the U.S. Navy as to the Iraqi air force.

Moreover, friendly countries with French weaponry, such as Norway and Saudi Arabia, can add significantly to coastal and chokepoint protection, alleviating the need for a U.S. presence.²¹

Clouds on the French Naval Horizon

Despite a rosy picture of expanding capabilities in the strategic and conventional arenas of naval power, as France enters the 1990s, several factors may severely challenge her ability to control her maritime destiny.

First, in the arms trade, the French lead in electronics and missile technology is being threatened, particularly by the Chinese. Although Chinese products may not remotely match French performance, many third-world buyers are attracted by the lower cost.²² Before the world trade embargo, which began last summer, Iraq, once a major buyer of French antiship missiles, had already begun to buy Chinese missiles. Consequently, the arms trade, which fueled

the French naval weapons industry, may falter as the competition grows and French shares of the foreign market diminish.

Second, the traditional French policy of developing and producing its own naval weapon systems is beginning to suffer from budgetary constraints, forcing France to turn increasingly to other countries for joint-weapon development ventures and multinational programs. Long a symbol France's independent political and military policy, the defense industry is now accelerating toward the inevitable internationalization of defense cooperation with its allies.²³ Illustrative of this is the U.S.-French program to re-engine C-135 aircraft, as well as the nearly \$1 billion purchase of AWACs and C-130 aircraft by France in 1987. Within the framework of the Nunn amendment, France has opened over one hundred data-exchange agreements in defense-related programs with the United States.²⁴ All of this is being driven by the increased competition in the arms market which compels producing weapons which, while increasingly more sophisticated, are also the cheapest available. Clearly, the French exclusivity of the market has weakened.

Third, at the operational level, the French requirement for a power-projection nuclear navy exhibits several weaknesses in force structure and capability. For example, the airborne early warning (AEW) capability of French carrier battle groups is particularly weak. The airwings do not possess anything comparable to the U.S. E-2C Hawkeye. Deck space for such an aircraft, in the French view, does not merit the trade-off in strike aircraft spots. Yet, without a true AEW capability, independent open-ocean operations are extremely hazardous in the standoff air-to-surface missile environment.

Additionally, carrier-based fixed-wing antisubmarine capability is not particularly strong, with the French carriers relying on the old, slow, single-engine Alizé aircraft. In any attempt to protect shipping in the Indian Ocean, a French carrier would be hard-pressed to counter Soviet, or any other submarines, even with the support of land-based antisubmarine aircraft. In recent years, the preponderance of naval funding has apparently gone to the ballistic missile submarine force, slowing the modernization pace of French carrier battle group and amphibious assault forces.²⁵ French naval airwings also do not possess a strong electronic warfare capability and cannot conduct radar suppression on the scale that U.S. airwings are accustomed to in the EA-6B aircraft. This weakness would be particularly hazardous when up against Soviet surface action groups.

Another problem for the French Navy is the absence of a dedicated coast guard. Patrolling coastal water (with the normally attendant fishing rights problems) falls squarely on the navy's back. This mission is a full-time job and draws heavily on the navy's budget.²⁶ For France, smuggling, international terrorism, and Soviet intelligence-gathering activities have made coastal patrol a jungle of offshore activity similar to that off the U.S. Gulf coast.

In summary, the French Navy finds itself shouldering a huge portion of France's overall defense posture—all the way from coastal patrol, through out-of-area power projection, to nuclear deterrence. As proved in the Persian Gulf, the French Navy has the capability to take on the responsibilities of a world-class fleet, but its vulnerabilities could be not only restrictive, but perhaps fatal.

French Naval Power and the U.S. Navy

In March 1989 Admiral C.A.H. Trost reported to the House Armed Services Defense Subcommittee that "reducing carrier levels below 15, without a concomitant reduction in our worldwide commitments, will inevitably lead to a repetition of the descending readiness spiral of the 1970s."²⁷ One year later (19 April 1990), Senator Sam Nunn of the Senate Armed Services Committee reported, "I believe the Navy can meet its requirements with between 10 and 12 carrier battle groups."²⁸

The question is, have U.S. Navy commitments been reduced, or do they remain the same in number? According to Admiral Trost's relief, Admiral Frank B. Kelso, "The objective of a maritime forward defense is to deter war, to show Nato's resolve to not relinquish one inch of soil. This means Nato forces should be placed in the best possible position to respond in case of conflict before conflict begins. . . . Then, and only then, can it be a credible strategy."²⁹ This statement does not suggest that the maritime strategy can tolerate a reduction in forward defense assets. If an offensive, forward-deployed strategy is still required, how will the United States meet those commitments with one-third fewer carrier battle groups than before?

Several courses of action are available. For example, one way to hold carriers forward deployed to meet current commitments would be to lengthen present deployment schedules beyond the nominal six-month time frame and with possibly shorter turn-around cycles between deployments. Experience with this concept, however, has demonstrated that personnel retention levels are reduced, and consequently, training and readiness levels are significantly more difficult to maintain. Therefore, recent proposals to use this method have met with resistance from the chief of naval operations.

A second possible course of action is random gapping of forward commitments in an attempt to find a middle road between alliance-supported commitments and reduced availability of naval forces, particularly carrier battle groups. This course was in fact taken in the fall of 1989 when, for a brief period, no U.S. carrier was in the Mediterranean. However, it is clear that within the current context of U.S. defense policy, the absence of a carrier battle group in that sea is the exception—not the rule.

A third suggested course of action is to increase foreign interoperability in the U.S. maritime strategy, i.e., fill the gaps in U.S. force availability with

allied assets while maintaining a forward-deployed posture with carrier battle groups. By 1998 the French Navy may be an excellent resource for creating a coalition battle group. French nuclear carriers could be supported by U.S. surface combatants, such as Aegis cruisers, to protect European and Indian Ocean commitments. With nose-tow launch systems (currently planned), cross-decking of aircraft from U.S. airwings to French flight decks will be possible. Thus, a French carrier with Rafale strike fighters could perform enhanced airborne early warning and surveillance by steaming with a detachment of U.S. S-3B aircraft or the advanced tactical support aircraft (ATS) now being developed. An ATS platform, combining the four major missions of ASW, AEW, EW, and logistics support would overcome the weaknesses previously noted in current French airwing structure.

Shortcomings in U.S. force structure have been embarrassingly evident in the mine warfare area and will be noticeable in another field when the older U.S. carriers begin to fade away in the late 1990s. Without a major service life extension program, eight U.S. carriers will reach the end of their fleet service sometime close to the year 2000.³⁰ This situation will be exacerbated if future carrier funding does not materialize. The French Navy will be bringing state-of-the-art systems on line during this same time frame, with both minesweepers and nuclear-powered carriers—ships which could be highly interoperable with a U.S. battle group.

Under a coalition battle group concept, a French carrier could join a U.S. battle group to maintain the current optempo of forward-deployed ships. Battle group command could be rotated between force commanders during workups and deployed cycles. While this might not be the ideal situation we enjoy as an all-U.S. battle group, as a deterrent force-in-being, capable of responding to a regional crisis, a coalition battle group would pose a credible force which could respond rapidly to almost any conventional threat.

What would happen if a crisis occurred in which the French national interest did not correspond to that of the United States? The United States would be responsible for a certain degree of crisis reaction risk. However, for anything less than global war, the United States could accept that risk for up to 10 days (the amount of time for a “ready” carrier from the 2nd Fleet to reach the eastern Mediterranean under the 6th Fleet). In the meantime, U.S. fleet forces could be kept deployed and capable of responding credibly to national interests.

Both the U.S. and French navies operate under similar strategic themes: global interests, forward (out-of-area) deployed forces, requirements for protection of shipping, power projection, and amphibious capability. Both run a high-tech philosophy, trading mass for accuracy in weaponry and relying on offensive strike power to achieve control of the seas. In the 1990s, the two nations’ naval operations and fleets are more alike, possibly, than at any

other time in the 200 years since France committed her army and navy to an operation in North America that changed the world.

Counter-Arguments to the Coalition Battle Group Concept

The principal "naysayers" argument to a coalition battle group centers on the traditional Nato perception of French political independence and military self-reliance. This argument is valid for nuclear deterrence. France will never accept subordination of her deterrent force to an Allied decision-making structure.³¹ However, at the conventional level, and hence for most points pertaining to conflict, the traditional perception may be a rear-window view of French strategic requirements. The inevitable internationalization of France's naval arms industry will accelerate defense cooperation with her allies.³² In 1987-88 in the Persian Gulf, the French displayed not only a capability, but a willingness to achieve interoperability with U.S. fleet forces—to the extent that the French carrier *Clemenceau* and her escort ships easily and efficiently replaced and changed screening and stationing commitments within the U.S. fleet.³³ Communications and control (C²) worked well between both forces. The French Navy routinely carries out ship-to-ship communications in English, has compatible data link systems, uses the Nato signal book, and participates annually in a dozen joint exercises with U.S.-Nato forces.³⁴ Thus, the groundwork exists for a coalition battle group which could operate at the conventional war level. The separation of nuclear deterrent issues from conventional presence and intervention is the key to an operable coalition naval force.

A second argument against a coalition battle group might be that, despite the similarities between the U.S. and French strategic interests, there would be no guarantee of concurrence in policy between the two navies. Hence, unified direction of a coalition force could be difficult to reach. This argument may apply to conventional deterrence outside the scope of Nato influence, but should the Soviet sphere of influence diminish, and Nato's political influence expand, for example in Southwest Asia, then a stronger argument would certainly exist for coalition U.S.-French naval presence and intervention when, and if, necessary. And, even if Nato's influence remains as it has been, a bilateral U.S.-French naval agreement for coalition operations could still be engineered for areas of common concern, such as in the Mediterranean or in the Indian Ocean.

Of all the arguments against a coalition battle group, perhaps the most profound may originate in the American isolationist spirit, still not yet dead, which imbued U.S. naval leaders with a go-it-alone approach, not divorced from alliance support, but never relying on a foreign power to secure national objectives. Perhaps a coalition battle group signifies the forfeiture of this tradition. Ultimately, the cost of maintaining this tradition may dictate a

change no less profound than the change that occurred in France 200 years ago when the *ancien régime* fell and the modern world was born.

Conclusions

Coalition operations, particularly in partnership with the French Navy, present a viable option for the continued forward presence of the U.S. Navy. The U.S. and French navies have strategic and operational interests that can be shared. The force structure elements of both indicate not only compatibility, but gap-filling mission roles as well. French and U.S. naval budgetary constraints and increased industrial cooperation programs substantiate the practicality of coalition operations, which would beneficially impact on foreign arms sales and thus on third-world interests. In this increasingly multipolar world, the U.S. maritime strategy should incorporate the concept of coalition battle group operations to sustain national interests and objectives.

As Benjamin Franklin said, "Surely we must all hang together, or we shall hang separately."

* * * * *

French Naval Order of Battle

Personnel. 66,100 (including 12,000 Naval Air Force, 19,100 Conscripts and some 2,500 Marines), plus about 28,000 Reserves.

Structure. 5 commands (Atlantic, Indian Ocean, Pacific Ocean, Mediterranean: Strategic Submarines).

Fleet

Aircraft carriers. 2 *Clemenceau*-class CTOL carriers. 1 *Jeanne D'Arc*-class helicopter carrier and training ship.

NB: Two *Charles De Gaulle*-class nuclear-powered aircraft carriers are scheduled to replace the *Clemenceau* and *Foch* by the year 2000. The lead ship is already under construction, and is scheduled to be commissioned in 1995.

Cruisers. 1 Colbert-class guided missile cruiser

Destroyers

6 *Georges Leygues* class (C70) (7th and last ship under construction)

3 *Tourville* class (F67)

2 *Suffren* class

1 *Cassard* class (2nd under construction)

1 *Aconit* (C65) class

1 *La Galissonniere* (Type T-56)

1 *Duperre* (modified Type T-53)

1 *Dupetit Thouars* (modified Type T-47)

1 *Maille Breze* (Type 47)

Frigates

17 *D'Estienne d'Orves* class (A69)

6 *Commandant Riviere* class (being withdrawn)

NB: The first 3 units in a planned series of six light frigates (*Floreal* class) have been ordered.

Submarines

1 *L'Inflexible* class with 16-M4s

5 *Le Redoutable* class: 2 with 16 M-4s, 3 with 16 M-20s (being converted to carry the M-4 MIRVed SLBM with a range of 3,000 miles)

NB: *Le Triomphant*, leadship in a new class of SSBN's, under construction

4 nuclear-powered Rubis-class attack submarines (3 more under construction)

4 *Agosta* class

8 *Daphne* class

3 *Narval* class (reserve)

Amphibious Forces

2 *Ouragan*-class assault ships

1 *Foudre*-class assault ship

5 *Batral*-class assault ships

30 LCMs

11 LCTs

5 LSTs

Light Forces

10 *L'Audacieuse*-class patrol craft

4 *Glaive* class

8 *Leopard* PCCs

Mine Warfare Forces

10 *Eridan*-class minehunters (2 under construction)

5 *Circe*-class minehunters

5 *Sirius* class

4 *Ouistreham* class (ex-U.S. *Aggressive* class)

NB: 6 ocean minehunters (Bamo-type)

Miscellaneous and Auxiliaries. 4 *Durance*-class underway replenishment tankers (also command ships for the Indian Ocean), 4 support tankers, 4 *Rhin*-class depot/support ships, 9 supply tenders, 9 trials and research ships, 7 oceanographic and research ships.

Naval Aviation

3 strike squadrons with 60 Super Etendards

1 interceptor squadron with 12 F-8E Crusaders

2 ASW squadrons with 27 Alizés

5 maritime reconnaissance squadrons with 30 Breguet Atlantics and 5 Guardians

1 reconnaissance squadron with 10 Etendard IVPs

3 ASW helicopter squadrons with 40 Lynx

2 assault helicopter squadrons with 13 Super Frelons

2 SAR/liaison squadrons with 24 Alouette II/III

Major Construction Programs Currently Underway

-2 *Charles De Gaulle*-class carriers

-A new class of 4 SSBNs (*Le Triomphant*)

- 1 additional C70 destroyer
- 1 *Cassard*-class DDG
- 3 FL light frigates (*Lafayette* class, 6 planned)
- 3 patrol frigates (*Floreal* class, 10 planned)
- 2 TCD 90 LSDs
- 6 Bamo class mine warfare ships
- 27 Atlantique IIs ASW aircraft (being delivered) (total of 42 planned)
- The shipboard Crusaders and Super Etendards are to be replaced by the new Rafale ACM by the late 1990s (total of 86 aircraft planned)

Major Naval Bases: Brest, Cherbourg, Lorient, Toulon

Source: George G. Weickhardt, "U.S. Maritime Strategy and Continental Options," *Military Technology*, January 1990, pp. 82-85.

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The character and the skill of the player against you are important factors.

Naval Strategy

A. T. Mahan (1911)

Little, Brown (1918), p. 177

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Napoleon is reported to have said at Austerlitz, when urged to seize an evident opportunity, "Gentlemen, when the enemy is committed to a mistake, we must not interrupt him too soon."

Naval Strategy

A. T. Mahan (1911)

Little, Brown (1918), p. 289

* * *

Napoleon once said that the art of war consists in getting the most of the chances in your own favor. The superior fleet holds the strongest suit, but the strongest suit does not always win.

Naval Strategy

A. T. Mahan (1911)

Little, Brown (1918), p. 177

Ambition and Careerism

Joseph G. Brennan

Aristotle confesses that the Greeks do not have a word for “ambition” except in the pejorative sense. He writes briefly on the subject in the fourth book of his *Nicomachean Ethics*. Aristotle is less interested in constructing ethical theory from the standpoint of “right” versus “wrong” than he is in analyzing the virtues or excellences that pertain to human character. We should strive, he says, to perfect our character by acquiring these virtues, for we are not born with them but are rather by nature fitted to receive them through habit and education. In contrast to the intellectual virtues, such as wisdom and devotion to science, Aristotle talks of the moral virtues in terms of a mean or balance between two extremes—one of excess, the other of defect. Thus in his leading example, courage—especially military courage—the mean lies somewhere between the two extremes of cowardice and rashness. Just where the mean lies in the moral virtues, he says, must be determined by reason.

In classifying the virtues, Aristotle comes in due course to ambition [*philotimia*].¹ An aura of disapproval hangs about this word, much as it still clings to our word “ambition” or “ambitious.” Shakespeare’s Antony says to the Romans:

The noble Brutus
Hath told you Caesar was ambitious:
If it were so, it was a grievous fault,
And grievously hath Caesar answered it.²

For “ambition” in the honorable sense, Aristotle uses the term “the Nameless Virtue” and describes it as the seeking and attaining of deserved honor. The excess of this trait leads us to grasp at honors of which we are not worthy and at the expense of others. The defect of it we find in the poor-spirited or small-minded man, who stands in contrast to Aristotle’s ideal, the magnanimous or great-souled man. Indeed, it is his analysis of the concept of the magnanimous man that leads Aristotle to the subject of ambition. The

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great-souled man seeks honor at the hands of those worthy to confer it; the vainglorious man goes after honors and position he does not deserve, while the poor-spirited man does not seek honor because he has a small opinion of himself. The poor-spirited man has no get-up-and-go, as Russell Baker's mother would say (she who constantly reminded him when he was a small boy that it was his duty to "make something of himself").³ Aristotle admired men who "made something of themselves" and would be puzzled at any military officer worth his salt today who would not want to be a general or an admiral, who would not work hard and well to attain that rank, accepting the honors as well as the responsibilities that go with it.

In U.S. military circles today, the question has been revived: What is the difference between an honorable, useful drive to advance in one's career, and, by contrast, that bad thing called "careerism"? Back in 1978, in the era of post-Vietnam syndrome, Gabriel and Savage's *Crisis in Command* caused an excited stir in the Pentagon.⁴ The book's authors charged the armed services with ethical deterioration and identified "careerism" as one of the causes or effects of that decline. Prominent among factors alleged to have led to the development of this vice was rapid rotation in the army during the Vietnam conflict, six-month tours so that an officer could include combat service in his record. Such officers, it was claimed, were seeking preferment and advancement in the wrong way.

Today we see the Vietnam era drifting into history, but once again the charge of "careerism" in the U.S. officer corps has been raised, this time in particular by two chiefs of service. In the spring of 1988, General Alfred M. Gray, Marine Corps Commandant, and General Larry B. Welch, Air Force Chief of Staff, expressed concern about "careerism" in their services. According to Richard Halloran's report in the *New York Times*, headed "Military Careers: Air Force and Marines Battle 'Ticket-Punchers,'" the term "ticket-punchers" is firmly tied to "careerism."⁵ The report quotes General Gray as saying repeatedly that he is "determined to stamp out careerism in the Marine Corps." General Welch made his position clear in an article in the journal *Airman*, stating that many of his officers had become primarily concerned with attending schools, taking on additional duties, and persuading generals to endorse their annual evaluation reports.⁶ "Job performance," said General Welch, "seemed less and less the measure of success." According to General Welch, the new air force evaluation system is designed to remove guesswork and put the emphasis on the officer's performance of his assigned job, on the tour he is doing now, not the tour he is aiming for on completion of his present assignment. In December 1988, at a post-lecture photo session at the Naval War College, General Welch reiterated his support of this position. "You're asking the wrong question," he said, "if you're asking what plans for advancement these young officers should make as they look down the road to their next tour. Their focus should

be on top performance *now* and not on determining what set of future positions or career steps will ensure success.”

According to the Halloran story, it appears that “careerism” has been less of a problem in the navy. Sea duty is a good way of advancement in that service, and among naval officers with ambition (whether in the honorable or pejorative sense of the word) there is a feeling that going to graduate school or even to the prestigious Naval War College may get in the way of sea command and more rapid professional advancement. (However, we may note in passing that the former Chairman of the Joint Chiefs of Staff, Admiral Crowe, moved away from submarines to study for a Ph.D. at Princeton.)

At this point we might look back a bit at some great captains of the Second World War. Had he known General Douglas MacArthur, Aristotle would have considered him a paradigm of ambition, in the sense that MacArthur sought honors and was indeed worthy of them. What we do not know is what the philosopher would have made of Colonel MacArthur’s mother writing to Secretary of War Baker in October 1917, requesting the secretary to make every effort to see that her son was promoted to brigadier general.⁷ But we can surmise that Aristotle would also have found a place for the general in his *Poetics*, where he writes of the man “of great reputation” who, by some “error of judgment” [*hamartia*] overreaches himself in such a way as to encompass his downfall.⁸ Not that the general fell very far: after his recall by President Truman from the Far East he faded away in a blaze of glory and honor, and that is what Aristotle’s man who possesses “the nameless virtue” seeks.

General Dwight Eisenhower may not have had quite the same sense of honor due him as MacArthur had, but he had a weather eye out for his career. His biographer, Stephen Ambrose, states that after his 1928 tour at the Army War College, “he [Eisenhower] wanted to choose the general staff, as service in that was a major plus in an officer’s career.”⁹ In his excellent essay “Is Ambition Unprofessional?” (*Army* magazine, July 1988), Lloyd Matthews, a retired army colonel and editor of *Parameters*, cites General George Marshall’s biographer Forrest Pogue recording that “he [Marshall] was able and ambitious.”¹⁰ Marshall’s father was equally ambitious in his son’s behalf, pulling all the strings he could to get the VMI graduate his lieutenant’s commission.

General Joseph Stilwell, who saw more frontline action than any other U.S. four-star general, may be considered as exhibiting the virtue of ambition only in a Pickwickian sense. Standing as he did at a slight angle to the universe, “Vinegar Joe” declared that “the higher a monkey climbs the tree, the more you see of his behind.”¹¹ Indeed, Stilwell as a youth had no intention of going to West Point. His father had planned to send him to Yale, but changed his mind when young Joe was involved in a schoolboy prank that resulted in the inadvertent slugging of the principal of Yonkers High School. Joe’s father

decided that his son needed training in discipline and made arrangements for his appointment to the Military Academy. According to Barbara Tuchman, Stilwell's biographer, Dr. Stilwell conveyed the news to his athletically inclined son in a soothing way, telling him, "There is a nice place up the Hudson where you can play tennis."¹²

We Americans are a success-oriented people, have been since the days of Ben Franklin, Joseph Epstein's model of American ambition in his book titled with the name of that virtue.¹³ Old Ben has left us all kinds of little notes, advice enlivened with humor, on how to get ahead, arrive at the top, how to make one's pile with prudent honesty, how benevolently to share the proceeds of our success with those less fortunate (and perhaps less ambitious) than ourselves, keeping a decent share of the profit for our personal benefit, for, after all, we owe it to ourselves. The opposite of success is failure, and we Americans have little patience with failure. That is one reason why the trauma of Vietnam hit us so hard. We failed. But we are not supposed to fail! Navy fighter pilot Jim Stockdale, hermetically transformed by more than seven years' confinement in Hanoi, half of them in solitary and under torture, emerged from captivity declaring among other things that the American officer must learn how to deal with failure as well as success.

With regard to careerism, I asked a number of officers at the Naval War College how they construed the term. Many prefaced their remarks with "service before self." One officer said careerism means climbing to the top by stepping on the faces of others. A second saw nothing wrong with being ambitious and concerned with one's military career: after all, isn't it a matter of doing the best for yourself that you can without injury to others? A third admitted that he could not define careerism but, like the eminent jurist on pornography, he knew it when he saw it. Others mentioned "ticket-punching," and when asked to clarify the meaning of that well-worn phrase, said that it was trying to get those assignments reputed to be the fastest tracks to promotion. Still another said that careerism was making sure of your visibility, seeing to it that high-ranking superiors notice you in such a way that when the promotion board meets and your name comes up, someone will remember you favorably. Others spoke in terms of deep drafts, screening for major command, aiming for executive officer on a cruiser or a carrier, or getting a squadron command. A few spoke of the Washington tour as a necessary call on the Wizard of Oz, without which it was impossible to follow the yellow brick road to ensured promotion.

More than one officer spoke of what seemed 180 degree turns in the matter of helping advancement along. An air force officer, having listened to his chief of staff talk about the new evaluation form's emphasis on an officer's current assignment, recalled that when he entered the service a dozen or so years before, officers were encouraged to "fill the square" by completing advanced education in the civilian as well as the military sector. "I personally

received," said this officer, "a letter from a general officer urging me to obtain a master's degree in order to remain competitive in achieving my full potential." He added, "I followed his advice."

And a marine colonel wrote, "If I were to be asked to list the primary negative influence in the officer corps today, I would unhesitatingly nominate 'careerism' as being at the root of the problem of ethical shortfalls. In its essence, careerism can be described as the subscription by an officer to that school of thought described by Gabriel as the 'entrepreneurial model.' Such an officer believes he has a 'job' to perform within a corporate bureaucracy, that the true measure of success is how far and how fast he can climb to what he perceives as the ladder of success. His credo is risk avoidance and promotion of self, his loyalty is entirely personal, his ethics situational. . . . If he manages to maneuver himself into a command position, he uses his subordinates to advance his career with concomitantly little understanding or appreciation of his role as leader, teacher and example to his junior officers. . . . The tragedy of the careerist is that he is self-replicating, for he drives off many of the very type of officer needed in the military services."¹⁴

Let me end this roll call of officers by citing two other opinions offered. One officer reminded his seminar that many of the junior officers in line for promotion will be judged by superiors who may themselves have come up by way of careerism and ticket-punching, whether you take these terms in their good, bad, or neutral sense. The second made the sensible remark that we should be careful not to label as "careerism" the very natural and useful urge in an officer "to be where the action is."

In times of hot war, promotion and advancement come quickly to competent military officers, many of whom in times of peace have been chafing under the bonds of slow promotion. In peacetime, some services have certain advantages over others. Navy and Coast Guard ships and aircraft operate in ways not altogether different from wartime deployment, so it may be hard for their officers to find time to go to graduate schools or war colleges. Other services, or maybe all of the services, may have a problem in combating the inevitable erosion of martial spirit in an era of prolonged, though uneasy peace. "Peace" here is taken to mean the diminution of clear and present danger of superpower conflict, not the jabs and jolts the nation may expect continuously to receive from smaller powers and their agents ill-disposed to the United States. As we look down the road to a bumpy peace that may extend into the twenty-first century, will the problem of "careerism" (in the bad sense) grow progressively more difficult to get rid of, linked as it is by many analysts to the entrepreneurial rather than the military ethos?

In his *Critique of Judgement*, Kant says, "War, provided it is waged with order and due respect for the sacred rights of civilians, has something sublime about it, while too long a peace may lead to a purely commercial spirit."¹⁵ U.S. military officers would not go quite that far, but they might admit that Kant

has a point there. After all, one can devise just so many training programs and exercises. To which some critics have added that the present danger is not so much the military threat posed by the U.S.S.R., but the prospect of continuing support into the next century for a 2,000,000 personnel armed force backed by immense hardware of incredible sophistication, backed in turn by a navy of a dozen or more battle-groups. How to avoid, ask these critics, the sagging of this gigantic apparatus under its own weight? How to escape the erosion of morale—not to mention morals—among the personnel of a mighty military arm, its future uses not always clearly visible? How to clean house, keep a taut ship, continue the march, without ambition and careerism, in the worst sense, from becoming all but inevitable?

In reply, one might observe that some countries seem to run armed forces of high proficiency and morale that have not fought a war for centuries. How do they do it? Although Sweden and Switzerland, in size and demography, are incommensurable with the United States, might we put the question to military representatives of those countries? I asked two colonels about it, one Swedish, one Swiss: How do you maintain high morale in your military forces in the context of past and ongoing peace? The Swedish colonel promptly named two factors—not the only ones, but the most important: first, there is the threat, the perpetual shadow cast by the great neighbor to the east; and second, the integration of the military and civilian communities in his nation, assisted in large part by required national service from all sectors of the population. The Swiss officer, a retired colonel of reserves and a professor at the University of Zurich, stated that his country had its threats as well: that, for example, of being caught in the middle of clashing powers, as in the Second World War, and a similar situation represented by the Cold War which, fortunately, did not break out into hot conflict. Like the Swedish officer, he cited the close weave of the military into the civilian community of his country: “Switzerland does not have an army; it is an army!”¹⁶ Every male between the ages of 20 and 45, whatever his station, is obligated to perform annual military service. Perhaps this is not the time or place to recall John Stuart Mill’s conviction that an all-volunteer force is regressive, attracting to its enlisted ranks the least privileged members of society. This opinion might be countered by the sobering thought that the Vietnam experience showed us that you cannot draft into military service an unwilling middle class. But the time for reconsideration of obligatory national service may yet come for us, possibly as early as the turn of the century.

As far as the U.S. military is concerned, I believe the critics overestimate the threat of moral erosion from within, though perhaps we should reflect on some points raised in their jeremiads. In the enlisted ranks, the all-volunteer force is working better for us than the early troubles led us to expect. So far as this civilian observer can determine, on the basis of limited observation, the morale of the U.S. officer corps is, on the whole, high. Just as there is

honorable ambition, a desired trait in an officer, so there is "good" careerism as well as the more talked-about "bad." The legitimate desire for personal advancement, as Colonel Matthews says, is a vital psychic fuel in military organizations. I would add that you cannot put a mix of high-spirited, success-oriented U.S. military officers together and expect them to trudge along quietly without interest in ambition or career. The dialectic of the situation, as philosophers would say, derives from the fact that we Americans are a highly individualistic lot (Tocqueville noticed this trait not long after he landed in Newport in 1831), and it must be quite a struggle for energetic young American officers of superior quality to suppress those drives in themselves in a military context where service before self, community before the ego, represents the ideal. But the dialectical tension between individual drive for advancement and requirements of service before self need not be entirely disadvantageous, either to the individual officer or his military service. For it is the tension of opposites, as Heraclitus said thousands of years ago, that keeps the world in being, that generates the stretched-string vibration of waking, not sleep, not death but life.

Notes

1. Aristotle, *Nicomachean Ethics*, Book IV, Ch. 4, 1-6. *Philotimia* (literally, "love of honor") has a somewhat narrower connotation than our word "ambition." The ambitious man today may aim at success, power or wealth as well as honor.

2. *Julius Caesar*, Act III, ii, 82-85.

3. Russell Baker, *Growing Up* (New York: St. Martin's Press, 1982).

4. R. A. Gabriel and P. L. Savage, *Crisis in Command* (New York: Hill & Wang, 1978).

5. *New York Times*, 25 April 1988, sec. A, 18.

6. General Larry B. Welch, USAF, "Chief Concerns," *Airman*, April 1988, 22-23.

7. William Manchester, *American Caesar: Douglas MacArthur 1880-1964* (Boston: Little Brown and Co., 1978), 93.

8. Aristotle, *Poetics*, Ch II, 13, 8-12.

9. Stephen E. Ambrose, *Eisenhower: Soldier, General of the Army, President-Elect, 1890-1952* (New York: Simon & Schuster, 1983), 87.

10. Colonel Lloyd Matthews, USA (Ret.), "Is Ambition Unprofessional?," *Army* magazine, July 1988.

11. Attributed to Stilwell in *New York Times* editorial "Rumsfeld's Rules of Ego," 5 December 1988, A 22. See below, Tuchman, 272.

12. Barbara W. Tuchman, *Stilwell and the American Experience in China, 1911-1945* (New York: Bantam Books, 1980), 13. Note Tuchman's observation of Stilwell (501-2): "Perhaps in his [Stilwell's] heart he was not ambitious or desirous of the top command; even, in his inmost heart, did not think he deserved it. . . . He was one of those individuals who, though conscious of their quick intelligence and superior ability, for some reason do not think highly of themselves."

13. Joseph Epstein, *Ambition: The Secret Passion* (New York: E. P. Dutton, 1980).

14. Colonel Michael C. Wholley, USMC, "Careerism and Corporate Ethic," unpublished essay, Naval War College, October 1988.

15. Immanuel Kant, *Critique of Judgment*, II, 28. Professor John Ladd, a noted Kant scholar, writes, "If you read the surrounding passages, you will see at once that Kant is not approving of war. The attribution of sublimity to it is aesthetic, the feeling of the sublime coming under the aesthetic, like the beautiful, and not under ethics of justice (*Rechtslehre*). Kant repeatedly says that ethics is not a matter of feeling and so the feeling of the sublime cannot be an ethical ground. . . . But [attribution of the sublime to war] should not be taken as condoning war, morally speaking, any more than the feeling of awe before a hurricane means that one thinks it a good thing. For he (Kant) thinks that war is a violation of human rights, the right to live in peace (liberty)." Letter to the author, 22 December 1988.

16. See John A. McPhee, *La place de la concorde suisse* (New York: Farrar, Strauss, Giroux, 1984).

A Paradigm for a Post-Postwar Order

Robert G. Kaufman

American foreign policy has entered into a new, promising, but potentially dangerous era. The advent of Mikhail Gorbachev and the apparent collapse of communism in Eastern Europe have convinced many that the democracies have won the Cold War, or that victory is imminent. Simultaneously, the relative decline of U.S. economic power vis-a-vis its European and Asian allies has convinced others that multipolarity will replace bipolarity as the ordering principle of world politics. Nonetheless, there are compelling reasons to doubt both the utopian prediction of democracy inevitably triumphant and the pessimistic vision of an American empire doomed to inexorable decline.¹

There is no doubt, however, that real and significant change has occurred, not just internationally, but in the domestic context of American foreign policy as well. With the ideologically charged Cold War between the United States and the Soviet Union apparently waning, with America's global economic power facing an increasingly stiff challenge from its principal geopolitical allies, and with budgetary pressures to reduce U.S. defense expenditures mounting, objections have intensified to the policy of containment that has served as the basis of American foreign policy since the late 1940s. Some advocate a radical retrenchment of American commitments overseas and a return to some variant of isolationism.² Others call, less drastically, for a substantial devolution of responsibility to America's allies for meeting a diminished Soviet threat. According to still others, the United States must give primacy to economic rather than security issues. The message of all these alternatives is the same: the United States can and must significantly reduce its commitments and the means for carrying them out.

The Cold War paradigm unreconstructed clearly will no longer suffice as a guide for American foreign policy, but neither isolationism nor substantial devolution of U.S. global responsibilities is a prudent alternative. A United States engaged in world politics remains a necessary if not sufficient condition

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for a peaceful transition to and maintenance of a stable and prosperous post-postwar order. Geopolitical realities, American ideals, and American self-interest interact and coincide to underscore the enduring importance of firm, unambiguous, and credible U.S. commitments to its allies in Europe and Asia. The alternatives to this strategy risk undermining the positive trends of the moment, increasing the dangers should reform in the Eastern bloc fail, and unleashing other forces in world politics which could jeopardize the peace. Although domestic political constraints will make it difficult to sustain a policy of vigilant internationalism in the post-postwar era, determined and farsighted statesmanship can make such a policy possible.³

The Legacy of Containment

Since 1945 the United States has pursued a policy of globally containing communism in general and Soviet power in particular.⁴ American statesmen based this policy on several assumptions. First there was the assumption, reflecting Halford MacKinder and Nicholas Spykman's theories of geopolitics, that the United States could not be secure if a single hostile heartland power came to dominate the Eurasian rimlands. In some measure this geopolitical logic also inspired President Wilson and Roosevelt's decisions to intervene in World War I and World War II, respectively.

There was the corollary assumption that the Soviet Union was an ideological and military adversary with the intention and the capability to dominate the Eurasian landmass. In his seminal Mr X article of July 1947, George Kennan expressed the view, to which most American statesmen have since subscribed, that the Soviet Union would not cease to wage war on the international system until it ceased to wage war on its own citizens.⁵ The object of American foreign policy was, accordingly, to contain the Soviet Union's relentlessly expansionist tendencies in the short term with a combination of military and economic power. American statesmen hoped that denying the Soviet Union the opportunity for expansion would eventually unleash domestic forces within that country which would reform the system in a more benign direction and moderate Soviet global ambitions.

There was also the assumption that containing Soviet power depended on firm, unambiguous, and credible American commitments to vital power centers in Europe and Asia. The lessons of Munich strengthened this conviction immeasurably. Invoking the failure of appeasement and the ill-begotten isolationism of the United States during the interwar years, and analogizing the Soviet to the Nazi threat, the Truman administration and most of its successors believed that formal and credible alliances with Europe and Japan could forestall a recurrence of the events which culminated in World War II. Various American administrations thus envisaged NATO and the Mutual Security Treaty with Japan as a shield behind which these allies could

restore their economic power, which the United States promoted simultaneously through the Marshall Plan, the General Agreement on Tariff and Trade, the International Monetary System, and the encouragement of European integration. With less consensus and success, the United States committed itself increasingly to resisting all variants of communism in the underdeveloped world on the theory that, cumulatively and psychologically, communist victories there could cause an adverse change in the world balance of power to the benefit of the Soviets.⁶

Finally, there was an ideological dimension to the policy of containing communism. How much ideological diversity the United States should tolerate in the world remains, to be sure, an open question. Although some administrations pursued this policy more vigorously than others, virtually all of them regarded the establishment of firm and stable democracies in the developed and underdeveloped world as the preferred alternative. American statesmen sought not just to restore Japanese and German power, but to create enduring democratic institutions there and throughout Western Europe in the belief that democracies are more likely to cooperate and less likely to fight with one another. Even in the Third World, where the American record remains more controversial, Samuel Huntington has argued powerfully that American power has served on balance to promote democracy there too.⁷ Similarly, the Reagan administration argued, in justification of its policies, that authoritarian regimes are less oppressive and more amenable to democratic reform than communist regimes — that, in effect, U.S. interest in supporting its traditional friends and U.S. self-interest coincided.⁸

This summary of containment artificially compresses the range of debate on its underlying assumptions and implementation. The Nixon, Ford, and Carter administrations viewed the Soviet Union as less ideological and communism as less monolithic than did their predecessors or Reagan's. In its first two years the Carter administration largely rejected the framework of containment, as has much of the mainstream of the Democratic party since its collective disillusionment with the Vietnam War in the late 1960s. Some administrations have emphasized the military dimension of the Soviet threat more than others. Still, these assumptions reflect generally the underlying basis of containment as practiced since 1945.

Anyone pondering the possibilities for the post-postwar world must consider the extraordinary success of the American policy of globally containing communism. Defending this policy will doubtless provoke controversy. Some believe that the policy of global containment rested on an exaggerated estimate of the Soviet threat, or produced counterproductive excesses in American foreign policy.⁹ There is, too, the legacy of revolutionary and ethnic violence, the accumulation of armaments, and the series of devastating limited and protracted wars which have occurred since 1945. Even granting the validity of these arguments, American statesmen

deserve great credit for maintaining the postwar system at less cost and risk than the history of the 20th century and the foreign policy records of peacetime democracies would have given anyone the right to expect. Who would have predicted, at the onset of the Cold War, that the United States and its democratic allies would have succeeded in bringing the end of the Cold War in sight on terms favorable to the West? Who would have predicted further that the democracies could have achieved this outcome against an implacable ideological adversary and military colossus without having to fight a war on the scale of the two world wars?¹⁰

That containment has worked does not necessarily mean that the democracies should continue the policy. Indeed, many argue that containment should be a victim of its own success. Nonetheless, the declaration of victory in the Cold War is premature. Its inevitability is contingent, in the first place, on what the United States chooses to do. Then, assuming the Cold War ends on terms favorable to the West, American power and the willingness to use it will remain vital to establish and sustain the post-postwar order which emerges.

Winning the Cold War

What has taken place in the Soviet Union and Eastern Europe is certainly fundamental and unprecedented. The collapse of communism from Warsaw to Bucharest has proceeded at a pace and scope which has astonished informed observers on all sides of the political spectrum. Within the Soviet Union change has proceeded more slowly, but political reform has occurred there too which eventually could radically transform the Soviet political system. Internationally, the Soviet Union has dramatically curtailed its support of Third World regimes hostile to the West and has disengaged from Afghanistan. For the first time in the long history of conventional arms negotiations, the Soviets have accepted the principle of deep and asymmetric cuts in the conventional arsenals of both NATO and the Warsaw Pact.

Although these changes are remarkable, they are still not irreversible. The Soviet Communist party has only begun to relinquish its monopoly of power. The Soviet Union still possesses the most powerful military establishment in the world; nor, until recently, had any perceptible change taken place in the Soviet Union's force structure, military output, or the size and offensive posture of its armed forces. Quite possibly, Gorbachev merely has shifted the tactics of Soviet foreign policy from blandishment to seduction, while the objectives of Soviet grand strategy remain the same: to decouple Germany from NATO, and NATO from the United States. Even if Gorbachev is genuine by Western standards, there is no guarantee that he will survive, especially should glasnost and perestroika fail to revive the Soviet economy, or ethnic and nationalist violence erupt within the Soviet Empire. The best

evidence available suggests not only that glasnost and perestroika have not worked, but that Gorbachev is unable or unwilling to undertake the bold policies that could possibly make them work.¹¹ The Bush administration is already drawing up contingency plans in the increasingly likely case that either the military or radical reformers replace Gorbachev. Nor, in the history of declining empires, have many gone quietly or peacefully into the night.¹² Consider the decisions of the Austro-Hungarian and Japanese empires in this century to fight rather than to accept disintegration and defeat. Consider, more recently, the Chinese Communist party's decision in the summer of 1989 to suppress dissent brutally and to cling to power rather than to permit gradual reform.

This is not a counsel for pessimism, but for prudence and caution. The trends are favorable. The cost of reversing the changes within the Soviet Union and Eastern Europe mount daily. The devastating consequences of a nuclear exchange between the superpowers also raise sharply the threshold necessary to contemplate the use of force to reverse historic decline, even among the most desperate and tenacious elites. The problem for American decision makers is how best to ensure that the favorable trends continue while minimizing the risk should totalitarian communism revive. Even now, the policy of vigilant containment is vital and prudential. Applying steady military and economic pressure on the Soviet Union has worked to make victory in the Cold War probable. Why abandon a successful policy on the verge of a success not yet assured?¹³

Some argue, to the contrary, that a hard-line policy toward the U.S.S.R. will undermine Gorbachev and strengthen Soviet hard-liners, which may result in missing a historic opportunity to end the Cold War.¹⁴ This analysis is plausible in theory but flawed in point of fact. The record demonstrates that the Soviet Union, and Great Russia before it, reform not when they feel secure but when under pressure.¹⁵ Contrast the success of the Reagan administration in dealing with the Soviet Union and the failure of Nixon and Carter's premature detentes. Although Reagan benefited from some internal developments within the Soviet Union autonomous from U.S. policy, his administration's vaunted arms buildup and the restoration of American military power deserve much credit for moderating Soviet hostility and convincing Gorbachev that the Soviets could not hope to bully or outbuild the United States.

Even in the justifiable enthusiasm of the moment, the United States must maintain NATO as a credible political and military deterrent to the Soviet Union. This means that Germany must remain an integral part of NATO; for without Germany, by the sheer weight of its geography, resources, population, and vigor, NATO is unsustainable. This does not mean that the alliance should reject out of hand arms control agreements with the Soviet Union aimed at reducing both sides' arsenals substantially. Perhaps arms

control is not only a political necessity for peacetime democracies, but strategically desirable as a potential way to close the credibility gap of the American commitment to defend NATO (which depends currently on the willingness of the United States to use nuclear weapons first, despite its vulnerability to devastating Soviet attack). Still, American statesmen must recognize that any arms accord which substantially decouples American forces from Europe risks unleashing powerful and unilateral pressure for further reduction and disengagement which peacetime democracies will find much more difficult to reverse should the need arise than more closed societies. NATO must therefore proceed with arms control cautiously, lest it reduce the cost or risk of reversing the salutary changes in the Soviet Union and Eastern Europe that soon could end the Cold War in the democracies' favor. Furthermore, the United States and its allies must not ameliorate significantly the Soviet Union's economic crisis, lest the necessity for free enterprise and political reform lessen and the totalitarian system survive.¹⁶

Managing the Transition to the Post-Postwar Order

Suppose, however, that the collapse of communism occurs in Eastern Europe and the Soviet Union irrevocably and soon. What should America's role be in making the transition to and maintaining a prosperous post-postwar order? Most predict that, in the short term at least, the world will return to multipolarity, with the United States, Japan, China, Russia, possibly a united Western Europe, or possibly a now united Germany as the major powers. Some hope that, in the long term, the world will move to unipolarity, based upon a super-sovereign state among the industrial democracies.

In either type of world, many of the central premises of containment remain valid and a United States actively internationalist a predicate for achieving them. The end of the Cold War does not invalidate the imperatives of geopolitics. Now as before, the United States still has a vital interest in ensuring that no hostile power or combination of hostile powers achieves dominance of the Eurasian landmass. Thus, Western Europe, East Asia, and the Middle East should remain central focuses of American concern. Now as before, the United States also has a vital interest in Latin America, where crisis could imperil America's pursuit of its other vital global concerns.¹⁷

Nor does the end of the Cold War invalidate the premise that the United States has a vital interest in promoting democracy abroad, especially in geopolitically crucial states. Indeed, American ideals and self-interest will remain complementary in the post-postwar era. One does not have to accept the argument that the spread of democracy inevitably will end war to recognize that Michael Doyle has given powerful if not conclusive empirical confirmation to Kant's prediction offered more than 200 years ago: Constitutionally secure democratic regimes not only tend not to fight one

another, but are more likely to cooperate and manage conflicts of interest harmoniously. Witness, for example, the zone of peace among democracies since the end of World War II.¹⁸

This is not to say that the United States can or should court enormous costs and risks to establish or maintain democracy everywhere. Even a country as powerful as the United States does not have the resources to discharge this enormous burden all of the time. Sometimes the prospects for democratic forces succeeding are too remote and America's interest in a favorable outcome too peripheral to justify active American intervention or involvement on democracy's behalf. This is to say, however, that the promotion, establishment, and maintenance of constitutionally secure and stable democracies at least in Europe and East Asia stand as important national interests of the United States.

Recognition of the enduring geopolitical imperatives of U.S. foreign policy does not in itself make an unassailable case for the policy of vigorous internationalism. Advocates of this policy also must argue compellingly that substantial American withdrawal, devolution of responsibility to erstwhile allies for maintaining their security, or a cutback in American capabilities could menace America's vital geopolitical concerns. Will there really be plausible threats to these vital U.S. geopolitical concerns which require firm, unambiguous, and credible American commitments abroad? Does the establishment and maintenance of democracy minimize these threats? Is American internationalism and vigilance necessary to encourage the salutary trends toward global democratization, which seem to have a powerful momentum of their own regardless of what the United States chooses to do? It is dangerous and imprudent to act on the assumption that the answer to these questions is no.

The collapse of communism does not necessarily mean the end of rivalry in international politics. For the foreseeable future the world will remain bipolar, militarily if not economically. Furthermore, even a non-communist Soviet Union will remain a major potential geopolitical threat. True, a Soviet Union without an ideological cause will become a less menacing adversary. Indeed, the Soviet Union could become even more pacific vis-a-vis the United States and other democracies should the liberalizing and democratizing trends continue. But democracy is not the only or even the most likely successor to the present Soviet regime. The Soviet Empire could implode violently amidst seething ethnic violence, while a successor Russian state could return to some variant of authoritarianism if not communism. Czarist Russia was historically expansionist and interventionist even before the Bolshevik revolution. The remarkably peaceful transition away from communism in Eastern European states, save for Rumania, should not obscure the danger that the Soviet Empire may dissolve violently and spasmodically, with a potential spillover of chaos to the Western democracies should the latter let

down their guard. Within the Soviet Union, 1989 witnessed an eruption of long-simmering ethnic enmity and violence: Latvians and Estonians against Russian immigrants, Azerbaijani against Armenians, Muslims against non-Muslims and vice versa. 1990 witnessed Lithuania's demand for immediate independence, which the Soviet Union seems determined to suppress. Vigorous assertions of Ukrainian nationalism, a potential calamity for any Russian regime, likewise seem inevitable. In this environment, maintaining the NATO alliance and a credible American commitment to it serves as a prudential hedge against either an aggressive and authoritarian Great Russian state which could emerge, or a bloody and protracted civil war which could ensue should the Soviet Union collapse from within.¹⁹

Similarly, the remarkable developments of 1989 in Eastern Europe give cause for optimism, but not for euphoria. Even under the best of circumstances, the transition from communism to democracy in this region will require much time, discipline, resources, and patience to achieve. The success of market economies and democratic polities absolutely and relative to their competitors speaks for itself. In the short term, however, the movement away from state control to markets will cause extreme pain and dislocation among many segments of Eastern European societies. The possibility of ethnic violence also could thwart a peaceful transition to and maintenance of democracies there.²⁰

Again, America's active involvement in and commitment to the security of Western Europe and the stability of Eastern Europe remain vital. For if history teaches anything, it is that great powers abhor and will fill a power vacuum. Some sort of Marshall Plan for Eastern Europe seems essential for those states to succeed in establishing democracy while averting the alternative of civil war, authoritarianism, or hostile great-power intervention. As with a post-communist Russia, a NATO with strong American support reduces the possibility of the worst case occurring and the danger of the worst case should it occur. The history of the 1920s should warn that establishing democracy in Eastern Europe is only part of the problem: maintaining democracy is even more difficult. In the early 1920s, for example, most of Europe's 28 regimes, including those in Eastern Europe, were democracies. By the end of 1938, that number had dwindled to 12 in Europe generally and none in Eastern Europe. By 1941, only five democracies remained intact.²¹ The breakdown of democracy during the interwar years, the concomitant rise of totalitarianism, and even the Second World War itself, owed largely to the failure of the democracies, the United States included, to maintain and form strong alliances. Even if one believes that nothing could have deterred Hitler—a plausible assumption—surely preventive action by the democracies could have minimized the risks and costs of war greatly.²²

Then there is the German question. Before 1945, a united Germany was a militaristic and aggressive Germany, a Germany which willed, as other

states did not, two world wars. Whether a united Germany becomes a menace to a stable world order will depend on what type of Germany emerges from the process of reunification. Will a united Germany choose unconditional alignment with the West, as the German Federal Republic has done since Konrad Adenauer? Or will Germany opt for neutrality between East and West, or even worse, collaborate with Russia against the West, as the Germans did from Rapallo in 1922 to the Nazi-Soviet Pact in 1939?

What type of Germany emerges may depend, in turn, on the internal arrangements of the German state. Four possibilities exist, based on historical experience. The first, most dangerous, and least likely is a totalitarian Germany: Adolf Hitler's Germany. A second, and still dangerous, is an authoritarian Germany: the Germany of Kaiser Wilhelm. A third possibility is an unstable and neutral democratic Germany: the Germany of the Weimar Republic. The fourth is a stable, democratic, pro-Western Germany: the Germany of Adenauer and his successors, at least until now. Obviously, a united Germany modeled on the Federal Republic is the best practicable alternative for the United States and its allies; a democratic Germany will likely remain a pacific Germany, the type of Germany easiest to accommodate in any post-postwar order.²³

In light of the dramatic success of the German Federal Republic and the unqualified failure of totalitarianism of the right or left, the prognosis for democracy in Germany is much better today than at any time in its history. As with Eastern Europe, however, one should not take democracy or favorable trends for granted. Recall how recently democracy has become established in Germany, how many democracies have failed in this century, and how difficult democracy is to sustain even under the best of circumstances. For this reason, the United States must stay actively engaged in Europe to ensure democracy's success.

The maintenance of NATO with a strong American presence best ensures a democratic Germany anchored in a whole and free Europe, a Germany which will not become what Dean Rusk termed "the loose cannon of Europe." The policy of containment succeeded not only in containing the Soviet Union by threat but also Germany by inducement, through integration with the West politically, economically, and militarily.²⁴ As Joseph Joffe has observed, America's double role as protector and pacifier has served as a precondition for Western European integration and for the German Federal Republic having achieved such great success. It virtually freed Western European states of the security dilemma vis-a-vis one another which had undermined democracy and promoted interstate rivalry there in the past.²⁵ Without the United States, Western Europe might revert to the dangerous balance-of-power politics that sets one nation off against another. The nations of Eastern Europe and the Soviet Union might worry again about a strong Germany. The strong nations of Western Europe—Germany,

France, and Great Britain—might worry again about each other. Nor, as the history of interwar Europe suggests, will weak or democratic states always balance in a timely and effective way against the strong. Without a U.S. military presence in Europe, states might choose appeasement, neutralism, or indecision as a means of conciliation rather than resisting either a resurgent German or Russian threat, just as states did during the interwar years when the United States retreated into isolation.²⁶

Thus, a substantial devolution of American global responsibilities in the post-postwar order is imprudent. Even with U.S. allies' relative share of power increasing and U.S. power in relative decline, there is simply no substitute for American power to maintain a stable world order.²⁷ A united Europe will remain much weaker than the sum of its parts because of historic rivalry among the member states and the difficulty of integrating Germany on terms mutually acceptable to the Western democracies, the Soviet Union, and Germany's other wary neighbors in the East.²⁸ With or without the Soviet threat, NATO with a strong American commitment will remain important as a deterrent to war and as the political underpinning of a post-postwar order based on Western democratic values.

Geopolitical logic and American ideals apply with equal force to justify continuity in the American security commitment to allies in East Asia. The Pacific may replace the Atlantic as the most geopolitically crucial region for American foreign policy in the 21st century. According to the Commission on Integrated Long-Term Strategy, China will have the second largest gross national product in the year 2010, with Japan number three and the Soviet Union slipping to number four.²⁹ India also will emerge as a major power. Already the United States has a higher level of foreign trade with the Pacific-rim nations than with Europe. What happens in Asia therefore does and will have a major impact on American security.

In the post-postwar world, Japan will remain the linchpin of America's position in the Pacific. The current economic tensions affecting Japanese-American relations should not be permitted to obscure the complementarity of American and Japanese interests. America needs Japanese capital for investment, just as the Japanese need a healthy American economy with which to trade and invest. For many years to come, Japan will remain dependent on America's security guarantee and its willingness to spend substantially more on defense than Japan. Correspondingly, a strong American presence in East Asia will facilitate Japan's emergence as a major power with the maximum benefit and the minimum risk.

Without the United States, Japan's transition to a full-fledged world power, including possibly military power, would cause major alarm among the smaller states of East Asia and in China. With the United States vitally engaged in East Asia, the Japanese may decide not to rearm, or Japanese rearmament would menace the Asian countries less than if it occurred as a

result of America's strategic withdrawal from the region. What type of impact Japan's power will have in East Asia will also depend on what type of internal regime the Japanese maintain. As with Germany, a democratic Japan will facilitate the possibility of a smooth transition and a benign impact. As with Germany, a vigorous American presence in Asia serves as the best insurance to keep Japan firmly in the democratic camp. As with Germany, the history of the interwar years reveals that the problems of trade that merely irritate Japanese-American relations now become potentially explosive when Japan maintains an authoritarian and militaristic regime. As with Germany, the inevitable adjustments in Japanese-American relations will occur with less rancor and cost with a democratic Japan than with the alternatives.³⁰

South Korea remains a vital interest for Japan and thus an important interest for the United States. Under the umbrella of the American security guarantee, the Korean peninsula has experienced close to four decades of peace. South Korea has developed into an industrial society and a fledgling democracy, a vindication for Western ideals and theories of development. There is no compelling reason to undermine these benign trends with a precipitate American withdrawal. Elsewhere in the Asia-Pacific region, a United States actively engaged is important to help friendly states avert economic and political crisis, to minimize the social and economic dislocations which inevitably accompany rapid modernization. Unlike Western Europe, the Asia-Pacific region lacks a regional organization to fulfill these tasks.³¹ Nor do these states have even the hypothetical capability to balance successfully against a resurgent Great Russian or Chinese threat.³²

In the post-postwar era, the states of the Asia-Pacific region will need American power as a counterweight to the potential emergence of an expansionist and imperialistic China which is just beginning to develop its industrial strength. Perhaps China will develop democratically and forego the attempt to expand its influence and control as it industrializes. Nevertheless, China's cultural tradition, its history in the 20th century particularly, and its brutal suppression of democratic dissent in June 1989 caution that neither democracy nor passivity is the inevitable outcome. Even if an authoritarian China continues to be more preoccupied with the reemergence of a Soviet threat than with its own expansion, the credibility of American power is a necessary if not sufficient condition for the stability of East Asia.

Saddam Hussein's brutal invasion of Kuwait, Iraq's bid to dominate the Middle East, should remind us why there is no substitute for American power in this region vital to U.S. security. Despite Europe and Japan's formidable economic power, only the United States has the will and the capability to stop Saddam. Thus, the United States still must have an unequivocal commitment to resist any attempts to gain hegemony over the Persian Gulf, the oil lifeline on which the Western European democracies and Japan depend.

Even if the United States defeats Saddam, Islamic fundamentalism and Arab radicalism will continue to represent potential threats to the moderate Islamic regimes friendly to the United States and necessary to sustain America's geopolitical interests. The security of Israel, a domestic and moral as well as a geopolitical imperative, will continue to depend, likewise, on an active American involvement and commitment in the region. Here, too, no plausible substitutes for American power loom on the horizon. Latin America will also require active American involvement and commitment in the post-postwar era. Mounting instability, Mexico's demographic crisis, foreign debt, and virulent anti-U.S. nationalism could produce a crisis which diverts the United States from directing its attention to more vital geopolitical concerns abroad.

Although the complementarity of ideals and self-interest, of democracy and geopolitics, is most compelling and promising for Europe and the industrial countries of East Asia, the United States will continue to have an interest in promoting democracy in the underdeveloped world. To be sure, the end of the Cold War does diminish the urgency of hastening the spread of democracy there. Without a connection to a communist superpower, small regimes hostile to the United States pose a less immediate threat and are less likely to survive, even without active American efforts to resist or undermine them.³³ The United States thus should have a greater margin for tolerating ideological diversity in geopolitically less significant regimes, because the latter no longer represent the forward outposts of a massive Soviet ideological and geopolitical assault on the cause of freedom generally.

However, even in the more remote areas of the Third World, the United States will continue to have an interest in promoting democracy when possible and prudential. First, the United States has never defined its self-interests wholly without reference to its ideals. Nor should it: the idea of freedom is not just a particular but a universal aspiration. Second, Kant's prophecy that democracies tend not to fight with one another should apply with some force to the underdeveloped world. Third, it is unwise to write off vast areas of the world which may be geopolitically insignificant today but the great powers of tomorrow. Why not anticipate these developments by promoting democracy now rather than later? Fourth, the United States would lose its uniqueness by abandoning the promotion of its universal founding principles abroad. The United States without these principles becomes merely an amalgam of fractious ethnic and religious groups, rather than a people united on the basis of a universal idea of freedom transcending race, creed, color, background, or ethnic origin.³⁴

In many developing countries, democracy will not become an option for years to come. There the choice will continue to be the lesser of two evils, based on a calculation of U.S. geopolitical interests and the relative odiousness of contending authoritarian alternatives. Nevertheless, this should not relieve the United States of the responsibility for distinguishing between lesser

degrees of geopolitical and moral evils. In the underdeveloped world in particular, practicality and prudence often will limit the character and extent of intervention to promote American values. Even the United States has finite resources; it cannot and should not intervene everywhere. Furthermore, the American people have a very low threshold of tolerance for military intervention in the underdeveloped world. Presidents can intervene there only when the cost of victory is minimal and the duration of the operation quick. The recent successful American interventions in Panama and the Philippines, two states with longstanding ties to the United States, indicate, however, the desirability and possibility of meshing ideals with self-interest. Even in the post-postwar era, the United States should not hesitate to use force on democracies' behalf for relatively low-cost, low-risk operations.

Domestic and Alliance Constraints

It is easier to formulate a post-containment paradigm than to implement one. American statesmen will encounter some significant obstacles to pursuing a policy of vigorous internationalism. The Bush administration and its successors will have to forge a bipartisan consensus for this policy in difficult domestic circumstances. Nor will America's principal allies agree with all of the prescriptions offered here. There are many who oppose any policy which threatens the loosening of bipolarity, substantial arms reduction, or cooperation with the Soviet Union so long as Gorbachev continues to be forthcoming. Some believe, moreover, that continued American vigilance threatens these objectives.³⁵

Any post-postwar policy thus must accommodate the inevitability of substantial reductions in defense spending and an intense demand for far-reaching arms control. It must recognize that economic issues will increase in importance as the Soviet military threat appears to wane. It must recognize that the United States will have to devise a new rationale for NATO. And it must recognize that America's allies will have significantly more bargaining power vis-a-vis the United States than they have had in the past.

Nevertheless, one should not underestimate the possible. Many commentators have exaggerated both the extent and the irreversibility of America's relative decline.³⁶ For many years to come the United States will remain the most powerful economic power in the world and by far the most powerful military power in the free world. America's current economic problems are not irreparable, and the apparent reduction in Soviet-American enmity will make the military requirements for a policy of vigilant internationalism easier to bear. A substantial American military presence in Europe should remain, but there is nothing sacred about current force levels. On the contrary, the opportunities seem promising for substantial reductions in the quality and quantity of Soviet and American forces deployed in Europe.

Economically and militarily, U.S. allies will continue to need American cooperation and support at least as much as the United States needs theirs. Thus, America's bargaining power, albeit diminished, is still considerable. Nor should one underestimate the will of the American people to continue supporting a policy of vigilant internationalism in the post-postwar era. The history of the Cold War demonstrates that the American people will bear the burden and pay the price of global leadership so long as American statesmen articulate the rationale for internationalism.

The rationale is indeed convincing. To retrench substantially now, or even in the future with the Cold War won, would merely risk repeating the historic mistakes of the 1920s, when the United States retreated into isolationism. Although every historical situation is in some way unique, and although the prospects for long-term peace and stability now are signally greater than during the interwar years, the United States cannot take too much for granted. The historic success of containment contrasts starkly with the 20th century alternatives which preceded it. The burden, then, should be on those who advocate unleashing the potential dangers which could arise should the United States abandon the geopolitical and moral tenets of a vigorous internationalism.

Notes

1. On Endism, see, e.g., Francis Fukuyama, "The End of History?" *The National Interest* Number 16 (Summer 1989), pp. 3-18; Samuel Huntington, "No Exit: The Errors of Endism," *The National Interest* Number 17, (Fall 1989), pp. 3-12; Francis Fukuyama, "A Reply to My Critics," *The National Interest* Number 18 (Winter 1989/90). On Declinism, see e.g., Paul Kennedy, *The Rise and Fall of Great Powers: Economic Change and Military Conflict from 1500 to 2000* (New York: Random House, 1987); Samuel Huntington, "The U.S.—Decline or Renewal," *Foreign Affairs* Volume 67, Number 2 (Winter 1988/1989), pp. 76-96.
2. For such an argument from the right, see Patrick Buchanan, "America First—and Second, and Third," *The National Interest*, No. 19 (Spring 1990), pp. 77-82.
3. For an excellent essay on the need to reassess the premises of American foreign policy for post-Cold War Europe, see Burton Yale Pines, "Waiting for Mr. X," *Policy Review*, No. 49 (Summer 1989), pp. 2-6.
4. On the policy of containment generally, see John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982).
5. George F. Kennan, "The Sources of Soviet Conduct," *Foreign Affairs* XXV, Number 4 (July 1947), pp. 566-582.
6. See, e.g., NSC 68 in *Foreign Relations of the United States*, Volume 1 (Washington, D.C.: Government Printing Office, 1977), pp. 235-292.
7. Samuel Huntington, *The Promise of Disharmony* (Cambridge: The Belknap Press, 1981), p. 240-259.
8. Jeane Kirkpatrick, *Dictatorships and Double Standards* (New York: Simon and Schuster, 1982), pp. 23-59.
9. For an example of the reasoning underlying the arguments of those who believe that because the Cold War may be over, it need not have been fought, see Strobe Talbott, "Rethinking the Red Menace," *Time*, January 1, 1990, pp. 66-72.
10. For an extensive argument of this point, see John Lewis Gaddis, *The Long Peace* (New York: Oxford University Press, 1987), pp. 215-235.
11. John Dunlap, "Will the Soviet Union Survive Until the Year 2000?" *The National Interest*, Number 18 (Winter 1989/1990), pp. 65-76.
12. This is one of the major themes of Kennedy's *The Rise and Fall of Great Powers*.
13. For a compelling statement of this point, see Charles Krauthammer, "Universal Dominion: Toward a Unipolar World," *The National Interest*, Number 18 (Winter 1989/1990), pp. 46-49.

14. See, e.g., Jerry Hough, "Gorbachev's Politics," *Foreign Affairs*, Volume 68, Number 5 (Winter 1989/90), pp. 26-41.
15. Richard Pipes, *Survival Is Not Enough* (New York: Simon and Schuster, 1984).
16. This is precisely the advice which the anonymous Z recently offered. See Z, "To the Stalin Mausoleum," *Daedalus*, (Winter 1990), pp. 295-344.
17. Colin Gray, *The Geopolitics of Super Power* (Lexington: University of Kentucky Press, 1987); Zbigniew Brzezinski, "America's New Geostrategy," *Foreign Affairs*, Volume 66, Number 4 (Spring 1988), pp. 680-699.
18. Michael W. Doyle, "Kant, Liberal Legacies, and Foreign Affairs," *Philosophy and Public Affairs*, Volume 12 (Summer 1983), pp. 205-235; Michael W. Doyle, "Liberalism and World Politics," *American Political Science Review*, Volume 80, pp. 1151-1169.
19. Zbigniew Brzezinski, "Post-Communist Nationalism," *Foreign Affairs*, Volume 68, Number 5 (Winter 1989/90), pp. 1-25.
20. *Ibid.*
21. Stephen Lee, *The European Dictatorships, 1918-1945* (London and New York: Methuen, 1987).
22. This is indeed the argument of Winston Churchill. See, e.g., Winston Churchill, *The Gathering Storm* (Boston: Houghton Mifflin Company, 1948), pp. 15-16. For a more recent restatement, see Williamson Murray, *The Changes in the European Balance of Power, 1938-1939* (Princeton: Princeton University Press, 1984).
23. Dennis Bark and David Gress, *A History of West Germany*, Volumes 1 and 2 (Cambridge: Basil Blackwell, Inc., 1989).
24. Wolfram Hanrieder, *Germany, America, Europe: Forty Years of German Foreign Policy* (New Haven: Yale University Press, 1989), pp. 1-25.
25. Joseph Joffe, *The Limited Partnership: Europe, the United States, and the Burdens of Alliance* (Cambridge: Ballinger Publishing Company, 1987), pp. 186-188.
26. On the subject of the effect of American withdrawal on alliance dynamics during the 1930s, see Robert G. Kaufman, "Balancing and Bandwagoning Reconsidered—Alignment Decisions and Non-Decisions against Nazi Germany between the Two World Wars," currently under review at *World Politics*.
27. For an excellent analysis of why even a united Western Europe or Japan cannot substitute plausibly for American power, see Joseph Nye, Jr., *Bound to Lead: The Changing Nature of American Power* (New York: Basic Books, 1990), pp. 141-170.
28. Gray, *The Geopolitics of Super Power*, pp. 144-164.
29. Cited in Zbigniew Brzezinski, *The Grand Failure: The Birth and Death of Communism in The Twentieth Century* (New York: Charles Scribner's Sons, 1989).
30. On the growing importance of the Pacific for the U.S., see Owen Harries, "The Coming Dominance of the Pacific," *The National Interest*, Number 11 (Spring 1988), pp. 124-128.
31. *Ibid.*
32. For an assessment of how the ASEAN countries depend on credible American commitment as a hedge against a potential Soviet, Chinese, or Japanese threat, see Robert Tilman, *Southeast Asia and the Enemy Beyond: ASEAN Perceptions of External Threat* (Boulder: Westview Press, 1987).
33. For an excellent statement of this point, see Krauthammer, "Universal Dominion: Toward A Unipolar World," pp. 47-48.
34. Nathan Tarcov, "If This Long War Is Over," *The National Interest* (Winter 1989/1990), pp. 50-53.
35. Joseph Joffe, "The Revisionists—Moscow, Bonn, and the European Balance," *The National Interest*, Number 17 (Fall 1989), pp. 41-54.
36. For an excellent critique of Declinism, see Huntington, "Decline or Renewal," pp. 76-96; Nye, *Bound to Lead*, pp. 141-170.



"History is lived forwards but it is written in retrospect. We know the end before we consider the beginning and we can never wholly recapture what it was to know the beginning only."

C.V. Wedgwood
William the Silent
 (Yale University Press, 1944)

PROFESSIONAL READING



A book reviewer occupies a position of special responsibility and trust. He is to summarize, set in context, describe strengths, and point out weaknesses. As a surrogate for us all, he assumes a heavy obligation which it is his duty to discharge with reason and consistency.

Admiral H.G. Rickover

“Remarkable Intellectual Independence and Honesty”

James S. O'Brasky

- Berquist, Ronald E. *The Role of Air Power in the Iran-Iraq War*. Maxwell AFB, Alabama: Air Univ. Press, 1988. 104pp. \$3.75
- Dean, David J. *The Air Force Role in Low Intensity Conflict*. Maxwell AFB, Alabama: Air Univ. Press, 1986. 142pp. \$4
- Mets, David R. *Land-Based Air Power in Third World Crises*. Maxwell AFB, Alabama: Air Univ. Press, 1986. 186pp. \$5
- Mrozek, Donald V. *Air Power and the Ground War in Vietnam*. Maxwell AFB, Alabama: Air Univ. Press, 1988. 211pp. \$9

These four books are products of the Air Power Research Institute of the Center for Aerospace Doctrine, Research, and Education of the Air University. Each author uses carefully researched case studies to illustrate the development and employment of air power doctrine and each provides a scholarly analysis of the doctrinal strengths, fallacies, and organizational pressures illuminated in each study. One of the major strengths of the Air Power Research Institute program as seen in these four publications is the remarkable degree of intellectual independence and honesty exhibited by the

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authors. The administrators of this program have much cause to take pride in these publications.

The common theme of these four books is the role of land-based air power in low intensity conflict and regional war.

In *The Air Force Role in Low Intensity Conflict*, David Dean treats the reader to a definition of low intensity conflict, a short historical account of "air control" in small wars, and an excellent treatise on the little known military assistance effort provided by the U.S. Air Force to the Royal Moroccan Air Force in its conflict with the Polisario separatist movement. Although the author contends that the U.S. Air Force was unable to assist the Moroccans effectively, from a later perspective, the overall military assistance effort to Morocco has to be considered a signal success of U.S. foreign military policy. Morocco has effectively neutralized and isolated the Polisario movement while pursuing the development of a vigorous national life.

Dean's account of the Moroccan-Polisario air war and the ad hoc U.S. Air Force military assistance effort well illustrates the frustrations of such activity. Much of the difficulty is embedded in the relationship between the recipient country's geopolitical military culture with the representatives of a superpower's political-military culture. Much in U.S. military procedures inhibits assistance efforts. Mr. Dean offers some basic requirements for assisting a third world air force: a deep knowledge of third world countries in general and their military forces in particular; the ability to transfer knowledge and technique (i.e. appropriate training packages); cross-cultural awareness, and the capability for speedy reaction.

The Air Force Role in Low-Intensity Conflict is not especially well written, but the research is sound and the analysis and recommendations are excellent.

Land-Based Air Power in Third World Crises by David Mets was written to demonstrate the utility and limitations of U.S. land-based aircraft when supporting political objectives in third world crises. The author's perspective is strictly that of the Air Force. It is clear from this study that land-based air power (and indeed air power in general) can signal intentions, demonstrate support, modify behavior and terminate conflict. The principal limitation on land-based air power lies in the projection of power far from main operating bases. Under such conditions, a high level of effort is needed to place small amounts of combat power on target in a timely manner. This reviewer wonders about the implications for the U.S. Air Force in a world filled with heavily armed and capable adversaries, diminishing basing rights and access, and increasing overflight restriction.

The last two studies under review concern regional wars, that between Iran and Iraq and that in Vietnam. Both wars were waged at mid to high intensity levels.

In *The Role of Air Power in the Iran-Iraq War* Ronald E. Berquist shows why neither side chose to use its air power decisively. This is one of the first

explorations of air strategy and doctrine for regional powers (a different perspective from familiar global power considerations). Mr. Berquist begins with a treatment of the Arab air warfare experience and the institutional foundations of the two opposing air forces. He then examines the events of the air war. His basic conclusions are the following: (1) Political constraints heavily influenced the air strategies. Deterrence and conservation of force structure seemed to be major influences. (2) Military lessons learned are largely dependent on the cultural lens through which they are viewed.

Unfortunately, the author did not examine what was militarily possible for these two air forces. Compared to their ground arms, both air forces were seriously constrained in their options by their small size. Even if either had gained regional air supremacy by destruction of the opposing air force, this by no means could be translated into air superiority over the battle area, cities, or industrial complexes (due to each country's air defense system), or to the ability to conduct a decisive battlefield interdiction or strategic bombing campaign (due to each country's lack of throw-weight/aggregate lethality).

The centerpiece of this review is *Air Power and the Ground War in Vietnam* by Professor Donald J. Mrozek. This treatise deals with only one quarter of the air war in Vietnam, focusing tightly on an analysis of the Air Force's campaign in support of the ground war within South Vietnam with minor excursions into trail interdiction and the secret bombing in the neighboring countries. The U.S. Air Force and the U.S. Navy's "strategic" air campaign over North Vietnam is conspicuous by its absence. Even the U.S. Army and U.S. Marine air operations in South Vietnam are treated only in the sense of their impact on joint doctrine. Having limited the scope of the treatise, the author then proceeds to create a minor jewel of analysis.

Dr. Mrozek contends that not only did the United States' commitment to the war in Vietnam lack unity, clarity and coherence, but also that the commitment of the various parties (i.e. U.S. military institutions) to the war was similarly flawed. On the relatively simple matter of the application of air power to the ground war, the myths of each institutional position produced intraservice and interservice rivalries which had serious effects: "(1) efforts to resolve conflict over command and control and strategy went on far too long, perhaps too long to come to grips with the real problems; (2) a decision once agreed upon could not easily be overturned, since it represented either a delicate political compromise or too much invested effort and sunk cost; and (3) whatever the reality behind the services' motivations, the military seemed so self-serving as to undermine the authority they could have mustered with the executive branch in the moments when it was open to advice, or with Congress." Each of the points is starkly illustrated in carefully researched chapters. Mrozek illustrates well both the command and control rivalry and the limits of technology. The reading is often bitter; yet more than adequate confirmation for the contents are available from other sources.

Dr. Mrozek makes several observations which are an essential basis for future joint doctrine development:

- Americans are not only affected by war, they also *affect* war, altering and influencing its characteristics and course. The risks and dangers generated by America's own ways of thinking and behaving will almost inevitably become an element in a future conflict, especially if those ways are left to the unconscious.

- Embedded ways of thinking guide the armed forces. Differing doctrines make for durable rivalries. In the Vietnam conflict, without unswerving direction from civilian authorities, conflict arising from practice embraced by one service but dismissed by another could linger without adjustment or resolution.

- Technical proficiency, operational effectiveness and technological capabilities will not suffice in war. Without a correct strategic vision, these may bring victories to the side better endowed with them, but they will be phantom victories leading to final defeat or stalemate.

- Limited war does not necessarily represent limited commitments by all the participants. Differences in perception about a war's limits are born of difference between the means and objectives of conflict. Political considerations (assessments of national interest—a set for each participant) thus drive the nature and character of the limitations.

Much of Dr. Mrozek's analysis appears to state his position a bit too starkly. While it is certainly true that unsightly interservice rivalries punctuated the establishment of the command and control structure for the American participation in Vietnam, let us not forget that many good men from all services, at considerable personal and professional risk, attempted to make these doctrinal and structural monstrosities work. Let us also not forget that the doctrine of air-land campaigns, precision guided munitions, and precision bombing systems grew out of the Vietnam experience.

A second criticism of this work might well be that Mrozek ignores a whole dimension of force projection. In Vietnam and in any future regional war, the U.S. Air Force's participation was, and is, largely at the mercy of the theatre infrastructure. This dependency on the availability of main operating bases in theatre implies that except when, as in the case of Saudi Arabia where there were plenty of bases ready for aircraft, the maritime and expeditionary services will usually carry the "air power" burden until U.S. Air Force base development can occur. The implication of this observation is that over time the dominant service source of air power in an undeveloped theatre will change several times. This transition is rarely admitted, much less recognized and planned for in joint service doctrine.

To the naval community, the series of writings should contain some disturbing implications. The first of these is that the roles and limitations of doctrine in regional and low intensity warfare is hardly studied in naval

professional schooling, and the second is that even though naval participation in joint doctrine development activity has not been enthusiastic, it appears to be essential.

The general lack of naval interest in doctrine as a topic is becoming dangerous, partly because most future operations will be of a joint nature, and partly because doctrine is becoming embedded in staff planning tools. This embedded doctrine should be that desired by the professional military community rather than that most convenient to the software engineer however well intentioned. Such embedded doctrine is especially pernicious because it subtly teaches its operators specific thought patterns and continuously reinforces them.

This reviewer recommends all these books to a broad professional audience.

Lupton, Donald E. *On Space Warfare: A Space Power Doctrine*. Alabama: Air Univ. Press, 1988. 149pp. \$7

Even before space flight became feasible, the more foresighted strategic thinkers had already recognized its potential military use. This recognition, however, rested more on instinct than on a sound understanding of what could and couldn't be done in space. Space is a very different environment from the earth's atmosphere, though the Air Force insists that the two form a continuous medium, and vague analogies drawn from the history of air power have often misled those who would speculate on the nature of space power.

From the many conflicting currents in the ongoing debate about military space, Lt. Colonel Donald E. Lupton isolates four major trends: the Sanctuary School, which wants to keep space free of weapons in the belief that reconnaissance activities conducted there, left unhindered, strengthen deterrence; the Surviv-

ability School, which stresses the vulnerability of space assets and portrays space war as a tit-for-tat, beggar-thy-neighbor enterprise likely to leave all parties the poorer; the High Ground School, which favors space-based ballistic missile defense, insisting that these systems could decisively affect the outcome of a terrestrial conflict; and the Control School, which stops short of the claims of the High Ground advocates, yet regards victory in space in a future war as a probable precondition for success in other mediums.

Colonel Lupton strongly favors the Control School. He dismisses the sanctuary theorists as unrealistic: asymmetries in the combatants' degree of dependence on satellites would make them almost certain targets in any protracted war. The survivability school, Lupton argues, overstates the vulnerability of space systems. These systems, he contends, are defensible. In fact, they are no more at risk than fixed assets on

earth. Although more sympathetic to the high grounders, Lupton doubts that a shield as permeable as a space-based ballistic missile defense system could significantly reduce the offensive capability of nuclear weapons. Space, he consequently concludes, will be one of four co-equal arenas in any war fought among the superpowers.

But such a hasty summary as this conceals much of Colonel Lupton's originality—that is especially clear in his use of naval analogies rather than the usual shopworn comparisons to air power. For example, to counter the argument that limited maneuverability and high exposure to attack render space stations unsuitable for military use, he likens them to the coaling stations that serviced 19th century steamships. Like the lightly defended coaling stations of yesterday, space stations would be easy targets for attack, but just as the coaling stations greatly extended the range of peacetime fleet operations, so would space stations permit the longer and more complex shuttle missions necessary to fully deploy space power. An admirer of Admiral Mahan, Lupton compares the ability to control passage through the near-earth regions of space to the priority that naval strategists give to dominating the relatively few searoutes over which the majority of vital resources flow.

Despite his fondness for sea analogies, Colonel Lupton is loyal to his branch of the armed services in his prescriptions for the management of military space. He believes that efficient planning, effective program

lobbying, and the command and control requirements of modern war, demand Air Force predominance. Mainly concerned with the force employment side of space doctrine, Colonel Lupton presents the case for Air Force organizational control briefly, almost as an afterthought. Already satellites and other space assets serve a wide variety of functions for a wide variety of military users. This has led, and will continue to lead to conflicts of prioritization and emphasis. Doubtless there will be those who, viewing the matter from different institutional perspectives, will wish to take issue with Colonel Lupton's position, both organizational and otherwise. Nevertheless, most readers will surely agree that as an introduction to an often poorly discussed subject, Colonel Lupton's book sets a high standard for clarity and cogent reasoning.

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Fenner, Milton A., Davis, Scott M., and Parmentola, John A. *Making Space Defense Work: Must the Superpowers Cooperate?* New York: Pergamon-Brassey's International Defense Publishers, Inc., 1988. 209pp. \$21.95

For those who are not intimately familiar with the Strategic Defense Initiative (SDI) and the multitude of arguments and issues related to it, this book provides an easy-to-read and well organized summary of the more

important factors. It is comprehensive, well balanced, and manages to avoid becoming excessively entangled with detail, whether technical, strategic, or political. Yet, at the same time, it clearly delineates critical technical and strategic factors, such as number of units or performance capabilities, that are crucial to the subject at hand.

Making Space Defense Work begins with an examination of what has happened to the idea of deterrence in the past decade or two. Then it deals with SDI, assessing its ideas, its weapon systems, and the requirements that would be placed upon them. It looks into the concepts of a partial defense and of population defense and concludes with a discussion of strategic defense options. An appendix provides a succinct summary of space weapon capabilities and technical issues.

Fenner, Davis, and Parmentola have solid backgrounds in physics, strategic weapon systems, and defense policy. This text is the result of a project of the Roosevelt Center for American Policy Studies. The authors were assisted by a panel of eminent defense technologists and strategic analysts, consisting of former leaders of the Advanced Ballistic Missile Defense Agency, the U.S. Arms Control and Disarmament Agency, and the U.S. SALT delegation.

The authors' perspective on the benefits of arms control agreements for the U.S. may surprise those who have not previously explored this subject carefully. Working through

the logic and evidence presented here could prove valuable and possibly an eye-opening experience. It clearly shows that this subject is complex and there is no simple "always right" approach to answers in this area, without regard to other factors. The impact of those other factors, such as cooperation between the U.S. and U.S.S.R. on strategic weapon systems, can completely reverse the benefit or harm to U.S. strategic interests that can be expected to result from a particular policy. Appreciation for these complex interrelationships is vital, especially for those of us in the defense community, because of the many simplistic, doctrinaire solutions proposed by advocates of various policies.

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Clayton, Anthony. *The British Empire as a Superpower, 1919-1939*. Athens: Univ. of Georgia Press, 1986. 545pp.

This is a detailed record of Britain's use of force by the army, navy, and air force—from display to action, from Aden to Zanzibar—as one means to maintain an empire. It is military history through the study of imperial technique.

The book deals with the restrained use of power. What the British did they did well, basing the system on force, but using it rarely. Nonetheless, Clayton shows, this was done at

the expense of economic and strategic overextension.

The British government followed a policy beyond its resources, and the British political tradition and morality had a grander vision of empire than simply one held together by brute force. In his concentration on force, Clayton says too little of how the exceedingly constructive institutional transformations, and examples of moral and political leadership—despite all repression—paved the way for the support Britain received in World War II, and the ease with which the empire was dismantled immediately thereafter.

Clayton's conclusion will give a contemporary superpower pause. Britain maintained its empire with bluff, pragmatic concessions, and the show of power. These worked for a while, but all evidence suggests that sooner or later the bluff would have been called. Restrained force was not enough to hold back centrifugal tendencies, such as nationalism and anticolonialism. In the end, the British could not, nor did they want to, hold the empire together by force; and so they gave it up to institutions they had let develop within the system.

GEORGE W. BAER
Naval War College

Bruce, Robert H. *Australia and the Indian Ocean: Strategic Dimensions of Increasing Naval Involvement*. Studies in Indian Ocean Maritime Affairs No. 1, Perth, Australia:

Centre for Indian Ocean Regional Studies, 1988. 138pp. \$20

This collection of papers from a 1988 conference examines the Indian Ocean region in light of the Australian decision to head toward a two-ocean (Pacific and Indian) fleet.

One of the most interesting papers documents the importance of the Indian Ocean for Australia, noting, for example, that over half the seaborne commerce moving to Australia sails through that ocean. This paper examines why it was not until the mid-1980s that steps were taken to protect the vulnerable northwest coast with a permanently stationed naval presence. The long-standing Australian reliance on the United Kingdom and the United States, as well as the lack of a defined threat perception are noted as the major causes of the laxity of Australian defense policy toward the Indian Ocean.

The essay likely to be of most interest to the American reader is by K. Subrahmanyam, formerly director of India's Institute for Defence Studies and Analyses, who presents an Indian perspective on the Indian Ocean that is far different from that found in the United States. His is a view that should be considered carefully. The Indian Navy is one of the fastest growing in the world. India is now the sixth nation to be operating a nuclear-powered attack submarine. Countering the perceived U.S. threat has been a major stimulus for this growth. As Subrahmanyam notes, "India had been subjected to an exercise of force

without war in 1971 when the task force 74 headed by the nuclear powered carrier USS *Enterprise* tried to intervene—though it proved to be too late—in the last stages of the war in Bangladesh.” India believes that the newly acquired SSN will “provide some minimal deterrence against such interventionism.”

One essay focuses on the U.S. military involvement in the 1980–88 Gulf War and another looks at the Australian role. While this is the most dated section of the work, there are many points of value in it. As one paper notes, “The U.S. interventionist strategy for the Gulf region has some serious limitations. On paper, plans and numbers look pretty promising but under the impact of a real conflict situation in a distant area they may not work.” As the United States knows full well, the difficulties of mounting any U.S. military activity in the Indian Ocean region cannot be understated. While in 1987–88 the U.S. Navy, with support from the other services, was able to escort merchant ships in the Persian Gulf, this was a difficult mission which required the commitment of a large number of ships.

Though the dramatic changes over the past several years have dated this volume, the work will remain of value for those interested in the Indian Ocean region.

ADAM B. SIEGEL
Center for Naval Analyses

Chandra, Satish, ed. *The Indian Ocean: Explorations in History, Commerce & Politics*. New Delhi: Sage Publications, 1987. 334pp.

This erratic combination of historical essays, technological evaluation and polemics is exceedingly difficult to evaluate. The theme of exploration, commerce and politics in the Indian Ocean region serves as only a tenuous connexion among the various articles. Consequently, either the editor, perhaps finding himself unclear as to the articles' individual accuracy, gave up the attempt to keep the authors' speculation within the theme, or he may simply have failed to meet the most basic requirements of editorship.

If this collection has anything to offer, it is in reminding us that the Indian Ocean is an important area for historical investigation, particularly when it comes to elements of cross-cultural and economic exchange between the area and Europe. S. Bhattacharya in “The Indian Ocean in the Nineteenth and Early Twentieth Centuries,” attempts to bring some analysis to the various exchange mechanisms operating during those times; F.J.A. Broeze, K.I. McPherson, and P.D. Reeves, in “The Making of the Modern Indian Ocean Ports,” gives us vast technological knowledge of how ports were developed and what factors influenced that development; Immanuel Wallerstein observes the economic impact of West on East.

If the reiteration of these various, often familiar themes were all there was to this collection, it would have

some use, if only as an introductory survey text. However, even that level of use is eliminated by the editor's inclusion of G. Bondarevsky's "Turning the Persian Gulf into a British Lake," which is riddled with factual errors. We are either looking at a stupendously unsuccessful mistranslation, or a work which takes absolutely no account of historical integrity, or a relatively crude attempt at polemical revisionism. The reader will have to judge which is the likeliest.

All these problems come under the category of editorial responsibility. The number of typographical errors, factual misconceptions, even the inoffensive dullness of some of the essays, leads to the belief that the editor has ignored the obligations of his position. It is impossible to determine which of the possibilities raised above have made the articles so opaque. But given the problems, the general reader is well advised to turn elsewhere for more reliable treatments of the same material.

A. J. PLOTKE
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Greene, Fred, ed. *The Philippine Bases: Negotiating for the Future*. New York: Council on Foreign Relations, 1988. 158pp. \$9.95

This volume provides a useful, general guide to one of the most important foreign policy challenges facing the Bush administration. American military bases in the Philippines have long been a target

of nationalist attack and a major irritant in the U.S.-Philippine relationship. Even before the intervention of U.S. forces on behalf of Mrs. Aquino in 1989, the renegotiation promised to be arduous and contentious. At risk are the largest U.S. bases on foreign soil, that for decades have played a central role in U.S. global and regional defense strategy. For the Philippines there are major questions of economics and of principle.

In an overview paper, Fred Greene examines the specific issues likely to arise between the United States and the Philippines in the current round of negotiations, among them differences over compensation, operational control, nuclear weapons, and social problems. Greene points out that questions of sovereignty and national dignity permeate many of these issues and add to the difficulty of resolving them.

The book also contains short versions of earlier works by two other acknowledged experts on the Philippine bases issue, U.S. Air Force Colonel William E. Berry, Jr. and Captain Alva S. Bowen, USN (Ret.). Colonel Berry reviews the virtually unceasing base negotiations between the United States and the Philippines since 1947, and concludes that the issues that have shaped these negotiations have changed little over the years. Bowen, recognizing that the current round of base negotiations may not result in agreement, explores several fallback options for the bases: 1) relocation of other U.S.

facilities in the region, 2) an expanded base structure in Micronesia, and 3) relocation to new facilities in the South China Sea. Bowen believes that none of these options is satisfactory in itself, but a combination of locations could replicate the advantages we now enjoy in the Philippines.

Despite differing perspectives, all of the authors contribute to a sense that Philippine and U.S. positions are sharply at odds on a wide range of issues. Both sides have different threat perceptions, and consequently different approaches to regional and national security issues. Moreover, the political will to renegotiate the agreement may be eroding. On the Philippine side there is increasingly strident resentment of perceived U.S. involvement in the domestic political process; on the U.S. side there is growing concern about the erosion of Mrs. Aquino's support, the threat to the bases from insurgency, and major budgetary and operational limits in meeting Filipino negotiating demands. Sadly, unless a high degree of statesmanship is forthcoming from both sides, Bowen's paper on relocation options may prove to be the most useful part of this book.

CHARLES S. AHLGREN
Naval War College

Stokesbury, James L. *A Short History of the Korean War*. New York: William Morrow, 1988. 276pp. \$8.95

Stanton, Shelby L. *America's Tenth Legion: X Corps In Korea, 1950*. Novato, Calif.: Presidio Press, 1989. 342pp. \$24.95

James L. Stokesbury's *A Short History of the Korean War* is a splendid introduction to the war. Only 276 pages long including a useful index, this smoothly written book manages to be both narrative and interpretive and gives a satisfying feeling of completeness. Stokesbury correctly divides the war into two parts which he calls the "War of Maneuver" and the "War of Posts."

Part I, "War of Maneuver," begins with an introductory chapter complete with background information that leads to the North Korean invasion and the United Nations retreat to the Pusan Perimeter. The stumbling performance of the U.S. Eighth Army is treated fairly. The corresponding performance of the Army of the Republic of South Korea looks better, in retrospect, than it did at the time.

The United Nations resurgence comes, of course, with the Inchon landing on 15 September 1950, with the U.S. Marines in the starring role, but not blatantly so. Following are chapters, with titles to suit, of the UN drive "To the Yalu"; "The Chinese Intervention," which turned UN victory into near-debacle; the furore surrounding "The Dismissal of MacArthur"; and, in "Approaching a Stalemate," Ridgway's masterful offensives of Spring 1951 which led to the armistice talks.

Part II, "War of the Posts," covers the down side of the war, when the United States knuckled under to its European partners in the United Nations, and allowed operations to stagnate into positional warfare, horrifically reminiscent of the Western Front in World War I.

There is a chapter on "The Air Battle" which summarizes the superb accomplishments of tactical aviators in gaining air superiority and eventually almost uncontested control of the air, and the disappointing results of both the bombing of North Korea and aerial efforts to interdict the battlefield.

There is no corresponding separate chapter on the naval war. Amphibious aspects are, however, proportionately well-covered. Carrier air and mine warfare get brief mention.

Shelby Stanton's *America's Tenth Legion* is quite a different book but, in its way, equally good. Stokesbury has covered the entire war. Stanton confines himself to the operations of the U.S. X Corps from the landing at Inchon in September to the evacuation from Hungnam in December 1950, scarcely more than three months, but a time in which the fortunes of war gyrated wildly.

Stanton's title, *America's Tenth Legion*, is clever, but its meaning is not immediately apparent until one remembers that William Manchester entitled his biography of MacArthur *American Caesar*; then the connection between MacArthur's X Corps and Julius Caesar's famed Tenth Legion becomes obvious.

X Corps was formed by MacArthur to undertake the Inchon landing. Its original composition was the U.S. 1st Marine Division and the U.S. 7th Infantry Division. It had its own tactical air command, the 1st Marine Aircraft Wing. Later, after the Wonsan landing in October, it would add the U.S. 3d Infantry Division. In those later operations X Corps also had operational control, more or less, of the Republic of Korea's I Corps.

To the disappointment of the Marines, MacArthur gave command of X Corps, not to Lieutenant General Lemuel C. Shepherd, Jr., a superbly successful division commander in World War II and whose Fleet Marine Force, Pacific, was providing the preponderance of troops, but to his own Chief of Staff, Army Major General Edward ("Ned") M. Almond.

Stanton's book is thorough. It takes the reader through the organization of the X Corps, the landing at Inchon, the battle for Seoul, the reembarkation for the landing at Wonsan, and the wild pursuit of the defeated North Koreans into the mountains of Central Korea and toward the Yalu. Then the Chinese came into the war. The Eighth Army under Lieutenant General Walton H. Walker, operating to the west along the Seoul-Pyongyang axis, was routed. The X Corps, independent of Eighth Army because of a whim of MacArthur's, fought its own fight and fell back, to be evacuated chiefly from Hungnam. The operations of the 1st Marine Division at Chosin

Reservoir is put into the perspective of these other actions. As with Stokesbury, the performance of the South Koreans comes off better than in other earlier accounts.

A reader, looking at Stanton's carefully assembled order of battle and at the opposing numbers, might wonder, as some of us wondered then, "what if the decision had been made not to have withdrawn to the south, but to hold on at Hungnam?"

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Flesch, Ron. *Redwood Delta*. New York: Berkeley Books, 1988. 272pp. \$3.95

Miller, John Grider. *The Bridge at Dong Ha*. Annapolis: Naval Institute Press, 1989. 181pp. \$16.95

These books recount the exploits of two U.S. Marines in Vietnam, one a private first class, the other a captain. They are remarkable for showing the American fighting man at his best: courageous, skillful and resolute. Happily, both authors understood that they needed no scatological detail, vulgarity or profanity. In fact the PFC, Ron Flesch, writing twenty-three years after the event, has produced a totally clean manuscript without in any way reducing the drama of the action.

During 1965 and 1966, Flesch served in Vietnam as a member of Delta Company, 1st Battalion (Redwood), 9th Marines, in the Danang area and spent a year in almost

continual patrolling, skirmishing and fighting in defense of the airfield complex. The Marines' search for the Viet Cong led them into frequent contact with villagers and the problems attendant thereto. Graphic action on almost every page reveals the joys of small-unit infantry combat—field operations day and night in heat, rain and mud, attack, defense, ambush, scouting, patrolling, the ballistic crack of small arms fire, the whump of mortars and grenades, the thrill of stepping on a mine or booby trap, the casualties.

Although Redwood Delta was a regular Marine rifle company, and not one of the Combined Action units used with success by the Marines, the company made good progress in driving the Viet Cong out of the villages and in gaining the confidence of the villagers and their chiefs. Flesch and his comrades understood the problem of pacification and sympathized with the beleaguered civilians. The picture emerges of some very effective fighting Marines, tough, upbeat, basically cheerful through it all—not the murderous psychopaths so often portrayed by disaffected authors. On one of his last days in Vietnam Flesch was promoted to lance corporal, a small reward for one year of hard and dangerous service, but the new lance corporal remains unimbittered, still true to corps and country. *Semper Fidelis!*

Captain John Walter Ripley, USMC, served as advisor to the 3rd Battalion of Vietnamese Marines in the spring of 1972, in the area below

the Demilitarized Zone (DMZ). Almost all American troops had left Vietnam. Only the advisors remained. An experienced officer, Ripley had led a rifle company of the 3rd Marine Division during a previous tour in country.

Colonel Miller, himself at one time an advisor to South Vietnamese Marines, puts himself inside Captain Ripley, voicing Ripley's apprehensions, repeating what Ripley saw, heard and said—an autobiography written by someone else.

As Miller's tale begins, the North Vietnamese, in two-division strength reinforced with armor, cross the DMZ and push rapidly south toward Dong Ha, twelve miles away. At Dong Ha the only north-south artery, Highway 1, passes over a two-lane steel bridge built by American Seabees in other years. Once over the bridge the North Vietnamese can roll south to Hue unimpeded by natural obstacles.

On Easter morning when the enemy attack, Miller focuses on Ripley's effort to destroy the bridge before the enemy can take it.

In his struggle Ripley is aided by Army Major Jim Smock, advisor to an ARVN tank battalion, who knows very little about demolitions. The Marine explains to Smock in some detail how he intends to lay the explosives. The Major responds: "I don't know what in hell you're talking about, but I trust you! What should I do?"

Ripley liked and admired the Vietnamese Marines, who returned his affection and esteem. They called him

"Dai-uy Dien!"—"Captain Crazy!" Later on, the fight of this 3rd Battalion, Vietnamese Marine Corps, almost to the last man, against overwhelming numbers of North Vietnamese troops who crossed the river upstream, forms a tragic conclusion to the story. The book fails, perhaps purposefully, to clarify just who ordered Captain Ripley to blow up the bridge. Had he not done so, however, the South Vietnamese forces would have faced certain defeat.

Redwood Delta may have value to the national security community in reminding today's soldiers and Marines of the problems encountered in Third World countries occupied by our troops. Who is friend? Who is foe? Women and children, who are used by the enemy as cover, are often found in the line of fire. What to do? Withdraw and abort the mission? Cease fire and allow the enemy to gain fire superiority or to escape unharmed? Tough decisions for a captain, a sergeant, a PFC or anyone else.

The Bridge at Dong Ha has value as a lesson in leadership—using one's courage, talent and initiative to save the day in the face of "fearful odds"—to save his unit and in this case his army from destruction. Ripley sets a high standard of performance and grace under pressure, which all American officers might emulate. *Semper Fidelis!*

ANTHONY WALKER
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Broughton, Jack. *Going Downtown: The War against Hanoi and Washington*. New York: Pocket Books, 1988. 283pp. \$4.95

It is never too late to learn the truth about an important chapter in history. In this welcome paperback reissue of a book he published some years ago, Jack Broughton, Colonel, U.S. Air Force (Ret.) does a magnificent job of recalling his experiences in the air war over North Vietnam from 1964 to 1967—the toughest years of air combat (at least in that war) with the possible exception of 1972. He also does an excellent job of establishing the relationship between the decisions made in Washington and their effects on the conduct of the war.

Broughton establishes his credentials as a combat fighter pilot by beginning with a chapter on his experiences in air combat during the Korean War. The author began his operational flying in P-47s in Germany in the late 1940s; from that point to his final flights over Vietnam, it seems as if he flew most of the fighter aircraft in the U.S. Air Force. He also does an authoritative job in briefly describing the operational strengths and weaknesses of most of the U.S. Air Force fighters of that era. In one piece of modesty, Colonel Broughton seems to downplay the fact that, in this period, he also had a tour of duty as the leader of the very select group of fighter pilots flying with the Air Force acrobatic demonstration team, the Thunderbirds. As an aviator and as a man, Jack Broughton finished his

military flying career at the top of the ladder—a wing commander flying daily combat sorties in F-105s—“Thuds”—from Thailand to “Downtown” Hanoi. So he is well-qualified to write an “inside” account of the most severe combat and the abundant guns, missiles, and fighters in opposition.

Colonel Broughton also writes an excellent account of the best and the worst leadership involved in the air war, and in the wider politico-military war. Beyond his favorite targets in North Vietnam, he takes aim with a vengeance on the usual political targets—Lyndon B. Johnson and Robert S. McNamara. He also does a job on a number of Air Force generals who, in his professional judgment, tried to direct the war from afar while possessing neither the experience nor the integrity to do so competently. At the same time, Broughton gives full credit to those leaders of professional competence, relevant experience, and the best of motives.

The book is by no means overloaded with politics and discontent. It is primarily a personal story about air combat, bravery, and the victories and defeats of the author and those around him. It is a full account of how-to and how-not-to organize, lead and fight in the air.

The recollections of combat from two wars are as real and authentic as any can be. There may be some exaggeration, but not much. (Navy pilots flying the same kinds of missions at the same time to the same places could verify Broughton’s

description. For an example of the parallels, read *One Day in a Long War* by Jeffrey Ethell and Alfred Price (New York: Random House, 1989) to compare the similar narratives of Navy and Air Force crews originating from different places, but fighting the same enemy.) This book ought to be read for its description of war, and its honest appraisal of vulnerable human beings under the stress of combat—or the stress of organizational pressures and personal ambitions.

If the book has a weakness, it could be the overuse of the word “I”. But that should not keep you from reading it. The man had to have been extraordinary in order to have done the things he did.

In fact, *Going Downtown* ought to be required reading for all Air Force Academy cadets and other military flight students, including prospective Naval Aviators. It’s not too late for designated aviators to learn either.

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Brown, David. *The Seafire: The Spitfire that Went to Sea*. Annapolis, Md.: Naval Institute Press, 1989. 208pp. \$24.95

Lamb, Charles, ed. *War in a Stringbag*. London: Leo Cooper, 1987. 325pp. \$28

Winton, John. *Carrier Glorious: The Life and Death of an Aircraft Carrier*. Hamden, Conn.: Shoe String Press, 1986. 254pp. \$32

For the naval officer and historian well-versed in the role of U.S. naval aviation during World War II, these three books offer a fascinating insight into the different experience of Britain’s Fleet Air Arm carriers. The first book is about a carrier fighter plane, the Seafire; the second book is an autobiographical account by Charles Lamb, one of the pilots of a torpedo-bombing squadron, 815 Swordfish; the third book is about a single carrier, the *Glorious*, that was sunk early in the war, 8 June 1940. Together, these works provide an American reader with a survey of the evolution of carrier aviation from a completely different perspective—different in roles and missions, different in flight deck procedures and different in wardroom humor.

Of the three, *War in a Stringbag* makes the best read. The “Stringbag” was Britain’s slow, awkward, and virtually obsolete Fairey Swordfish. Lamb’s tale is not only of raw courage but of real ingenuity as he and his mates overcame the severe handicaps of the Swordfish, a 100-knot airplane trying to fight and survive in a sky filled with 300-knot enemies.

What was it like to survive the sinking of one’s carrier? Lamb begins his memoir with a terrific account of his experience—the destruction of the *Courageous* (twin to the *Glorious*) by a U-boat in British waters on 17 September 1939. The most harrowing aspect was to convince many crewmen, especially the mustered Royal Marines, to jump overboard. The latter only jumped after a flyer

gave a loud command: "ROYAL MARINES—HUN! TURN FOR'ARD—DISMISS! ABANDON SHIP—OVER THE SIDE AT THE DOUBLE—EVERY MAN JACK OF YOU!"

Later Lamb was assigned to the big *Illustrious*, a full-fledged new fleet carrier, for operations in the Mediterranean. That ship's most important operation was the night attack on the Italian fleet at Taranto in November 1940. Lamb sheds light on the five-year-old plan for the attack and describes the role of the pathfinders, of whom he was one, in leading 815 and 819 Squadrons as they crippled the Italian fleet. Interestingly, interservice differences forced the Navy to steal the necessary intelligence photos from the R.A.F. for the pre-battle briefing!

Two months later, in January 1941, the *Illustrious* was badly damaged by Stuka dive bombers off Malta and had to withdraw, leaving her homeless pilots to operate from bases successively in Malta, Crete, Greece, and Egypt.

In addition to many carrier pilots who flew with distinction in these early actions, two key leaders emerge—Rear Admiral Lumley Lyster and Captain Denis W. Boyd, whose talents kept them at the forefront of British carrier aviation throughout the war.

Lamb's recall of verbatim conversations is wonderful, if slightly suspect. He relied on second-hand accounts to fill in gaps of the story. Yet fact is often more remarkable than fiction; for example, landing

Swordfish planes in occupied Tunisia to spirit spies in and out of enemy territory under the very nose of the mistrusted Vichy French. On one such caper, in September 1941, Lamb landed in a muddy lake and was captured.

When Vichy France changed sides late in 1942, Lamb returned home for a year and then found himself among many former *Illustrious* shipmates on the new *Implacable* as "Lieutenant-Commander Flying" in charge of hangar and flight deck operations in the Pacific.

John Winton's *Carrier Glorious* is unusual in its intimate portrayal of prewar British carriers. Relying heavily on interviews and personal letters, Winton paints the best and most complete picture of any carrier of any navy of the 1930s. Converted from a cruiser hull, like the *Furious* and *Courageous* during World War I, the *Glorious* did her greatest service in the Mediterranean, providing air cover with three dozen planes for the British fleet, who were trying to deter Italian ambitions in that region.

Fleet exercises stressed convoy protection and multi-carrier operations with the *Eagle*. Shipboard routine is an eye-opener, including daily issues of rum and tobacco as well as anti-gas drills and night-flying operations. Malta's protection occupied the fleet, especially during the Abyssinian crisis and the Spanish Civil War; and *Glorious* was in the thick of it all.

As in the prewar U.S. Navy, men who would dominate wartime oper-

ations appeared on the ungainly carrier in one role or another—Lyster, Bruce Fraser, Edward Evans-Lombe, and L. D. Mackintosh. However, none come more alive than Captain Guy D'Orly-Hughes, a flamboyant submariner who became skipper of the *Glorious* in June 1939. He brought the ship into World War II. A hardheaded, overzealous veteran, he so shunned the advice of his more expert airmen that he lost his ship the following June off Norway to two German battleships.

Winton treats the controversy over the ship's loss by thoroughly analyzing the break between D'Orly-Hughes and his "Commander (Flying)"—air officer—Commander J. B. Heath, a gentle man and early career aviator who bore the brunt of the captain's displeasure. Appraising the merits of the case fairly was difficult, for D'Orly-Hughes sacked Heath, ruining his career, and sent him home just days before the fatal battle, in which the captain was killed. Winton, drawing upon the final analysis of the official British naval historian Captain Stephen Roskill, concludes that D'Orly-Hughes' capricious behavior was a major cause of the *Glorious'* loss.

No fewer than 1,207 men were lost from the ship, leaving only 38 survivors.

David Brown's tome might have been titled "All You Wanted to Know about the Seafire but Were Afraid to Ask." Virtually every flight from every carrier in every action by the naval version of the

Supermarine Spitfire is recalled in minute detail, or at least listed. The book is a complete reference work. It includes deck crashes and is replete with appendices on technical details, chronologies, air actions, and squadron or base assignments of each Seafire ever built.

After explaining the several modified versions of the Seafire, the author chronicles its combat record that begins with the invasion of North Africa in November 1942, off the *Furious*, *Formidable*, *Argus*, and *Victorious*. The planes served on escort carrier in the Italian and southern France campaigns and suffered high operational losses. Never the equal of the U.S.-built F4U Corsair and F6F Hellcat, the Seafire was often relegated to combat air patrols or gunfire spotting. But it complemented the American-built planes on carriers of the British Eastern and Pacific fleets against Japan during 1945. The Seafires did see some action in Malaya, Korea, French Indochina, and Burma between 1948 and 1954, fighting communist guerrillas and armies. Statistics of sorties summarize each action.

As an encyclopedic book, *The Seafire* is unsurpassed among carrier plane histories. Even the large number of superb photographs is unequalled for a book of this type. But it is downright dull reading.

Together these volumes serve to remind Americans that the British not only invented the aircraft carrier, but that their carriers fought a war all alone until the United

States rallied to their side. All three books include a wealth of heretofore unpublished photos, making their narratives even more graphic. Lessons for modern-day shapers of national security abound in all three.

CLARK G. REYNOLDS
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Poolman, Kenneth. *Allied Escort Carriers of World War Two*. Annapolis, Md.: Naval Institute Press, 1988. 272pp. \$29.95

Allied Escort Carriers of World War II builds on Kenneth Poolman's earlier work, *Escort Carrier, 1941-45*, which deals only with the British escort carrier experience. His new book includes U.S. hunter-killer operations in the Atlantic, as well as escort carrier operations by both navies in the Indian and Pacific oceans. Both books provide a detailed account of day-to-day CVE operations, particularly in the Atlantic.

The present volume has two advantages, aside from additional basic research. It is written in the full knowledge of the very effective first homing torpedo (the U.S. developed Mk 24 "mine"), and the revelation (not emphasized sufficiently) of the use of ULTRA intelligence to determine upcoming German submarine operations. The latter in particular—not publicly known until the late seventies—made the U.S. CVE hunter-killer group concept possible.

The escort carrier was created because of the British need to counter long range air attacks on merchant shipping in the mid-Atlantic where British land-based fighters could not reach. The first CVE was the *Audacity*, a captured German merchant ship upon which a flight deck, but no island or hangar, was built. She operated American made F4F Grumman fighters. Hers was a brief career, beginning in September 1941 and ending on 21 December, when she was sunk by the *U-751*. The U.S. by then was largely involved with the conversion of Maritime Commission C-3 hulls to CVEs. These went first to the British and then, after Pearl Harbor, to the U.S. Navy. Ultimately, the British operated 44 CVEs of which they built six, while the U.S. managed 80 CVEs of four classes, all merchant hull based designs. The U.S. lost one CVE in the Atlantic, and five in the Pacific. The British lost three, all in the Atlantic.

In the Atlantic antisubmarine war, the U.S. Navy got the better deal since it was assigned to close the lower half of the mid-Atlantic gap where the German submarines were safe from shore-based Allied ASW aircraft. There U.S. forces, not concerned with possible surface or air actions, perfected the independently operated CVE hunter-killer group which relied heavily on HFDF bearings and ULTRA intelligence to find enemy submarines.

In contrast, the British CVEs operated near the convoys, shielding them against both air and U-boat

attack. They operated in the stormy North Atlantic on the icy Murmansk run, and in the Mediterranean.

Allied Escort Carriers of World War Two chronicles these events in human level detail. Carrier aircraft losses, particularly in the northern latitudes, are grimly impressive. Caused not so much by enemy action as by the elements and the small deck, today these operations would be branded by the press as inhuman and unacceptable. Nevertheless, the British carried on.

The book contains numerous photographs, line drawings of the various CVE classes and a series of excellent aircraft profiles by J.M. Goulding. The last were undoubtedly originally in color and would have been more effective if pulled together in a few color pages.

The last third of the book deals with activities in the Indian and Pacific oceans, where, in general, the CVEs played support roles to the main British and U.S. fleets during the closing year of the war. The highlight is the battle between six CVEs and a Japanese task force led by the *Yamato*, the world's mightiest battleship. At the last minute the Japanese unexpectedly turned away after sinking just one of the six. As in the Atlantic, in the Pacific far more CVE aircraft were lost to operational problems than to enemy action.

There are errors, of course. Two pictures, for example, were miscaptioned, and the author cannot agree with himself on how to spell the *Liscome Bay's* name. These, however,

are minor. The book, overall, with eleven appendices and a bibliography is invaluable for what it does.

RICHARD F. CROSS
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Alden, John D. *Flush Decks and Four Pipes*. Annapolis, Md.: Naval Institute Press, 1965. Revised printing, 1989. 112pp. \$29.95

Hague, Arnold. *The Towns*. Kendal, England: World Ship Society, 1988. 92pp. \$12

Flush Decks and Four Pipes is a general history of the design, construction, peacetime use, and wartime service of the American flush-deck destroyers of the *Caldwell*, *Wickes*, and *Clemson* classes. A total of 273 flush-deckers were built between 1917 and 1922. The *Manley* was the first to commission on 15 October 1917, and the last was the *Decatur* on 9 August 1922. The last surviving flush-decker was not discarded by her owner, a banana company, until 1955. The flush-deck destroyers were built with a heavy gun and torpedo armament for fighting fleet actions. No antisubmarine weapons were installed in the ships as built, but depth charge racks and Y-guns were added to the few ships that were finished in time to serve during the First World War.

The first edition of *Flush Decks and Four Pipes* had a soft cover and an unusual format with two spines, but the revised printing has a hard cover and conventional single-spine format. No changes were made to the

original text but a preface and a full page of addenda have been added. The addenda clear up some minor errors in the original edition and answer several questions about the flush-deckers that have accumulated since the first publication.

About half of the book is a statistical summary with twelve lists of tabulated information about the ships: the main table lists all 273 by hull number with the dates of first commissioning, final decommissioning, and final disposition; flush-deckers converted to roles such as Light Minelayer (DM), Seaplane Tender (AVP), later AVD), High-Speed Minesweeper (DMS), High Speed Transport (APD), Miscellaneous Auxiliary (AG), Unclassified (IX), and Water Barge (YW); flush-deckers that served with the Coast Guard; the fifty ships transferred to Britain, listed by their "Town" numbers and names, cross-indexed to their former United States name and hull number; unit citations and commendations awarded to flush-deckers during World War II; a cross index of names to hull numbers, including the British "Towns"; and a cross-index of Russian names to former British and U.S. Navy names. General specifications are given for one flush-decker, the *Wickes* (DD-75).

The selection of photographs covers the entire life span of these ships. They are shown not only in all their variations but also at work in the multitude of tasks they performed, peace and war, including service by several as banana boats. A

centerspread photograph used in the original edition was left out of the reprinted edition. A full page with only its caption was left in. There is one inboard profile drawing of a flush-decker.

The Towns is a history, with text and tabular lists, of the fifty flush-deck destroyers transferred from the United States to Great Britain under the destroyers-for-bases agreement of 1940. The body of the work is devoted to the service history of each of the fifty destroyers. Three flush-deckers of the *Caldwell* class (two of them three-funnelled ships), twenty-seven *Wickes* class and twenty *Clemson* class were transferred at Halifax, Nova Scotia from September through December 1940. The flush-deckers in British service were given town names common to both the United States and Britain. Six of the destroyers were commissioned in the Canadian Navy and named after border rivers common to both Canada and the United States.

The British inspected the flush-deckers at Halifax. Hulls and main machinery appeared to be in good condition, but their boilers, auxiliaries, piping and wiring were not. Many needed immediate repairs before they could make the voyage to England, and others that had started across the Atlantic had to return to Halifax for repairs. Closer inspections were made as the ships were dry-docked in Great Britain where it was revealed that the most serious problem was rust and corrosion of their hulls. For example, loose, corroded rivets led to saltwa-

ter leakage, which contaminated fuel that in turn caused boiler damage. These defects, caused by years of neglect or wear, delayed the entry into combat of some flush-deckers.

The Towns were prepared for service and adapted for antisubmarine warfare through a series of scheduled refits. As a class they became operational early in 1941. They were used on escort duty on the east coast of England, in the North Atlantic and as antisubmarine escorts to the 1st Minelaying Squadron. Some were manned by Dutch, Polish or Norwegian crews. After 1943, most were employed only on training duties or were inactivated. Nine were loaned to the Soviet Union in 1944; one of these, the *Dyatelnyi*, ex-HMS *Churchill*, ex-USS *Herndon* (DD-198), was the last war loss of the class. The rest were returned to Britain in the years 1949-1952 and scrapped.

All the flush-deckers transferred to Britain are pictured, except the *St. Marys*, ex-USS *Doran*, ex-USS *Bagley* (DD-185) for which no authenticated photograph could be found. A foldout plan, with some details left out, shows the internal arrangement of the destroyers on transfer in 1940.

Together, these books offer an almost complete history of the flush-deckers. *Flush Decks and Four Pipes* offers a lively narrative description of the peacetime and wartime activities of the flush-deckers as a class, but Alden makes little mention of the poor material condition of those transferred to Britain. *The Towns* offers a look at the problems

of adapting fifty worn-out or neglected destroyers for service in a war for which they were unsuited, but in which they served gallantly.

WILLIAM H. CROFT
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Lambi, Ivo Nikolai. *The Navy and German Power Politics 1862-1914*. Winchester, Mass.: Unwin Hyman, Inc., 1984. 438pp. \$65

Ivo Lambi describes in detail the German plans for naval operations from 1862 to 1914 against France and Russia, and later against Great Britain and the United States as well. He also provides considerable information on the German naval construction programs of the period.

The fascinating details of naval operations planning dominate Lambi's narrative. Unfortunately, the author's explanations provide an inadequate strategic background. He has also allowed minor errors in technical points and nautical terminology to slip by. Had he provided a detailed bibliography, that would have been useful.

Still, this book probably stands by itself in the English language in the sheer detail of its scope and coverage. Several articles by Paul M. Kennedy, Jonathan Steinberg, and Holger Herwig, and Herwig's book, *The Politics of Frustration, the United States in German Naval Planning 1889-1941*, contain this same level of detail, but only for isolated periods.

Lambi's book has had very little exposure and has seen few reviews.

This is a shame, for it deserves far better treatment. I recommend it to both the serious student of German naval history and to strategic and force planners.

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Cole, Paul M. and Hart, Douglas M., eds. *Northern Europe: Security Issues for the 1990s*. Boulder, Col.: Westview Press, 1986.

At direct glance the book under review would seem to have been overtaken by the current revolutionary changes in Eastern Europe and the USSR. These days a sudden and massive thrust by the Soviet/Warsaw Pact forces across the North German Plain appears unlikely. The still ongoing upheaval in Eastern Europe, combined with the recent outcome of the talks on conventional force reductions in Europe may have made it almost impossible for the Soviets to carry out a sudden and massive *blitzkrieg*-type thrust into Western Europe.

So why is Nato's Northern Flank still worth serious discussion? To this reviewer, the answer is very simple. No matter what the current Soviet military doctrine may be, that country's military capabilities and geopolitical position count the most. The USSR is, and will remain for the foreseeable future, the only country which can obliterate both the United States and everyone else in Nato.

Despite the changes in the military situation in Eastern Europe, Nato's flanks remain vulnerable, particularly in the north. Hence, the importance of the topic chosen by the editors of the book under review.

The aim of the editors and authors was to reassess the security environment in Northern Europe in the light of history, traditions, and regional dynamics. The opening chapter by Arne Brundtland introduces the key issues that affect the policy in the region. Brundtland describes the historical environment that is the foundation of the current security issues. The next three chapters are case studies dealing with Sweden, the Federal Republic of Germany, and Norway.

Perhaps the most interesting chapter in the book is about the Federal Republic of Germany by Heinz von zur Gathen. The author describes in some detail the various strategic aspects of the Baltic Sea in its relation to central and northern Europe. His focus is, however, on the German contribution to the defense of the Baltic Approaches.

In a chapter on Norway's energy security, Charles K. Ebinger and Caroline Verhague explain both the potential and the vulnerability of Norway's energy security. Richard Brody in his chapter on deep-strike technology analyzes the relationship between emerging technologies and the defense of northern Europe. He describes how conventional deep-strike weapons can be used against the Soviet targets in the area and vice versa. The author also deals with the

problem of deploying and using such weapons by both sides.

Carl Bildt provides a summary of changes in the security environment in Northern Europe from a Swedish point of view. He indicates that while everyone agrees that things have changed in Northern Europe, there is some dispute about the extent of these changes and their implications. Bildt focuses his attention on the buildup of the Soviet SSBN/SLBM force in the Arctic waters, and the submarine incursions in Sweden's and Norway's territorial waters. But he also analyzes the problems concerning the energy and legal issues in the Arctic, prospects and problems of arms control, and finally on national defense efforts of various countries in the European north.

Bildt concludes that the strategic importance of Northern Europe will continue to increase in the years ahead for both opposing superpowers. Probably rightly, he thinks that Moscow's ultimate objective is to see the entire area neutralized. This reviewer speculates that despite *glasnost* and the *new thinking* the Soviet notion of neutrality still means neutrality on the Finnish rather than on the Swedish model. But only the future can bear out, or refute, that thought.

MILAN VEGO
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Nielson, J.M. *Armed Forces on a Northern Frontier: The Military in*

Alaska's History, 1867-1987. New York: Greenwood Press, 1988. 298pp.

For many Americans of the "lower 48," Alaska is an intriguing combination of familiar stereotype and unknown reality. A contribution such as *Armed Forces on a Northern Frontier*, which focuses on a locale often taken for granted, yet (unfairly) not often thought about in connection with anything other than dogsled races and oil spills, is a timely and welcome event.

Armed Forces is the product of considerable labor, that appears to be a labor of love—the author's enthusiasm for Alaska is evident throughout. In fact, it is a massive book; the nominal page length of 298 pages, plus acknowledgements and foreword, is inflated by the fact that the book is printed in a tiny 600 words-per-page typeface only slightly larger than that of a telephone directory. *Armed Forces* is packed with detail. For this reason, it is bound to be a valuable tool for anyone researching the subject of Alaska.

Unfortunately, the book does not achieve the author's aim of providing "a usable understanding of Alaska's past as a process of interrelated or connected events, people, and ideas." It delivers a tremendous quantity of facts, but a major cause of its lack of focus is that portions of the book were apparently developed and presented as separate papers. The rationale for the chapter structure is not evident; while chronological ordering is suggested by the title,

the chapters are not strictly faithful to this. The general lack of convergence of the chapters gives the impression that they may have been produced as separate papers, which later were glued together to produce a book. While this can be a legitimate way to create a book, the chapters should form an integrated whole; else, the resulting product is a compendium, not a book.

There would appear to be enough raw information in *Armed Forces* to lead to several, very good books on Alaska. If this information had been sifted and interpreted, a valuable contribution might have been made to a better understanding of our 49th state. But I found *Armed Forces* to be much like a cluttered attic: likely to have valuable and interesting objects, but hard to decipher as a pattern. A reader with a general curiosity about this subject would be advised to consult other sources first.

PATRICK G. SULLIVAN, JR.
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Weems, John Edward. *Peary: The Explorer and the Man*. New York: St. Martin's Press, 1988. 362pp. \$11.95

Originally published in 1967, Weems' biography of Robert E. Peary and his search for the North Pole has been reissued just in time for the latest round of the controversy over his polar exploration. While the Cook portion of the affair seems to have gone away, new calculations based on Peary's apparent sextant

observations indicate that he might have been as much as 110 miles away from the pole on April 6th of 1909.

Regardless of the merits of this newest turn of the controversy, Peary remains an important and impressive figure in naval and polar exploration. Shortly after his graduation from Bowdoin College in 1877, Peary was appointed as a civil engineer in the Navy and began a career of major exploration, that was broken only by the tedium of late 19th Century naval staff service. He seems to have been a good civil engineer, but his heart lay with polar exploration as it had from his undergraduate days. The Navy—whether from lack of interest or remarkable foresight—granted him an unusual number of leaves of absence and eventually the support to pursue his passion.

Peary appears to have been thinking about the Pole when he was surveying a Nicaraguan canal route in 1885. Taking leave from the Navy in 1886, he set out to explore the west coast of Greenland and to test his ideas for polar travel. With additional leaves from the Navy and support from the American Geographical Society, he returned to Greenland in the winters of 1891/92 and 1893/94 and again in the summers of 1896 and 1897.

In 1898, despite the general opposition of the Navy but with the intervention of President McKinley, Peary was directed to "continue his great work in the North." He was given a five year leave at half pay. When the Spanish-American War

broke out, Peary left for four years in Greenland. These were productive years, when Greenland was recognized to be an island, and much was learned about travel by dogsled across the ice. On his return to the Navy, he passed the promotion exams to commander, accepted the presidency of the American Geographical Society, and found a new friend in the White House—Theodore Roosevelt.

With the President behind him, the Navy quickly saw the possibilities in polar exploration.

In the 1905/06 season, the Secretary of the Navy sent Peary to seek the North Pole, saying "Our national pride is involved in the undertaking, and this department expects that you will accomplish your purpose and bring further distinction to a service of illustrious traditions." A sledging season with unusually wide leads in the ice pack prevented Peary from reaching the pole that season.

Again with the active support of President Roosevelt, he set out in 1908 for Greenland. After establishing base camps and wintering-over, he set out for the Pole with Matthew Henson and several Eskimos. By Peary's calculations, he reached the Pole on April 9, 1909 and returned to fame and controversy. Eventually, Congress appointed him rear admiral in the Civil Engineer Corps in recognition of his accomplishments.

What sort of a man was Peary? Peary's diaries and letters show him to be a tough, individualistic driver who was extraordinarily dedicated to a goal that dominated his life.

While he had doubts and concerns for the hardships that his life's work caused for his family, he never deviated. One reads of Peary for a study in grit: this was a man who lost all his toes to frostbite in 1894 and still walked to the North Pole, 15 years later when he was 54 years old.

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Donnelly, Christopher. *Red Banner: The Soviet Military System in Peace and War*. Janes Information Group, Ltd., 1988. 288pp. \$52.50

The primary strength of *Red Banner* lies in the insights it provides on the underlying forces, motivations, and dynamics which act to shape the Soviet military forces and their doctrines.

Christopher Donnelly is the Director of the Soviet Studies Center at Sandhurst. One of his key premises is that the Soviets view war differently than we in the West do. Hence, he opens his book with a section called "Molding the Soviet Military Mind." He writes that "we may all share the same human features, but we possess them in different measures, and we develop different values depending on our experience and our circumstances. If this can be said of individuals, then it can also be said of nations and equally, of armies." In this section he focuses on the environmental, historic, national, military, cultural, and political factors that create the "lenses" through which Soviet

officers view both the West and the issue of warfare. It is here that Donnelly builds the reader's understanding of the "raw" forces that shape the rest of the military. (For example, the lack of terrain features in much of the U.S.S.R. cause the Russian officer to seek other means to protect himself and men, hence the strong Soviet emphasis on deception or camouflage.)

The following section, "The Soviet Military Infrastructure," examines the place of the military in society, its structure, the development of its doctrine and its training. He places emphasis on the education of officers and the impact of the general staff.

Donnelly's final section brings all these factors together in "The Soviet Art of War." After he discusses the development of Soviet Military Art and its current state, Donnelly presents a view of the how the Soviets would try to fight a war today.

Some of the points advanced by Mr. Donnelly are:

- The remarkable consistency of Soviet military doctrine. Although lessons from modern technology have been integrated, so have many from the Civil War and the Great Patriotic War. In fact, the basic doctrinal structure retains much of Czarist, Leninist, and Marxist origins.

- The Soviet Military is essentially a cadre mobilization system, much like the Israelis. Consequently, the Soviets can, with relative ease, transfer divisions currently maintained at a high readiness state to a

lower state without making fundamental changes to their military structure.

- The Soviets see Nato's emphasis on the tactical development of lower level commanders as building very expensive chess pieces, while they focus on developing the best chess masters possible. Thus, even if Nato achieves tactical victories, the Soviets plan to win at the strategic level.

- With the General Staff concept, the Soviets have achieved their own form of "jointness," since an officer's promotion as a General Staff officer is based on his success in that role, and not necessarily on the views of his parent service.

- The Soviets would not use nuclear weapons even when an offensive was "bogged" down. The most likely use would be in response to Nato nuclear actions. But even a Nato "nuclear demonstration" might be ignored if the Soviets were close enough to victory.

Red Banner presents a comprehensive, overall look at the Soviet military structure today. Then, through the depiction of the underlying forces, *Red Banner* also gives the reader a framework to interpret what is happening during the current period of change. Donnelly does all this in a readable and understandable form.

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Nelsen, Harvey W. *Power and Insecurity: Beijing, Moscow and Washington: 1949-1988*. Boulder: Lynne Rienner Pub. Inc., 1989. 165pp. \$25

Now that we are in the last decade of the twentieth century, with events in the international arena spinning out of control, and with historic and seemingly fixed national alignments changing like the winds, Harvey Nelsen's *Power and Insecurity* is a most welcome book. In 178 pages, Nelsen, a former U.S. government intelligence analyst and author of the *Chinese Military System*, attempts to explain the Sino-Soviet dispute in terms of national security parameters.

Starting out his work as a history of a bilateral relationship, Nelsen quickly found that "at every turn, U.S. policies intruded on my attempts to fathom Sino-Soviet bilateral relationships, thus the book became a triangular analysis." Examining this triangular relationship, Nelsen's analytical tool is the theme of "power and insecurity." Nelsen concludes that the key to understanding the Sino-Soviet relationship is neither ideology nor economics. It is, instead, a focus on national security interests and threat perceptions that drive the actions of these two nations and thus shape their relationship.

Since the publication of *Power and Insecurity*, domestic events in both the Soviet Union and the People's Republic of China have moved dramatically. Given these events, however, Nelsen might have drawn

different conclusions concerning the roles that ideology and economics play in forming the external relationships of the two nations.

Rather than being minor factors, as Nelsen contends, ideology and economics define the national security interests of the Soviet Union and China. In the Soviet case, Mikhail Gorbachev has been driven by an economic situation that has become the most severe threat facing the Soviet Union today. For the Chinese government, the events of Tiananmen Square have led the communist party leadership to view the trend toward Western-style liberalization as an ideologically based threat to national security.

In both cases, it is domestic factors that constitute the basis for the threat to national security and thus the major force shaping the bilateral and triangular relationship.

Nevertheless, Nelsen provides a sound background from which we can better understand the dynamic Sino-Soviet relationship. In the potentially turbulent years ahead, it would do us all well to improve our understanding of the operation of one of the most important trilateral relationships in the world. In this sense, anyone interested in U.S. national security would profit from reading this book.

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Huang, Ray. *China: A Macrohistory*. Armonk, N.Y.: M.E. Sharpe, Inc., 1988. 277pp. \$24.95

In the spring of 1989, the blossoming of the prodemocracy movement and its brutal suppression by the Beijing regime drew worldwide attention and underscored the difficulties of bringing about change in China.

Those who seek historical insights into why reform is so hard to implement in contemporary China would do well to read Ray Huang's *China: A Macrohistory*. Huang, a Ming dynasty (1368-1644) specialist who has taught at several U.S. universities, has produced a concise, readable, interpretive history of China.

Huang's thesis is that China's vast territory and enormous population shaped and constrained the evolution of Chinese politics, economy, and society. China's huge size dictated that a mystical political authority and patriarchal social system—the sociopolitical system of Confucianism—buttress the thinly stretched state apparatus. Furthermore, management of this large agrarian society required that simplicity and uniformity inform the organization and activities of the state.

The need for homogeneity had several ramifications for the polity. First, political power and correctness emanated from the top—the emperor—downward to the peasantry, mediated by a bureaucratic class schooled in ideological cor-

rectness. Political authority was unitary and unidirectional.

Second, in political life, form often superseded content. Higher levels of authority tolerated nominal compliance in implementing policies, as long as lower levels made the correct motions of obedience. Such tolerance was necessary to carry out uniform policies over a vast nation, but over time also resulted in the failure of reforms and the decline of central government power.

Third, the bureaucracy, trained exclusively in the reigning sociopolitical orthodoxy, never developed the technical skills necessary to address the increasingly complex practical problems that began to face China in the 18th and 19th centuries.

Fourth, the state viewed the polity as a collection of villages of small-scale peasant farmers, and based its policies on this simple ideal. No effort was made to break up the cellular nature of the village economy or to develop a national economy beyond the needs of the taxation system. The development of countervailing local interests, institutions, or a legal system that might challenge the political and economic structure was precluded.

As a result, size, Confucianism, and the agrarian-bureaucratic management system made China "mathematically unmanageable" and inhibited efforts to change China. Dynasties fell when the existing taxation and military systems became unable to support

the superstructure of the state, and thus the state lacked the resources to govern and defend the nation. New dynasties reconstituted the state, revived the economy and taxation system, and reinforced the Confucian social system, but remained unwilling and unable to effect the necessary reforms to make China "mathematically manageable."

Yet, Huang contends, beginning with the onslaught of the West in the 19th century, China has been shifting from its outdated agrarian-bureaucratic management to the system of "monetary management" that characterizes modern nations. Monetary management is the application of commercial principles to the governance and economic life of a nation, whether it be capitalist or socialist. Huang believes that China's move to monetary management is irreversible. He maintains, nevertheless, that the strength of the legacy of the past, as testified by the difficult and protracted course of the Chinese Revolution, means that this change will be slow and will experience reverses, contradictions, and readjustments.

China: A Macrohistory offers an excellent analysis of the logic of Chinese history to specialists and nonspecialists alike. Huang's concise volume, however, may leave some readers hungering for more details on contemporary China. Those concerned principally with issues related to national security, therefore, should read this book for background, and consult other

works on the People's Republic of China. Finally, in light of the riveting events of the spring of 1989 and the conservative backlash thereafter, Huang's optimistic conclusion that China is well on its way to becoming "mathematically manageable" by modern standards seems premature.

ROXANE D.V. SISMANIDIS
The Library of Congress
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Handel, Michael I., ed. *Leaders and Intelligence*. Totowa, N.J.: Frank Cass & Co., Ltd. 1989. 300pp. \$12.95

"There are in any army, and for that matter any big organization, very large numbers of people whose existence is only remembered when something for which they are responsible has gone wrong."

When British Field Marshal Slim pointed this out in recounting his experiences in World War II, he was not specifically referring to the intelligence community. But his comment, included in the anecdotal and highly enjoyable essay by former head of British scientific intelligence, Professor R.V. Jones in *Leaders and Intelligence*, neatly characterizes one of the major themes of this collection.

Leaders and Intelligence contains nine essays which were originally delivered during three international conferences on Intelligence and Military Operations that were held at the U.S. Army War College

between April 1986 and May 1988. Each essay examines a historical case study relationship between either political or military leadership at the operational or strategic level, and the intelligence resources that were available and utilized. These relationships and the utilization of those intelligence assets are critiqued in light of the historical and contemporary lessons to be drawn.

As with any collection, there is difficulty in establishing a specific line of thought which flows neatly through to the end, but the editor's introductory essay, while putting forth personal views on the state of current leadership-intelligence relationships, also serves to provide an overview of the works that follow, and establishes a reasonable framework to support the volume as a coherent whole. The tone it sets, initially providing a not-so-subtle bemoaning of the unfortunate fate of intelligence officers in general, does, in the final analysis, give a balanced account of the problems and shortcomings of both sides of the leader-advisor relationship and presents sound arguments, evidence and principles to support the need for further attention on both sides to improve the way each does business.

The case studies selected for this collection vary both in aspect and in style, and cover nearly 200 years: Napoleon in the Jena campaign; German, English and American leadership in World War II; the Army-CIA-media clash during Vietnam; and American and Israeli actions in the Middle East.

"Intelligence Estimates and the Decision-Maker," by Major-General (Res.) Shlomo Gazit, former Israeli Head of Military Intelligence, is a frank, pointed and remarkably revealing position piece. Using examples from recent U.S. and Israeli history, he provides a refreshingly non-American critique of events in the Middle East and the intelligence (and leadership) successes and failures that affected and sometimes precipitated them. He describes in stark and brutal detail how the abortive Israeli war in Lebanon, the occupation of West Beirut, and the resulting Phalangist massacre in the refugee camps were the result of leadership or intelligence failings.

Not only does *Leaders and Intelligence* provide historical lesson and elucidation, it also provides current, real-world examples of what can go right and what can go wrong in the complex environment of leadership-intelligence relations, and offers relevant suggestions for improving them.

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Naval War College

West, Nigel. *The SIGINT Secrets*.
New York: William Morrow &
Co., Inc. 347pp. \$22.95

Anyone who is looking for the complete history of signals intelligence, as defined by the United States, will have to look elsewhere

than in this book. However, this is an interesting review of the start of modern communications intelligence (Comint), how radio came to be, and how some bright people realized early on that it would be important in war as a double-edged sword.

Nigel West is a bit stuffy. He is anxious that we know which school each of the early players in English Comint attended, from what acceptable profession they came and, in many cases, the excellent careers that followed. All of this is interesting to the real aficionado of intelligence, but it makes for heavy reading for someone interested in "just the facts." Happily, a good deal of what he says is, in fact, interesting from a military history point of view.

West maintains that the only really reliable intelligence in World War I and, even more so, in World War II, was Comint. Traditional human intelligence was largely ineffective. This was the result of many factors, including the Gestapo's effectiveness in Germany. He makes a convincing case for this, citing the number of agents that were "turned" and the tremendous damage their handlers did to the agents' unsuspecting employers. Unfortunately, he makes almost no mention of Electronic Intelligence (Elint), the other half of signals intelligence as defined by the United States, and its historically significant contribution to intelligence in both peace and war over the past half century.

West's description of how Comint played a major role in both world wars is first rate, but when dealing with more recent times the book becomes less detailed. It does have some new material, but does not describe in depth Sigint's role in the minor wars and incidents with which Britain and the United States have been involved since 1945, including Korea, Vietnam and the Falklands.

The author is confused over how the National Security Agency was formed, and the missions and roles of the various U.S. service cryptologic elements: the Naval Security Group (NSG); the Electronic Security Command (ESC) and its predecessor, the USAF Security Service (USAFSS); the Army's Intelligence and Security Command (INSCOM) and its predecessor, the Army Security Agency (ASA). For instance, ASA was not disbanded to form the Armed Forces Security Agency, forerunner to NSA, and I find it hard to believe that the Naval Security Group has responsibility for all U.S. communications security as its only mission.

West says that the shootdown of KAL 007, the Korean airliner the Soviets destroyed (claiming they thought it was a USAF RC-135), is proof that the Soviets lag behind the West in Sigint capability. I do not follow how he arrived at that conclusion. One isolated error is a bit much on which to make such a general and, I believe, erroneous assumption.

Still, this book should be required reading for all prospective commu-

nications officers and radiomen. Sections of it would also be good reading for war colleges and prospective commanding officers. It clearly illustrates that even the most sophisticated cryptologic devices can be defeated by users who are careless, lazy, or both, and what the appalling results can be.

The conclusion of the book is the story of a prominent cryptologist who, at the end of his career writes a book about that exact point, and is "hounded to death" by both NSA and the British Government Communications Headquarters (GCHQ) because they fear their targets will read the book, understand how we are reading their mail, and change their procedures. I have less faith than that in radiomen worldwide, and more faith than that in cryptologists: Radiomen on both sides are going to continue to make mistakes and cryptologists on both sides are going to continue to exploit them. Let us hope we make fewer significant mistakes than our competitors. This book may make some of us realize the potential penalties.

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Hayler, William B., ed. Turpin and MacEwen's *Merchant Marine Officers' Handbook*. Centreville, Md.: Cornell Maritime Press, 1989. 573pp. \$50

The formal college education of a deck officer in the merchant marine

is very similar to that of a naval officer for, among other things, by law, American merchant marine academies include enough courses in naval science to qualify their graduates for commissions as ensigns. In fact thousands of such graduates have served in the navy and some have reached flag rank.

Fresh out of their respective academies, then, the merchant officer and the naval officer are on reasonably common ground. But after five years or so, each would be quite uncomfortable—miserable even—if suddenly thrust into the other's work place, for the merchant mariner becomes more and more a mariner every year out of the academy, while the naval officer evolves into a remarkable composite: warfare specialist, sub-specialist, administrator, bureaucrat, diplomat, and mariner.

The editor of this book, William B. Hayler, has managed to succeed in both worlds. After a full career as a surface warfare officer, he earned his license as a master mariner and became a professor at the California Maritime Academy. The first edition of this handbook, written by Edward A. Turpin and William A. MacEwen, was published in 1942, nearly 50 years ago. The current edition is written not by two people, but by 24 who collectively have written 25 chapters and five appendices. Hayler himself is a major contributor. Most of the contributors are maritime academy graduates, though three are naval academy alumni who later did the additional

study necessary to advance to master mariner.

Some chapters are peculiar to the merchant service: containership operations, labor relations, tankers, ship's business, Coast Guard inspections, and so forth.

Many others would be useful to merchant and naval officers alike: piloting and navigation, collision avoidance, celestial navigation, steering gear, ground tackle, stability and trim, fire fighting, accident prevention, medical emergencies, and rules of the road, among others. Of course, there are none on strictly naval matters, such as formation steaming, battle station procedures, and protocol.

The first chapter, by Captain William F. Schill, is a beauty: "The Everyday Labors of a Ship's Officer." It is the common-sense, plan-ahead, know-your-gear, know-your-men stuff of which success is made. It could just as easily have sprung from the pens of Nelson or Nimitz.

Very much up-to-date, this entirely new text treats the ship-board use of computers, electronics, and inert gas systems, and deals with the problem of pollution. It provides instruction in the use of hand calculators to figure everything from great circle distances and course angles to fuel consumption.

The book is intended as a text for both the maritime academy cadet and the able seaman preparing to sit for his first license, and as a reference for the professional mariner who needs only to jog his memory.

The text appears complete, up-to-date, and accurate. What is not accurate is its title, which ought to be *Merchant Marine Deck Officer's Handbook*. But the editor can't be faulted for that; the title was selected for him nearly fifty years ago.

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"The winds and waves are always on the side of the ablest navigators."

Edward Gibbon
Decline and Fall
of the Roman Empire
(1776-1788)

Recent Books

Addington, Laroy H. *The Patterns of War Through the Eighteenth Century*.

Bloomington: Indiana Univ. Press, 1990. 161 pp. \$10.95

In 1984, Addington published a book entitled *The Patterns of War Since the Eighteenth Century*. This volume is both an introduction and a companion piece to it. Addington's patterns are not abstract ones, but highly compressed narrative chronologies of the major wars through the centuries.

In this way, he is able to give a general history of warfare, showing its social, political, technological and organizational development. The two volumes will be useful for undergraduate and introductory survey courses in military history.

Anthony, Ian. *The Naval Arms Trade*. New York: Oxford Univ. Press, 1990.

221 pp.

The Naval Arms Trade, a "Strategic Issue Paper" from the Stockholm International Peace Research Institute, provides a general overview of the naval arms market, focused upon both the principal supplier (seller) countries and buyer countries. The book also provides a detailed analysis of the procurement processes, illustrated by collaborative naval programs among nations and the programs of Argentina, Australia, Brazil, Canada, India, and New Zealand. The interrelated economic, political, and military factors involved in the international transfer of maritime aircraft, missiles, ships, submarines, and technology are discussed. The book should be of interest to policy analysts as well as to those interested in the arms trade and weapon acquisition processes.

Campbell, John, ed., *The Experience of World War II*. New York: Oxford Univ.

Press, 1989. 256pp. \$29.95

John Campbell has compiled a moving volume focusing on the social aspects of the war and the postwar recovery. The personal, emotional, and economic impact of the war, on the warriors and innocent bystanders, is beautifully described in words and vivid pictures. Side boxes contain brief biographies of personalities in the war and give graphic summaries of trends. The overall scope of the war and individual battles are given only brief coverage to help orient the reader and form a background for the human story. The book is organized into self-contained sections focusing on individual groups or themes such as the soldiers and sailors, the civilians, propaganda, the war workers,

etc. Don't miss this one. It is a vivid reminder that war involves large numbers of people making great sacrifices and enduring great suffering. Good therapy for the strategist who has begun to think too much about the abstractions of war.

Dann, John C., ed. *The Nagle Journal: A Diary of the Life of Jacob Nagle, Sailor, from the Year 1775 to 1841*. New York: Weidenfeld & Nicholson, 1988. 402 pp. \$27.50

The Director of the Clements Library presents in this volume the previously unknown manuscript autobiography of a seaman. Apparently written in Canton, Ohio, about 1840, the author recounts an amazing career. In 1777, Nagle joined his father serving with Washington's army. When that army went into winter quarters at Valley Forge, he joined the privateer *Fair American*, commanded by Captain Stephen Decatur; he was 16 years old. At the age of 20, in 1781, he joined the *Rising Son*, commanded by Captain Samuel Cassan.

Captured by HMS *Royal Oak*, he went into British service, serving successively under Rodney at Martinique, Arthur Phillip in the First Fleet to Australia in 1788, Howe in the Channel in 1794, and Jervis and Nelson in the Mediterranean. He sailed to the Far East in the East India Company's ships and to South America on a Baltimore clipper, then swallowed the anchor and moved inland to Ohio.

The editor has provided introductory sections to each stage of Nagle's life, providing a broad context for the vernacular narrative that follows. In addition, he has chosen an excellent range of illustrations to complement the text, which is carefully annotated with archival references.

Nagle's career richly mirrors many of the main facets of maritime life in the late 18th and early 19th centuries. It all makes fascinating reading, but as a document of the time it is "too good to be true."

Forrester, C.S., *The Good Shepherd*. Annapolis, Md.: Naval Institute Press, 1989. 256pp.

The story of Commander George Krause, USN, the good shepherd of his convoy flock, has stood well the test of time. Duty and character are what this man is about and what he teaches us—duty and character which give small reward save their own, enough for a good man such as this one. Krause is no Hornblower, but he is a man who can be counted on. Chasing submarines away from a convoy for 52 unbroken hours is a thinking man's game as well as a test of physical and mental stamina. *The Good Shepherd* was originally published in 1955 and has been reissued by the Naval Institute Press (one of the series of classics of naval literature) with an introduction by Commander J.D.P. Hodapp, who was Forrester's literary assistant.

Mackenzie, Robert Holden. *The Trafalgar Roll: The Ships and the Officers*.

Annapolis, Md.: Naval Institute Press, 1989. 336 pp.

An offset reprint, without correction or annotation from the original 1913 edition, this work remains a useful source today. It is organized into 33 chapters, each devoted to one of the British vessels which served under Nelson at the battle of Trafalgar in 1805. (Of course, there were only 27 ships in combat, the remainder being 4 frigates, a schooner, and a cutter which were present and on patrol to windward of the battle, but not engaged.) Each chapter gives a short sketch of the ship's history and a brief synopsis of the careers of each officer on board. Interestingly, the lists show that at least 7 officers who fought at Trafalgar were born in North America.

Melville, Herman. *White-Jacket*. Annapolis, Md.: Naval Institute Press, 1988. 452pp.

No, this is not a new record for tardiness in publishing a review. Melville's *White-Jacket* of 1850 has been reissued by the Naval Institute Press as part of its series Classics of Naval Literature. Finding himself stranded in Honolulu, Melville enlisted in the navy in 1843 aboard the USS *United States*, which returned him to Boston after a cruise of the South American station. By all accounts, Melville was an exemplary sailor, and *White-Jacket* is to be taken not as a thinly disguised autobiography, but rather as a series of tales from the fore-castle. The book's significance lies in the impact it had on Congress and the public. Melville's description of flogging may well have been the catalyst that led to Congress banning the practice from the U.S. Navy. Aside from flogging, *White-Jacket* is a collection of short anecdotes, written in the elaborate language of the time, which give us a sense of life in another time and in another navy.

Nailor, Peter. *The Nassau Connection: The Organization and Management of the British Polaris Project*. London: HMSO, 1988. 133 pp.

Professor Peter Nailor's long awaited history of the British Polaris submarine project concentrates on the early origins and management organization for the project. Beginning with the communique following the meeting between Harold Macmillan and John F. Kennedy at Nassau in December 1962, it covers the story up to the point when the Royal Navy became ready for the first deployment of the weapon system in July 1969.

This carefully focused and succinct history is particularly valuable as an example of the special relationship between the USN and the RN, while also serving as an instructive case study in the organizational management of a successful technological innovation.

We will undoubtedly wait a long time before more historical information on this project becomes available, but in the meantime, Professor Nailor's

well-written book will remain the authoritative foundation stone of our knowledge.

Sinclair, Arthur. *Two Years on the Alabama*. Annapolis, Md.: Naval Institute Press, 1989. 303pp.

As one of the classics of naval literature, *Two Years on the Alabama* has been reissued by the Naval Institute Press. The Confederate raider CSS *Alabama* began her depredations on Yankee shipping in the summer of 1862. Two years later she was flushed out of Cherbourg by the USS *Kearsarge* and sunk in a dramatic and very public battle. During her short but violent life she captured 60 prizes worth \$60 million—in 1865 dollars! She was one of history's most successful commerce raiders—a lost art in the suite of current naval tactics. Arthur Sinclair was a lieutenant aboard the *Alabama* throughout her cruise. While he may have written this book to settle some old scores, it remains a lively account of an almost forgotten navy.

Williams, Ray. *Royal Navy Aircraft since 1945*. Annapolis, Md.: Naval Institute Press, 1989. 170pp.

From the Seafire—the seagoing version of the Spitfire—to the Sea Harrier, the Royal Navy has produced and flown a remarkable collection of aircraft, even as the number of aviation-capable ships has declined since 1945. The most interesting has been the V/STOL Sea Harrier which destroyed 24 enemy aircraft in the Falklands War with no loss. Until the passing of the big, through-deck carrier from the Royal Navy in 1978, a number of fearsome big jets were flown, including the Phantom, the Buccaneer, the Scimitar and the Hunter. Williams' book catalogues each and every one, including the development history, the squadrons in which they served, and their eventual disposition.

Willoughby, Malcolm F. *The U.S. Coast Guard in World War II*. Annapolis, Md.: Naval Institute Press, 1990. 448pp. \$39.95

This is a reprint, happily on better paper than the original, of a book which appeared originally in 1957. Its style is plodding, and analytically it is gauze-thin. But it has a lot of photographs otherwise hard to find, and it tells in great detail about the surprising variety of activities and forms of combat which the Coast Guard performed very well during the Second World War.

Wilson, Dale E. *Treat 'em Rough: The Birth of American Armor, 1917-20*, Novato, Calif.: Presidio Press, 1989. 257pp. \$24.95

Tanks were the answer to the problem of breaking up the endless stalemate of trench warfare during World War I. Pioneered by the French and British, they were quickly adopted by the U.S. Army. Wilson, an assistant professor of history at the U.S. Military Academy, gives life to the trials and tribulations

of bringing a new technology into the American military. Patton and Eisenhower were among the officers who nurtured the infant corps through its birth pains until its absorption into the infantry in 1920. Descriptions of these early tanks, their weapons, and operations in the three great tank battles of the war are well told and illustrated with photographs and tactical maps of the battlefields.

Wilson, Michael. *Destination Dardanelles: The Story of HMS E7*. Hamden Conn.: The Shoe String Press, 1988. 194pp. \$26

When the Royal Navy began to build submarines early this century, they were so poorly regarded that no ceremony attended their launch and commissioning. They were small, fragile things and were given only the poor dignity of numbers rather than names. Fortunately for naval historians, one of the men who sailed them in the First World War, Lieutenant Oswald Halifax, executive officer of the *E7*, kept a diary. It tells of wartime life in a cranky, primitive, dangerous and unreliable submerging sewer pipe, and is the basis for Wilson's history. His work features HMS *E7* and places that little submarine in the larger naval events of the time, including her remarkable passage of the Dardanelles with other British submarines.

Withey, Lynne. *Voyages of Discovery: Captain Cook and the Exploration of the Pacific*. Los Angeles: Univ. of California Press, 1989. 512 pp. \$12.95

Lynne Withey's one volume narrative history of Cook's exploration of the Pacific is a welcome addition to a crowded field. After the magisterial studies of J.C. Beaglehole, one might think that there was little left to say. Nevertheless, as we passed through the bicentenary celebrations marking Cook's three voyages between 1768 and 1779, a whole new range of insights have been found. Most importantly, scholars have come to see the now well-documented events of the voyage in the terms of a larger context: the interaction of European and Polynesian cultures. Within this broad view, Withey has summarized the new scholarship and linked it to the concrete facts surrounding the voyages. She has deftly traced the way in which the Europeans' values colored their reactions to the peoples of the Pacific Islands, and at the same time, she has elegantly described Cook's personality and his achievements as a leader and a seaman. This highly readable book is equally appropriate as a text to introduce undergraduates to the subject, or a pleasant companion for anyone who wants to read of one of the most engrossing chapters in the history of the Pacific Ocean.

