Naval War College Review

Volume 46
Number 4 *Autumn*

Article 1

1993

Autumn 1993 Full Issue

The U.S. Naval War College

NAVAL WAR COLLEGE REVIEW

AUTUMN 1993

The editorial offices of the *Naval War College Review* are located at the Naval War College, Newport RI (Address: Code 32, Naval War College, 686 Cushing Rd., Newport RI 02841-1207). Published quarterly, its distribution is limited generally to commands and activities of the U.S. Navy, Marine Corps, and Coast Guard; regular and reserve officers of the U.S. Navy, Marine Corps, and Coast Guard and military officers of other U.S. services; foreign officers and civilians having a present or previous affiliation with the Naval War College; selected U.S. government officials and agencies; and selected U.S. and international libraries, research centers, publications, and educational institutions. Correspondence concerning *Review* matters should be directed to its editorial offices. (Telephone: 401-841-2236, DSN 948-2236, Fax 401-841-3579. All other departments of the College may be reached by calling 401-841-3089, DSN 948-3089.)

The *Naval War College Review* was established in 1948 and is a forum for discussion of public policy matters of interest to the maritime services. The forthright and candid views of the authors are presented for the professional education of the readers. Articles published are related to the academic and professional activities of the Naval War College. They are drawn from a wide variety of sources in order to inform, stimulate, and challenge readers, and to serve as a catalyst for new ideas. Articles are selected primarily on the basis of their intellectual and literary merits, timeliness, and usefulness for a wide readership.

The thoughts and opinions expressed in this publication are those of the authors and are not necessarily those of the U.S. Navy Department or the Naval War College.

Manuscripts must be submitted in typewritten form, double-spaced or triple-spaced (WordPerfect 5.1 diskettes welcome). They are submitted at the sender's risk. The *Naval War College Review* neither offers nor makes compensation for articles accepted for publication and assumes no responsibility for return of the material, although as a matter of practice every effort is made to return manuscripts not accepted for publication. In submitting an article, the sender warrants that it is original, that it is the sender's property, and that it has not been published elsewhere.

For reprint permission and indexing information, see notice on page 176.

Second Class postage paid at Newport, R.I. POSTMASTERS, send address changes to: *Naval War College Review*, Code 32S, Naval War College, 686 Cushing Rd., Newport RI 02841-1207. ISSN 0028-1484

NAVAL WAR COLLEGE REVIEW

Volume XLVI, Number 4, Sequence 344 Autumn 1993

Our cover: Fueling at sea in the 1990s—a black-and-white image selected as a contrast with the earliest days of a vital evolution, discussed in this issue by Thomas Wildenberg. For more information about this photograph see page 74.

The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by law of the Department of the Navy. Funds for printing this publication have been approved by the Navy Publications and Printing Policy Committee.

"In his editorial leadership, Frank has reflected deeply, probed incessantly, and written clearly about the nature of sea power and the role of naval forces. But he has been no armchair admiral or detached intellectual; rather, he has made a concrete contribution to naval thinking."

President's Notes

THE QUALITIES OF THOUGHT and expression hold fast together. Our world over the last fifty years has been plagued not only by some foolish and evil ideas but by the degradation of language expressed in jargon, obscure formulas, verbosity, and inexactness. But if this has been a salient feature of the general intellectual landscape, there has been one warrior against both bad thinking and bad writing, and that is Frank Uhlig, who retires this fall as Editor of the Naval War College Press (though he will remain a part of the larger College community). Frank was enticed to leave the U.S. Naval Institute in 1981, at a time when the Chief of Naval Operations, Admiral Thomas B. Hayward, and the Under Secretary of the Navy, Robert J. Murray, were seeking to revitalize strategic thinking in the naval services and to develop a shared intellectual framework within which officers could address key issues of strategy and operations. The result was the reorganization of research and gaming at the War College into a single Center for Naval Warfare Studies (CNWS), which

---

Admiral Strasser holds a B.S. from the Naval Academy, two master's degrees from the Fletcher School, Tufts University, and from the same school a Ph.D. in political science. He graduated from the command and staff course at the Naval War College in 1972. He commanded the USS *O'Callahan* (FF 1051), Destroyer Squadron 35, Cruiser-Destroyer Group Three, and Battle Group Foxtrot. His seven years in Washington included two years in the office of the Chairman, Joint Chiefs of Staff.

would, among other tasks, exert influence through coherent expression and a vehicle for propagation. Frank Uhlig has been central to this enterprise.

He arrived in Newport well equipped for the task. In addition to naval interest documented as far back as age twelve, and two years of active naval service, he brought to the College nearly thirty years of publishing experience. Twenty of them were at the U.S. Naval Institute, where he had created and edited the *Naval Review*, visited U.S. Navy units around the world, most memorably in Vietnam, and won the Navy League's Alfred Thayer Mahan Award for Literary Achievement.

His edited collection entitled *Vietnam: The Naval Story* appeared in 1986, and a new book, *How Navies Fight*, is now forthcoming from the Naval Institute. But his editorial duties have come first. With this issue, he has published sixty-two numbers of the *Naval War College Review*. Fourteen books have appeared in Frank's time under the Naval War College Press imprint—five of them, plus four "Newport Papers," edited in the Press offices.

In his editorial leadership, Frank has reflected deeply, probed incessantly, and written clearly about the nature of sea power and the role of naval forces. But he has been no armchair admiral or detached intellectual; rather, he has made a concrete contribution to naval thinking. Along with publications and participation in symposia and war games, his instrument has been his large professional correspondence: a sustained conversation with a surprising number of authors and other scholars, officers, and distinguished figures in and out of the College. In it he has encouraged promising ideas, challenged sloppy thinking, and stimulated concise and precise writing: "You can't think effectively in ignorance," he opined. "Writing is the most easily judged evidence of thought."

Here (with Frank's permission) are some samples of that correspondence. One frequent subject was his years-long inductive search (i.e., from historical examples) for a general theory of the actual uses of navies. At length there appeared in his letters what would become the thesis of his new book: "Here are what seem to me the main purposes of a navy at war: (a) to make sure friendly shipping can flow; (b) to make sure enemy shipping cannot flow. Those are absolutes. There is also a conditional purpose, conditional upon having reasonable assurance that one's own shipping can flow: (c) to land armies on hostile shores, supporting them then and thereafter with fire and logistics."

His historical researches have also resulted in a renewed appreciation for the contributions of Alfred Thayer Mahan and other naval theoreticians. "We hear the term 'Mahanian Strategy' a lot. One assumes that in such a strategy one belligerent, if not both, seeks out a great sea battle in which the foe's fleet is to be annihilated. . . . It is all very blue-water and offensive. But is that what Mahan said? . . . The great quote . . . 'Those far-distant, storm-beaten ships . . .' doesn't sound offensive, it sounds defensive. And it also seems, in essence, to be, in Admiral Gorshkov's words, a matter of 'fleet against the shore.' A second

fragment is Mahan's likening of the sea to 'a great common.'. . . Friendly commerce-bearing ships upon that common must be protected from predators, and hostile commerce-bearers must be driven off it. That is both offensive and defensive. . . . So, is what we call 'Mahanian' really Mahanian, or is it a corruption foisted upon us?"

A related interest has been the "operational level" of war. A Second World War reference: "Strategically, the seizure of Guadalcanal was defensive, operationally it was offensive. The eventual success of the venture at Guadalcanal permitted the U.S. to go on the offensive in the South Pacific both strategically and operationally. The strategic aim was first the capture of Rabaul and, later, the neutralization of that place. The operational aim, in support of the strategy, was to seize air bases on Munda and Bougainville. And so as the war went on and reality changed, strategy changed too in order to match reality. Operations supported strategy and tactics supported operations."

Frank can be relied upon to be able to put contemporary events into historical perspective. "The 'maritime strategy'. . . can be seen as a codification of what we would hope to do if war were to break out between Nato and the Soviet Union. . . . To discuss our subject usefully we have to use examples from real life. In 1941 the Orange Plan . . . gave way to the realities of war. Once war began in the Pacific, the 'strategy' to relieve the Philippines was shown to be a fantasy, even if, before December 7, it was a political necessity. Under intense Japanese pressure, the fantasy was replaced by (a) another, the forlorn hope of holding the 'Malay Barrier,' and (b) the realistic effort to hold key points in the Pacific. . . ."

However, naval thought and debate, in the abstract and in print, is his most frequent subject. ". . . So long as we do not try to turn our instruments of naval war, or the strategies and tactics by which we attempt to use them, into . . . dogmas, to be attacked by the infidels and defended by the true believers, we will probably find sea power useful and perhaps indispensable next time we get into a big contest." Indeed, "if the pulse of the naval debate is weak, regardless of its budget the Service will be weak. If the pulse of naval debate is strong, the Service will be strong."

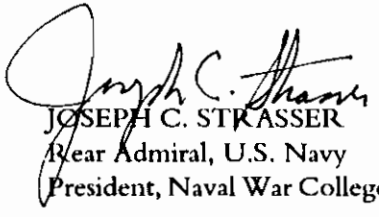
His letters reflect a sensitivity to clear (or muddled) thought processes. "You told us about the advantages the Americans had over the Japanese in the way of intelligence. Yet, was it always so? . . . In contrast, the Japanese seem to have anticipated our strikes at Truk and Palau early in 1944 and our attack upon Leyte in October that year. How did they find out? Or did they just think very well?" Or, concerning one year's Global War Game play: "Blue has scattered his 14 big carriers all over the world. . . . How does Blue expect ever to get a mass of carriers large enough to succeed in a place important enough to matter?"

The purposes, direction, and appearance of the *Naval War College Review* are a continual subject of his correspondence. "It is the nature of the contents which

makes a journal useful or not useful. I have been trying [1983] to change that, too. I am anxious to publish more officers' work, especially naval officers' work. I am anxious to publish more on what clearly are naval subjects. . . ." The difficult transition from good thinking to equally good writing is a related concern. "Writing is . . . one of the strongest instruments available for the disciplining of our thoughts—especially when it is published for other people's eyes." Many a writer prepared to reflect, reflect, reflect, and edit, edit, and edit again has known Frank's guidance—only laziness arouses his anger, whether it be intellectual lassitude or sloppy craftsmanship. "As I read the original it became clear that there were some lazy words competing with the hard workers for the readers' scarce time and mental energy. I have attempted to obliterate the lazy ones." Or, ". . . The paper is 'too dense.' Indeed, I am reminded of the recipe for success offered by Ed [Edward H.] Heinemann, the great aircraft designer: 'Simplicate and add lightness.'"

"Now," as Frank recently wrote a colleague, "as the likelihood of major war between our country and the other great power recedes, or appears to recede, the difficulty of nurturing serious military thought may well become more intense. Given all these conditions how do we ensure that, if a great war or even a modest-sized one were to arise, we would have sufficient officers able to perform at the highest levels of command and staff as effectively as their forebears did nearly half a century ago? That, it seems to me, is one of the great tasks facing the Navy and its war college now and in the foreseeable future."

I am pleased that Frank Uhlig is not going far, and his contributions will continue in that same foreseeable future. We at the College feel most fortunate to have had an individual of Frank's integrity, intellectual prowess, and dedication here for some twelve years. The naval services, the defense community, and consequently the nation are better for having undergone his tutorial.



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

DEPARTMENT OF THE NAVY
BUREAU OF STEAM ENGINEERING
N.E.H. 100

U. S. NAVAL RADIO SERVICE

RECEIVED OR FILED AT STATION — OR U.S.S. WILHELMINA — BY — DATE NOV. 11, 1918 TIME 1120 A.M.

PREFIX	ORIGIN	NO.	OPERATOR (SNDG.)	OPERATOR (RECD.)	CHECK	FILING DATE
RADIO NAVY	British Wireless			L.S.Boe	GOVT.	

VIA

GOVT. Press To All Stations For Publication London, November 11,1918

At ten twenty Monday morning Prime Minister made the following announcement:- "The armistice was signed at five this morning and hostilities are to cease on all fronts at eleven this morning".

The above message was received while we were lying in the harbor at Brest, France.

Communication Officers

D.W. Ladd H.L. Sweetser F.R. Uhlig

Radio Force

R.E. Cunningham,	Chief	L.S. Scott	3rd C.
G.P. Murray	1st C.	F. Redford	3rd C.
L.S. Boe	2nd C.	J.J. Smith	3rd C.
E.J. Driscoll	2nd C.	D. Bradford	2nd C.

FORWARDED TO VIA — DATE — TIME — M.

PREFIX	ORIGIN	NO.	OPERATOR (SNDG.)	OPERATOR (RECD.)	CHECK	FILING DATE
RADIO NAVY					GOVT.	

"War Termination," seventy-five years ago this fall

Implications of the Changing Nature of Conflict for the Submarine Force

John T. Hanley

WE ARE IN A TIME OF GREAT CHANGE. Among naval forces, this change will most affect the U.S. attack submarine (SSN) force. Clausewitz counselled: "The first, the supreme, the most far reaching act of judgement that the statesman and the commander have to make is to establish . . . the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature" (*On War*, p. 88); further, "In war more than any other subject we must begin by looking at the nature of the whole" (p. 75). In this regard, we cannot address the role of U.S. SSNs in isolation from either the rest of the Navy or other military services. Nor is it very useful for the development of tactics and strategy or for force planning to address capabilities without an appreciation of the nature of future conflict.

Our vision of future conflict is not very clear. The relationships between world powers are changing rapidly. Concepts of polarity (uni-, bi-, or multi-) and balance of power do more to confuse than clarify the dynamics of international relations. For the foreseeable future, world politics will remain organized around nation-states. However, the absolute, unrestrained role of nation-states (sovereign political entities recognizing no authority beyond themselves) as the main actors on the world scene is waning. Developed nation-states find their power diffusing *up* to supernational organizations (the United Nations, Nato, the Conference on Security and Cooperation in Europe, the European Community, the Western European Union, the "Group of Seven" nations, the International Monetary Fund, etc.); *out* to transnational economic concerns; and *down* to local and special interests. State sovereignty is under attack, both in effect and in principle. Growing interdependence and the accompanying inability of governments to control unilaterally the destinies of their peoples are eroding the effect of sovereignty. The rapid and vehement rise of ethnically motivated conflict in crumbling nations is raising concerns for human rights and signalling

Dr. John T. Hanley, Program Director for the Chief of Naval Operations' Strategic Studies Group, is a nuclear-trained submariner and a captain (selectee) in the Naval Reserve. He holds A.B. and M.S. degrees in engineering science from Dartmouth College and a doctorate from Yale University in operations research and management science.

a change away from sovereignty as the principle dominating international behavior. Accompanying this weakening of states is a changing lexicon of war—from a continuation of politics (pursuit of state interests) to a continuation of justice with the admixture of other means. The combination of weak sovereignty and appeals to justice rather than state interests as the basis for conflict is a condition that the world has not experienced since the Treaty of Westphalia in 1648.[1]

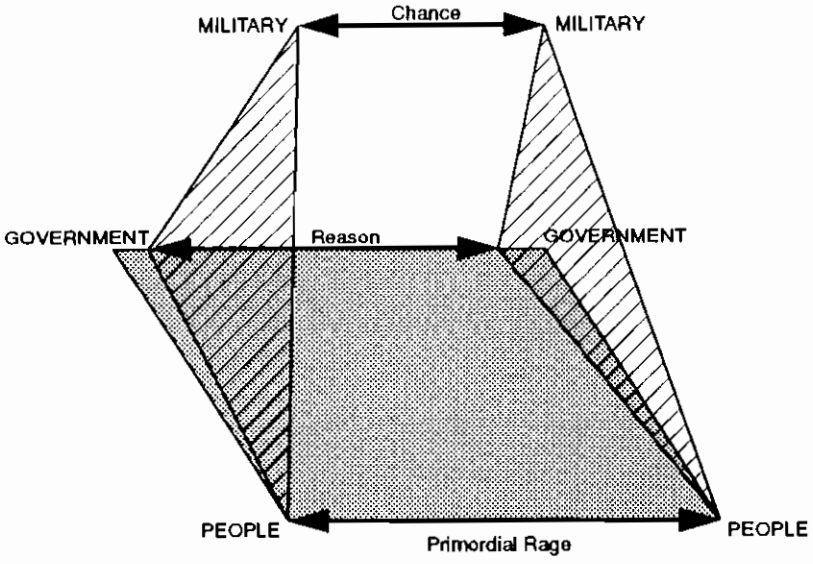
The concerns of mature nations are shifting from war to order. Collectively we anticipate "A Long Peace."[2] The emerging vision is of an end to the era of total war ushered in by Napoleon, where developed nations mobilized all their energies to hurl military power at each other. This vision of peace does not preclude armed conflict. It does not preclude developing nations, principally in the Middle East, mustering all their energies to hurl their militaries at each other; nor does it preclude developed nations committing their militaries, for example, to Middle Eastern wars, Balkans peace enforcement, protection of Kurds, or counter-narcotics. Indeed, the outlook is one of an expanding zone of turmoil, within which conflict becomes more nasty. Widening gaps between those that have and do not have wealth, knowledge, and technology; the collapse of weak nations; population growth; endemic hatred; arms proliferation; and the globalization of economics, communications, and environmental effects constitute a security environment quite different from that which the developed world has confronted over the era of "Napoleonic" war.[3]

We are witnessing a breakdown in the structure of what we have recognized as war. Clausewitz captured the essence of the Napoleonic era of warfare in his "trinity" of actors in war: the *government*, the *army* and the *people*.[4] The salient features of war in his era included an established state employing military forces loyal to that state.[5] The state organized these forces to fight forces similarly constituted; civilians were not to engage in fighting. This concept created clear distinctions between combatants and noncombatants. Conventions for the treatment of civilians, property, and prisoners, and for the use of weapons, further set apart warfare from criminal activity. The use of force against uncivilized tribes involved a different set of conventions. Because territorial boundaries define states, the dominant object of war involved the control of territory.[6] War was the province solely of the state. Conflict outside the bounds of these conventions—uprisings, rebellion, terrorism—were not, properly, war.

In Clausewitz's construct, represented in the diagram, the role of the people is to provide the "primordial rage" needed to justify the effort and the horrors of war, and then to stay out of the fray. The role of the government is to set policy consistent with a calculus of the costs and benefits of fighting and to reason with the enemy government. The army is to deal with the uncertainty and friction inherent in war conducted by a large, complex organization against a calculating opponent.

As we learned in Vietnam, however, when features of the trinity are missing (such as hatred on the part of the American people or a distinction between the

Viet Cong and the peasants), trying to a match "trinitarian" organization to a non-trinitarian opponent has its risks. In such cases primordial rage is typically absent; in fact, the peoples of liberal democracies want combat to be quick and to shed little blood, particularly the blood of their own warriors and that of the civilian populace on the opposing side. Where one or more of the main actors in the conflict has no state, governmental structures with which to reason are weak or do not exist. Movements or ethnic groups may have no single head accepted by all factions as legitimate to represent them. The nature of their grievances are usually such that the problems are endemic and not subject to quick resolution. Non-state entities usually organize their forces into small



Clausewitz's Construct of Trinitarian War

J.R. NUNES, JR.

subgroups that use the populace for concealment. Therefore, hurting the fighters without inflicting collateral damage on innocents demands careful timing and discrimination. Because such forces are small, their command and control structures are usually primitive, like the nervous system of a shark—whose head can still bite after the body is chopped off. Also, where ethnic and religious hatred is endemic, catching one fish does little to change the behavior of the school. Loyalty to the cause is typically greater than belief in the virtue of established conventions of war.

A symptom of the weakening role of the state is that people no longer consider war the sole province of the state. The examples of the Kurds, former Yugoslavians, Moldavians, Ossetians, Abkhazians, and residents of Nagorno-Karabakh, in addition to the Irish Republican Army, the Palestine Liberation

Organization, and assorted terrorists all attest that mature states are not the main sources of conflict on the current scene. In many of these conflicts the stakes for losing are subjugation or extinction; the root of the matter here is more *thymotic* than economic.[7] The asymmetry between the economic calculus of mature states and the thymotic impulse of ethnic conflict makes peace-keeping or peace enforcement all the more difficult.

The emerging framework for international security is not one of poles. Rather it is one of collective action by mature, wealthy states to limit the level of violence in the zones of growing turmoil. This framework is, as yet, unstable. The transition to (or through) it will take decades. Collective action by the triad of Europe, America, and Japan could break down because of conflicting policies dictated by domestic political pressures, rising in turn from asymmetrical security and economic concerns. The likely result would be an arms race in Asia, more independent European military capabilities, and an international security regime based upon regional alliances that exclude America. Also, it will take decades to establish whether important states such as Russia and China become a part of collective action or set themselves apart from the community of mature nations.[8] They must first resolve their political economies and undergo generational leadership changes. To join the community of wealthy nations, they will demand treatment as great powers; in return, the West will demand behavior within international norms. In any of these circumstances, the prospect of a military peer to the U.S. that would engage in Clausewitzian, trinitarian war between great powers, should it ever occur, is towards the end of our thirty-to-fifty-year planning horizon.[9] The actions of the United States in shaping the military behavior of other great powers will be the greatest determinant of the success of collective action. Meanwhile, enforcing an acceptable level peace in the zone of turmoil will be the dominant form of armed conflict.

During the coming decades we can anticipate conflict involving both trinitarian and non-trinitarian organizations. The remaining standoffs between North and South Korea, India and Pakistan, hegemons of the Persian Gulf, Israel and the Arab states, and South American countries such as Ecuador and Peru present the prospect of nation-states hurling their forces against each other. The ethnic conflicts emerging from the rubble of the Cold War and the former Soviet Union demand immediate attention.

Security, War, and Defense

Security, war, and defense are not the same. Maintaining an improving quality of life dominates the concerns of most people in mature countries; many less-developed nations are not as free from the fear of armed attack, intimidation, or invasion. The prospect of a lengthy period with no acute threat to the survival and growth of mature nations, combined with the likelihood of collapse of states

with immature political economies, is fundamentally reshaping U.S. security concerns. Whether departments and ministries of defense should return to being ministries of war (with new conventions) or become ministries of security is a topic policymakers are beginning to address. We in the military services are being carried with the current into new roles and missions without clarifying the advantages and pitfalls of alternatives to current organizational structures.[10]

The security concerns of the U.S. are much broader than trinitarian war and have counterparts among all the great powers. Beyond trinitarian war are:

- non-trinitarian conflict (falling outside the conventions of what we generally accept as war, to include terrorism, tribal conflict, peace-enforcement and peace-keeping operations);
- things that flow across our national borders (including immigration, drugs, and even goods, services, and finance); and,
- internal security (including not only urban riots and crime but also structural issues such as a nation's infrastructure, educational system, and private and governmental debt).

Though the role of military force in addressing this panoply of issues is obscure, we have many examples of how people are trying to make it relevant. The Congress has already assigned to the military expanding roles in the detection and monitoring of drugs and in controlling immigration. This activity has progressed beyond the use of existing capabilities, to being the jurisdiction for funding new forces (e.g., maritime patrol aircraft). Not only were Marines and National Guard units part of the response to the riots in Los Angeles, but some have suggested that they should be retained explicitly for this purpose. Calls are growing for military engineers to clean up the environment and rebuild the nation's infrastructure, for military doctors to expand their role in city hospitals, and for military instructors to assume a role in educating children. Concerns are growing that by taking only the highest quality recruits the military will no longer serve its function of providing a path of upward mobility for disadvantaged segments of the population. Of course, all of this is happening at a time when Congress is looking to slash the defense budget to finance growing entitlements, the deficit, and non-defense discretionary spending. The time has come to distinguish the purpose of the military from its uses, before the military becomes not very useful in its essential roles.

But as we look to the future, what *are* the roles essential to the military? As nation-states erode the principle of sovereignty in the quest for international order, it will become more difficult to distinguish the role of the military in the enforcement of order from the pursuit of individual national aims. The collapse of the Soviet Union and of communist ideology has created a historic opportunity to establish a cooperative security regime among the great powers. Arguably, and as noted, the choice before Russia and China is to join this regime or to isolate themselves again from the world and fall from the great-power ranks.

The creation of such a cooperative security regime raises many issues. If the world is to live within a structure of the rule of law, what are the mechanisms for its creation? What are the mechanisms for adjudication and for establishing the authority for enforcement? What are the rules for deciding whether to intervene in a conflict? Under what conditions will states contribute forces? How will forces be organized, and how will the operating costs be allocated? The current answers to all of these questions are only partial and are based mostly on weak institutions and procedures left in the wake of the Cold War.

The institutions and procedures of the United Nations provide a framework, but not the whole answer. Even though the power of the nation-state is waning, it still dominates the weak collective will. The role of China in the UN Security Council illustrates the limits of a collective security regime that requires unanimity for action. Effective cooperative security will require a principle of subsidiarity, by which those most affected and willing can act according to their national interests. Such regimes would still limit unilateral action in the face of strong opposing collective will. As the UN Convention on the Law of the Sea demonstrates, even American freedom of action is circumscribed when the majority of nations ratifies new instruments. Increasingly the legitimacy conferred by the UN will circumscribe the use of military force.

Roles for the U.S. and Its Military

Because of its unique position in international security, the United States will play a key role in determining the success and the shape of future security regimes. Should American leadership falter, establishing a system of effective security around the globe will be problematic. A U.S. decision to restrict its engagement in international security accords, or neglect (engendered by pressing domestic concerns) of international affairs, or disagreement over fair allocation of costs, could limit the ability of the United States to lead. To develop a better appreciation of the requirements for U.S. leadership and the role of American military forces, it will help to look at some specific cases.

Developing the Structure of Security Relations. The *most demanding task* for the U.S. military in this time of rapid contraction will be to sustain the fabric of the international security structure. The U.S. is the only great power with a global web of security relations. It also is the only power capable of moving, coordinating, and sustaining sizable military forces across the globe. This combination of interests and capabilities is the fabric that holds the current system of international security in place, and it provides the basis for extension to a cooperative security regime. It also puts the United States in such a position that others look to it to lead whenever common interests may be threatened or the international order is violated. Absent the belief that the U.S. is a reliable security partner, the whole

structure of international security relations would change. New, regional security regimes based on something other than American commitment would contain no guarantees that U.S. interests would be considered or protected.

Whether Americans will choose to bear the costs of maintaining this position of leadership is uncertain. The cost of leadership at the Rio de Janeiro Environmental Summit of June 1992 was such that the administration chose at the time to "lead" in the role of a sea-anchor. If this choice indicates the calculus that will dominate U.S. behavior, we can expect the strands of the American security web both to weaken and be placed under great strain—with predictable result. Part of the fiscal 1993 Defense Authorization passed by the House of Representatives calls for $3.5 billion to be paid by Europeans, Japanese, and Koreans to maintain U.S. forces on their soil, for a forty-percent reduction by the end of 1995 of forces stationed overseas, for reducing American forces in Europe to 100,000, and for further reductions in Nato infrastructure funds.

The current rationale for the continued existence of Nato centers on the ideas that there is no other viable framework for addressing the security concerns of Europe and that without American presence the prospect of a return to interstate conflict within the European Community would cast a shadow over all other proceedings.[11] Pragmatically, without American air and sea lift, command systems, and intelligence, European forces can conduct only very limited combat operations even on the borders of their own areas, much less in the Persian Gulf. Experiencing cuts in military expenditures similar in proportion to those in the U.S., the Europeans have no room in current budgets to buy an independent capability. Continued American presence and commitment to pursuing a stable security regime in the region is essential in the view of European governments. Even the Russians prefer the continued existence of Nato to a European military structure independent of the Americans. Simply put, Nato cannot survive without energetic U.S. participation.

If prospects for any realignment of regional power relationships that would augur trinitarian war in Western Europe are distant and elusive, in Northeast Asia they are more immediate and tangible. The political economy of North Korea is not likely to survive the decade in its current form. The unification of the peninsula—whether peacefully or as the result of war—is likely in the coming years. On the peninsula are two of the world's largest armies; a unified Korea will alter regional power and security relationships between China, Japan, Korea, Russia, and the United States and will affect the security concerns of all Asian nations. Prospects for unification already have South Koreans looking at the specter of Japanese military expansionism as the rationale for their own force structure. China has never lost its vision of itself as the "Middle Kingdom," the region's dominant power. Both China and Russia are experiencing significant internal tensions between their respective centers and Pacific provinces. The effect of a unified Korea on these pressures is not clear. How the U.S. and Korean

governments will justify to their publics the continued presence of American forces following the collapse of the North is equally murky. However, none of the Asian nations is enthusiastic about using the current opportunity to talk with the Russians as a basis for establishing a "Conference on Security and Cooperation in Asia" in anticipation of turmoil in the future.

Concerned that a rapid withdrawal of the American military would upset the balance of power in Asia and the Pacific, even former leaders of the non-aligned movement Indonesia and Malaysia have joined Singapore, Brunei, and Thailand in offering the United States access to facilities that would paritally offset financial costs of maintaining U.S. forces in the area without Philippine bases. These nations view U.S. presence as a counterweight to China and a hedge against

". . . [American] commanders-in-chief responsible for such projection of power in each of these scenarios would find SSNs useful—but not essential. In fact, their absence would not affect the general concepts of operations."

Japan's developing an independent military capability. "East Asian nations made 35 percent of all major weapons purchases in 1991."[12] Historical enmities and unstable regional powers and economies that can afford modern military equipment create a potentially dangerous brew.

The greatest security threat to the U.S. would be a great power that adopts a policy of addressing its security concerns unilaterally and develops an independent military capability. The main strategic task for the U.S. is to assure our traditional allies and new partners that their security interests and ours are largely congruent and that efficient use of resources calls for cooperation in safeguarding these interests.

These interests are various. All developed economies have a significant interest in unimpeded access to energy, principally oil. The main specific security concerns of the Europeans derive from ethnic conflict and economic backwardness in neighboring lands. The former could lead to the spread of violence to tense regions where fighting has not yet occurred. Both could lead to massive immigration pressures, slower European federation, and slower economic growth. As for Russia, its main aims are to stabilize its political situation through integration into the world's economy and to quell the ethnic strife on its borders. The strife in the other former Soviet republics threatens the well-being of twenty-five million ethnic Russians and presents the specter of an Islamic revolution on its frontiers (though many Russians believe that once ethnic hatred has passed, most former Soviet republics will naturally form cooperative political, economic, and security relations with Moscow). The Japanese, for their part, are mainly interested in free access to markets and in the political stability, foreign and domestic, that promotes economic growth.

In essence, all these security concerns center on peaceful economic development: containing and stifling ethnic conflict and preventing the gap between developed and adjacent developing areas from generating new sources of conflict both serves that interest and satisfies ethical sensibilities. Indeed, the lot of peoples in underdeveloped political economies can improve only as they can obtain a stable political environment. The U.S. military, as an instrument for enforcing international order and the rule of law, can play a large role in addressing all these congruent security interests.

The principal task for the U.S. military will be to reassure our traditional allies and new partners, including Russia and China, that we can reduce our forces stationed and deployed abroad without putting their security concerns at risk or generating a power vacuum. Creating this assurance requires more action than rhetoric. Only energetic work with other militaries and reliable, effective performance in assigned missions are likely to persuade these nations not to increase spending on armaments. If successful, we will "inhibit the rise of future military superpowers among our present allies."[13] If we fail, we will face a dilemma: it will be precisely because we reduce our military forces that we will need more of them. Because the domestic pressures motivating the current defense draw-down will remain, the outcome is more likely to be a redefinition of American security responsibilities than the reconstitution of forces.

The United States may indeed drift into the realm of an ordinary power. In this circumstance, the role of the U.S. in international security will change significantly. The likely outcome would be a retrenchment of military missions to core American security (i.e., mostly in the Western Hemisphere), allowing Eurasia to develop security arrangements without U.S. involvement. In Asia this could lead to a nuclear-armed Japan and turmoil in the current international security regime. In the Mideast, it would leave Israel to its own devices and expose our oil supply to the vagaries of economic trading with a possible regional hegemon.

Trinitarian War. Compared to the importance of maintaining the structure of international security relations, the contingencies to be considered under this heading (short of an intercontinental nuclear attack on the United States) pale in significance. However, it is by effective leadership and military performance in such contingencies that the United States can sustain the web of global security.

Whether the U.S. will satisfy Clausewitz's criteria when waging war against another state is ambiguous. Of the candidates for trinitarian war previously mentioned, only a North Korean invasion of the South, an invasion of the Gulf Cooperation Council States by Iraq or Iran, or a concerted Arab attack on Israel would be likely to bring in the U.S. on the side of an ally. Whether the American people would provide the primordial hatred prerequisite to trinitarian war would

depend heavily on the circumstances. Even for Iraq, with a leader as odious as Hitler, criticism for inflicting too much damage upon the civilian infrastructure was widespread. We can expect demands for relatively bloodless victory to remain.

In the South Korean case, the role of American forces in response to an invasion is relatively well defined and rehearsed. The South Korean army would bear the brunt of an initial ground attack, while U.S. forces dominated the air. Both land and sea-based forces would contribute to strikes against command centers and forces lined up along restricted corridors. In this respect, the use of air power would be much as in Desert Storm; North Korean armored forces bear many resemblances to their Iraqi counterparts. The North Korean navy cannot effectively deny the U.S. the use of even the local seas, but it can inflict damage. Enemy submarines and mines would dominate the concerns of those tasked to protect the naval forces. Our naval forces would once again prepare for Inchon-like operations.

In a resumption of the Korean War (we operate today under an armistice, no peace treaty having ended the conflict), the concern with war termination is more over how to constrain South Korean ambitions than over North Korean victory. The U.S. does not contribute enough military force to control the actions of the South. Depriving the Chinese of reasons to become involved would condition the missions assigned to our forces.

Turning to the Persian Gulf, we have a paradox. Any invasion of Kuwait or Saudi Arabia over the next couple of decades would involve the same types of forces that have just proved so ineffective against U.S. air power. An Iranian invasion of Saudi Arabia, on the other hand, would require first the defeat of Iraqi forces at the head of the Gulf, then protection of Iranian lines of supply. Should such an invasion occur, we could expect it not to pause and dig in. However, our approach of gaining control of the air and then using air power to decimate relatively unprotected forces has a familiar ring. The role of our naval forces would be essentially as it was, with perhaps more reliance on the ability to land at unprepared facilities. Iranian submarines, mines, and coastal cruise missile batteries would complicate naval operations in the North Arabian Sea and Gulf. However, the chance of another invasion of the Arabian peninsula is remote as long as the U.S. retains the capability to redeploy to the region.

Should Iran or Iraq want to intimidate or control the smaller Arab states, a strategy of extortion involving elements such as (non-trinitarian) political subversion by support to indigenous militant movements or the threat of missile attacks would be more difficult to counter than outright invasion. Our strategy for countering intimidation or extortion in such cases rests upon classical concepts of presence and deterrence, though the latter would involve principally non-nuclear munitions. The prospect of the use of weapons of mass destruction would place a premium on our own missile defenses, including contributions

from Aegis-equipped ships. Though the world's response to direct attacks would involve counter-action, invasion of the offending state by coalition forces from the international community is a remote likelihood.

Israel is not a formal ally of the United States and has not encouraged the idea of U.S. forces operating in Israel. Faced with an Arab military attack, the Israelis would need mainly logistical support. They have sufficient forces to thwart an attack not involving all Arab forces in coordination. Israeli wars have tended to be short, because Israel cannot afford to lose territory or people and none of its antagonists have the logistics to sustain high-intensity combat. Therefore, support to Israel must be available nearby or transported by air. Should Israel need combat support, sea-based forces may be the only ones at hand.[14]

Common to all these scenarios is the need for naval forces to be on-scene quickly to provide air power. The Korea and Persian Gulf invasion scenarios also call for putting troops ashore, possibly by assault from the sea. To anticipate a fuller discussion of the point, we can observe here that American commanders-in-chief responsible for such projection of power in each of these scenarios would find SSNs useful—but not essential. In fact, their absence would not affect the general concepts of operations.

These examples of trinitarian conflict have a greater value for tactical and doctrinal development than for force planning. Perhaps over the next decade or two, Korea will unify itself peacefully; Saudi Arabia could in that time become more closely aligned with Iraq and Iran than with the West; and the militaries of the Arab nations may be in too great disrepair to launch a conventional armored attack against Israel. In any case, the costs of maintaining large conventional forces are increasing at such a rate that even developed nations will have difficulty purchasing new equipment in quantity. North Korea, Syria, Egypt, and Israel, with populations expanding faster than their economies, will be hard pressed to maintain current force levels. Iraq and Iran need sizable oil exports to support any military expansion. These trends portend that aggressors may turn to means other than the large conventional forces that proved so inadequate in Desert Storm.

Non-trinitarian Conflict. Intervention by the U.S. in wars between India and Pakistan, Peru and Ecuador, or between any of a number of other states properly fall in the realm of non-trinitarian conflict. Trilateral arrangements between the belligerent states and the international community would be invoked; the U.S., working with other countries, would seek to contain, limit, and quench such conflicts that affected the global economy, potentially affected security relations between the great powers, or violated humanitarian sensibilities. Yugoslavia and Somalia serve as useful models illustrating the role and limits of military force in non-trinitarian conflict.

As of this writing (early June 1993), Americans and Europeans are coming to the conclusion that even though it may not be possible to enforce peace in former Yugoslavia, doing nothing is untenable. The Balkans may be a model for future European conflict—in which case, if Nato is irrelevant there, it is irrelevant to the heart of regional security concerns. Though the absence of its leadership in planning operations has been unfortunate, American reluctance to get involved is sensible; memories of Beirut are vivid. Ground forces cannot hope to keep the warring factions apart and thereby keep the peace; they can serve mainly to demonstrate that the world will not tolerate certain levels and types of violence.

Peace-keeping forces have demonstrated success but also severe limits. They have remained in Cyprus since 1974; if they are removed, the conflict there is likely to resume. With the spread of ethnic violence, the demand for such forces is increasing even as force structures are being cut. The Canadians are leaving Europe but have three battalions stationed around the world as United Nations peace-keepers, including in Bosnia, where, as they recognize, they are in a precarious situation. Casualties or an indefinite commitment will strain the tolerance of Canadians for maintaining their current strategy.

That we cannot keep the peace does not mean that we can do nothing. Our principal difficulty occurs where we encounter irregular forces. Where the combatants employ modern combat aircraft, naval vessels, armored formations, artillery, or centralized command structures, we have significant capabilities to intervene. We could have prevented the naval bombardment of Dubrovnik and the aerial bombardments of Slovenia, Croatia, and Bosnia-Herzegovina. We can make the use of armored vehicles and artillery dangerous for their crews. Such options cannot stop the killing, and cannot go on simultaneously with humanitarian or peacekeeping efforts. They can, however, even the odds, demonstrate limits to the freedom of action of the Serbian leaders, and restrict the instruments of combat to things that peace-keeping forces and peace-making actions are better able to handle.[15]

The analogy for international action in Yugoslavia is the American action in Los Angeles. We cannot make peace among the gangs in East Los Angeles without changing their socioeconomic circumstances and social maturity. However, we can prevent them from murdering each other with tanks and fighter-bombers. National, as well as international, societies tolerate certain levels of violence but restrict the geographic scope and instruments within which the violence occurs.

In non-trinitarian conflict the desired end-state is a stable political regime and a growing economy, not merely military victory or intimidation. Somalia has demonstrated, as did "Just Cause" (the recent—as opposed to 1911—U.S. invasion of Panama), the pitfalls of the military planning operations independently from the civil agencies needed to create a viable social structure. In Somalia the absence of a government (or even a trusteeship), a judicial system,

effective police, and schools has prolonged the stay of American and other forces in the country. Integration of the appropriate agencies from the start is the only way to ensure a seamless transfer from military to civil action and thereby reduce the strain on U.S. force commitments.

International, or unilateral U.S., military intervention in an Indo-Pakistani war is difficult to conceive and would be dependent upon particular circumstances. Attempts to study the problems of military intervention there have produced no clearly good answers. The potential for the use of nuclear weapons would galvanize world attention. A failure of deterrence would be devastating for the combatants and could have major implications for nuclear proliferation if one side gained benefit from their use.

The role of organized forces in non-trinitarian war will be to drive the level of violence down to the point where it becomes properly a matter for policemen (or lightly armed peace-keeping forces). The examples of Yugoslavia and Somalia make evident the roles of naval forces in this type of conflict. Maritime interdiction forces will enforce the inevitable economic sanctions. Naval forces can deny use of the seas, provide command and intelligence facilities, deliver relief supplies, deliver and put troops ashore and sustain them, and strike hostile conventional forces and their support systems if necessary.

Cross-border Flows and Internal Security. Many in the United States want to exploit the competence of military forces in accomplishing whatever mission they are assigned by giving them tasks beyond those for which they have been intended. Some fear, however, that having national military forces act as policemen will simultaneously corrupt the conventions of war (such as distinctions between civilians and noncombatants) and blur distinctions between civil disturbance and war.[16] Though the American tradition restricting the use of military in civil disturbances is a strong one, just as gang wars in cities become harder to differentiate from international disorder, a particular effort will be required to keep in focus the distinction between the role of warrior and that of policeman. Expanding the activity of the military in immigration control and drug enforcement does nothing to reinforce this distinction. Unless the threat is tied clearly to state sponsorship, counter-terrorism more involves police work than the skills of a warrior. The policy of the current administration shows a strong predilection for using the Department of Defense and the military services to address the full panoply of American security concerns. As it implements this policy, it should not take for granted that the military can be used for other than its essential purpose without eroding combat skills. A study of the effects of such a policy should accompany its implementation, lest we get too far down the path toward an ineffective fighting force before we know there is a risk.[17]

Implications for the SSN Force

The fact that this discussion has seemingly wandered well away from the submarine force illustrates its major implication for that arm. The U.S. submarine force faces serious challenges in a security environment distinctly different from that of recent decades.

A nuclear submarine's competitive advantages lie in a combination of covertness, endurance, and the difficulty of attacking it, along with the ability to improve its own acoustic sensor performance by varying depth. This makes it particularly valuable when facing opponents that have:

- sizable navies capable of defending themselves from air attack;
- air forces (including coastal cruise missiles) capable of withstanding U.S. air power;
- fixed targets that can be destroyed by cruise missiles but are outside the range of surface-launched cruise missiles or bombers;
- critical coastal installations suitable for attack by special forces; or,
- dependence on operations or systems vulnerable to SSN monitoring.

Unfortunately, from the submarine force perspective, the match between unique SSN strengths and the situations and opponents that we now anticipate is spotty.

Nuclear-powered submarines cost on the order of a billion dollars to build, but only ten million dollars a year to own and operate. Because scarce defense dollars and the changing security environment are the twin "drivers" in addressing strategy, doctrine, and force structure, any discussion of the submarine force needs therefore to distinguish between existing SSNs and future designs.

Implications of Change for the Current Force. The principal issues for the current SSN force are what the president and the unified commanders-in-chief will want to do with them, and how fast to deactivate individual boats. We have a highly versatile attack submarine force, capable of contributing to a broad range of surveillance and combat missions.[18] These platforms will form a part of the Navy's contribution to the full scope of U.S. security concerns.

SSNs in Developing the Structure of Security Relations. Keeping our alliances intact and extending partnerships entails practices of working with other nations to sustain belief in the United States as a reliable security partner, policies of cooperative security, and capabilities to address effectively mutual security concerns.

As the U.S. reduces its navy, the remaining SSNs will find themselves deploying more frequently as part of naval and joint task forces. SSNs have few distinctions from other naval forces as symbolic representations of U.S. interest and commitment. However, the distinctions they do have are mostly adverse for submarines. Size, ease of access, and security concerns limit their use for ship visits during port calls. Only those militaries with submarines or sophisticated

antisubmarine forces have had an interest in working with the U.S. submarine force, and this interest is qualified by wanting not to be embarrassed. Our concern over divulging actual submarine noise characteristics restricts operations even with close allies. The submarine force will feel pressure to become more open in its practices in order to improve its effectiveness as an ambassador of American goodwill.

Perhaps predictably, U.S. policy for cooperative security with Russia is divided, particularly as it regards submarine forces. Though cooperation with the Russian Navy is increasing, Russia in its current state of instability remains the main candidate to be a nuclear threat to the West. Thus, we find American and Russian naval forces steaming in one kind of formation in places like the Persian Gulf but U.S. SSNs keeping quite a different formation with Russian ballistic missile submarines (SSBNs) on patrol.[19] If U.S. policy for establishing a cooperative security regime is successful, our treatment of the Russian SSBN force will be closer to the way we treat the French one—cooperation with little detailed information exchange.

The combat capability of SSNs as part of naval task forces and on independent operations will contribute to intimidating potential opponents and addressing mutual security concerns. More visibility for the submarine force will enhance that intimidation. However, there is little evidence to support a contention that SSNs distinctly add to the already overpowering ability of the U.S. military to intimidate.

In sum, SSNs frequently play at a disadvantage compared to other U.S. military capabilities with respect to developing a cooperative security structure.

SSNs in Trinitarian War. The recent Department of the Navy white paper " . . . From the Sea" addresses principally naval functions in regional trinitarian war such as Desert Storm. SSN missions in such conflicts include surveillance, sinking enemy ships and submarines, Tomahawk strikes, and special forces operations. These would be conducted in conjunction with joint task forces rather than as independent operations. These operations frequently call for operations in shallow water. An SSN's ability to monitor minelaying, both to allow other forces to avoid them and to support amphibious operations, are valuable in these scenarios. However, each contingency calls for only a handful of submarines to perform these missions. As noted above, SSNs are not essential to the area commander-in-chief's concept of operations—i.e., the absence of submarines would not substantially alter his plans.

The opponents we anticipate within the next two decades will have small navies with little ability to defend themselves against attack from the air. Their challenge to our control of the seas is minimal, coming mostly from diesel submarines and mines. With minor exceptions, naval combat will occur close to the territory of the opponent. In the presence of U.S. aircraft carriers and Aegis cruisers, these opponents have no air threat capable of defeating U.S.

surface naval forces. Their cruise missile targets that we may wish to strike fall well within the range of surface force operating areas.

Recently the U.S. submarine force has placed increased emphasis on anti-diesel submarine, strike, mining, and special warfare missions. Improving the ability to find diesel submarines is clearly a priority for all naval antisubmarine (ASW) forces. Where the submarine force has traditionally emphasized a capability to search and attack independently, current scenarios place a much greater emphasis on the ability to operate in rather small geographic areas occupied also by surface battle forces. Though it has been an article of faith that submarines are more effective than surface or air ASW forces against other submarines, whether that is true specifically against diesel submarines is an open question. In the Second World War, by mid-1943 the Allies, with only surface and air ASW forces, were sinking one U-boat for every Allied ship sunk. Against a capable ASW organization a diesel submarine has inadequate endurance to both attack and flee.[20] Adding friendly submarines to a task force complicates the ASW task; though improvements in navigation make coordination easier, making sure of attacking only enemy subs and not friends will clearly require much more work.[21]

The need for the submarine force to emphasize missions other than ASW and mine detection is less clear. As for strike, it can be performed by surface forces. As was true in the recent attack upon Iraqi nuclear facilities, in none of the anticipated scenarios is the detectability of the launch platform a factor. To be sure, one can expect that as the UN Convention on the Law of the Sea takes effect, some nations will develop more capabilities to exercise sovereignty over their Exclusive Economic Zones. Their efforts may lead to better surveillance and targeting for their land and sea-based cruise missiles; accordingly, the risk to surface naval forces may increase over time. However, the sophisticated systems needed for timely targeting of mobile platforms are precisely those we have optimized our forces to disrupt and destroy. As with diesel submarines, the principal concern in a missile attack against surface forces is the first shot; after that, the enemies we envision would have difficulty precisely locating targets.

We can expect opponents to try, using devices like mines, to deny our navy access to coastal waters. Mines remain the achilles' heel of the Navy in general, and the submarine force in particular. Mines are a weapon for sea denial, of little use to those who can control the sea. They are difficult to sweep once deployed. Being relatively indiscriminate, they damage civilian vessels as readily as warships. Since we are so reliant on the use of the seas, legitimizing mining by doing it ourselves is not in our interest. For all these reasons, U.S. and allied policymakers are reluctant to use mines. In balance, the United States should devote far greater effort to countering mines than to developing capabilities to lay them.

Like the above missions, special warfare fills a particular niche in modern armed conflict. Congress created the Special Operations Command because the

services and the Department of Defense had slighted funding for capabilities that fill narrow niches as opposed to mainline missions. In the decade since the creation of the Joint Special Operations Command, however, units like the Delta Force and Seal Team Six have had little opportunity for combat. The main value of naval special forces has lain in training small navies for riverine operations and policing functions. Though a handy capability, the special force operations that require the use of submarines remain those least in demand.

SSNs in Non-trinitarian Conflict and Cross-Border Flows. In the current Bosnian conflict, American SSNs have been quietly contributing valuable support to the international effort. In Somalia they played no role. Superb combat machines, SSNs are limited in their ability to exert the graduated force most useful in this type of conflict.[22] Maritime interdiction to enforce economic sanctions is an almost universal part of such operations, and is one in which SSNs play little role. As currently equipped, a submarine can only threaten to damage or destroy a merchant ship that does not comply with its demands—in which it is no more effective, and less efficient, than a surface combatant. Damage to innocent shipping is completely unacceptable, limiting the submarine's role to cases of unambiguous guilt. In the actual exertion of force, SSNs provide here little that other forces cannot.

As for cross-border flows and internal security, SSNs will continue to be used in the detection and monitoring of drugs, but this is a high-cost, limited-effect use of naval combatants, particularly submarines.

The Case for Building New Attack Submarines. Based upon this survey, the case for building new SSNs is weak. The clearest argument for new submarines would be the prospect of an opponent with its own powerful nuclear submarine force. However, few nations have the resources to build a navy to challenge the United States on the broad seas. Those that have the resources have little interest today in doing so; if U.S. policy is successful, they will have no greater incentive in the future.[23] Also, it is insufficient to show that a submarine *can* perform a mission; it must be demonstrated that only a submarine can effectively perform it. To justify building attack submarines, their cost must be reduced substantially; otherwise it will be cheaper to build other platforms in quantity. The projected SSN force, of half to a third the current size, will cover the missions we can anticipate over the next twenty years.[24]

In the current budget environment, spending one billion of the five billion ship-construction dollars in a given year for one submarine is unlikely. The likelihood of a hiatus in submarine construction is significant. We need to explore the opportunities, as well as the pitfalls, of a period of no submarine construction. For instance, over eighty percent of the cost of a new SSN is for other than its combat system; this point raises questions. Can we, in a decade of technology development, produce an alternative to the pressurized-water fission

reactor that is less expensive and provides adequate endurance? Or can we develop, at less cost, technology that can perform SSN missions without submerging humans in a steel tube?

In summary, the nature of future conflict suggests that the nation will increasingly rely on naval forces as an instrument of policy. However, submarines have dropped from the extraordinary position they had in war plans against the Soviets, to filling narrow niches.[25] Like the special forces, submarines will not enjoy the funding priority they once held. None of the contingencies that we anticipate provide a sound foundation for large submarine force levels. The principal justification for the submarine force lies not in adding up contingencies but in its contribution to the perception of American military strength. No other power should sense an opportunity to challenge U.S. naval supremacy. If our submarine forces decline to a point where the opportunity for a genuine challenge emerges, we will have made a fundamental mistake. The threshold of strength and circumstances at which allies and partners begin to feel our commitment or capabilities are too soft, or at which our enemies feel unintimidated, is hard to quantify. Surely, however, if we suspend nuclear submarine production we should actively create incentives for others (the French, Russians, and Chinese) not to export them. We have decades before we risk truly going out of the nuclear submarine business. However, we cannot be passive in the meantime about losing our undisputed capability to control the broad seas.

In biological evolution, species that can do more with less, better than their competitors can, thrive. They narrow the niche of other species competing for the same resources, sometimes to extinction. Evolution, also, is punctuated by sudden environmental changes. Species that cannot adapt quickly enough, perish.[26] The U.S. submarine force faces today a sudden change toward an environment in which the resources it needs for new growth are being consumed by competitors that are more efficient in satisfying national security concerns. Unless the submarine force can compete for construction resources more effectively, SSNs will go the way of the dreadnoughts.

Notes

1. Martin van Creveld develops this theme in his book *The Transformation of War* (New York: Free Press, 1991). The Treaty of Westphalia ended the Thirty Years' War. In doing so it established the dominance of "reason of state" over "reason of religion" as a basis for foreign policy, and also the principle that territorial rulers had the power to regulate taxation, defense, laws, and public affairs within their localities without Imperial intervention (See G. Parker, *The Thirty Years' War* (New York: Military Heritage Press, 1987), pp. 217–218).

2. John Lewis Gaddis coined the phrase "A Long Peace" in "Toward the Post–Cold War World," *Foreign Affairs 70*, Spring 1991. The problem is that reconstitution following a long peace demands more than simply adding more forces. The fundamental reshaping of security perceptions and problems that occur during the

long peace requires another reshaping of forces and doctrine when it ends. The pace of technological change over the period of peace will also affect the choice of forces should a peer competitor emerge.

3. At the end of World War II, an estimated 2.2 billion people inhabited the planet. By the time the Berlin Wall came down, the number had grown to 5.3 billion. The number living in developed countries over this period went from a bit under to a bit over one billion. In the next forty-five years, the world population is projected to grow from nine to ten billion. Ninety-three percent of population growth is occurring in the developing and yet-to-begin-developing world. Today the "have" nations contain sixteen percent of the world's population and control seventy percent of the wealth. Should projections hold, over the next twenty years this gap will widen to fourteen percent of the population controlling seventy-five percent of the wealth (not accounting for disparities within developed nations). Many see the conditions created in the United States in the 1980s in which the richest one percent gleaned seventy percent of the nation's wealth as having contributed to such situations as the recent riots in Los Angeles. Concerns over have-nots wreaking havoc on the world scene are leading to calls for the rule of law and order on an international scale. Particularly in developed nations, distinctions between national interests and an international rule of law that applies to all are becoming less clear.

4. Van Creveld.

5. In his era, the concept of the state as an entity distinct from its ruler became more important, as a factor circumscribing the freedom of rulers to act in ways detrimental to their peoples.

6. Examples in the twentieth century of the U.S. fighting for interests not involving territory are rare. The difficulty that Nato has had with the concept of employing forces for other than territorial defense is a current illustration.

7. In his book *The End of History and the Last Man* (New York: Free Press, 1992), Frank Fukuyama harkens back to Socrates' description of the three parts of man's soul. First is the "desiring" part, that which recognizes thirst and wants to drink. Next is the "calculating" (or economic) part, where man recognizes that the liquid he has may be poison. But man also demands that others recognize his self-worth: this demand arises from the third part, the *thymos*. Some implicitly equate thymotic reasoning to irrationality. Technically, however, rationality calls only for consistent choices—i.e., that if frequently presented with similar alternatives the person consistently makes similar choices. Rationality then, can involve a combination of thymotic and economic considerations.

8. A great power is one that substantially affects the calculations and behavior of those other states that influence world events. A radical realignment of policy by a great power would affect directly the structure of global relations and the global security environment. Economic power by itself would qualify the United States, Germany, and Japan for this status. The geography and potential of Russia will keep her in the club. China qualifies by its size and role in the UN.

9. Thirty to fifty years covers the life of naval ships, with all but aircraft carriers having a planned thirty-year life span, and carriers, fifty.

10. The "Memorandum to the President-Elect: Harnessing Process to Purpose," by the Carnegie Endowment and Institute for International Economics Commission on Government Renewal, 1992, is one attempt to address the organization of the executive branch to cope with the emerging environment. The formation by the Clinton administration of an Economic Council similar to the National Security Council arose from the recommendations of this report.

11. Indeed this seems to be the dilemma that the French face. To have the Americans out of Europe, they must have some assurance that the Germans are irreversibly integrated into a European military structure.

12. Leslie H. Gelb, "Asian Arms Races" (editorial), *The New York Times*, 18 March 1993.

13. This quotation comes from a recent futures study (of 2025) conducted for the Vice Chairman of the Joint Chiefs of Staff.

14. Airborne forces arriving without supplies may prove more of a burden than a contribution in this situation.

15. The terminology of peace-enforcement, peace-keeping, and peacemaking used here is that of UN Secretary General Boutros-Ghali in his June 1992 report, *An Agenda for Peace*. Peacemaking in this construct is the work of diplomats and aid agencies. Peace-enforcement requires heavily armed military forces.

16. Van Creveld makes this point strongly, citing the problems the Israeli forces are having with the Intifada.

17. Charles J. Dunlap's article "The Origins of the Military Coup of 2012," *Parameters*, Winter 1992–1993, suggests the most pernicious aspects of this policy.

18. Though one could argue that 637-class (*Sturgeon*) SSNs, being deactivated first, are a bit more versatile than their 688-class (*Los Angeles*) colleagues.

19. Witness collisions between the USS *Baton Rouge* and a Russian Sierra-class SSN, and between the USS *Grayling* and a Delta-type SSBN within the past year.

20. Though diesel submarine performance has increased, so has ASW sensor performance.

21. Another lesson from the outcry and litigation after Desert Storm is that people will not stand for their sons and brothers being killed by their own coalition's forces.

22. See Jan Breemer's article "Where Are the Submarines?" U.S. Naval Institute *Proceedings*, January 1993, pp. 37–42.

23. See (then) Secretary of Defense Dick Cheney's *Defense Strategy for the 1990s: Regional Defense Strategy*, January 1993. Though placing a greater emphasis on human rights and democratization, the new administration's policy lies within the bounds of major themes presented in that document.

24. This year we have eighty-eight SSNs. Without new construction, and assuming a thirty-year ship life, the American SSN force will drop at a rate of three to four ships a year beginning about 2010, reaching a level of thirty SSNs around 2015. Even if ship life is extended, maintaining force levels will require production of more than one ship per year if production is delayed.

25. Covert, local surveillance fits into the category of "niche" missions.

26. Michael Rothschild, *Bionomics: Economy as Ecosystem* (New York: Henry Holt, 1992) has excellent examples.

Ψ

Call for Papers

The World War II in the Pacific Conference will be held at the Hyatt Regency Crystal City, Arlington, Virginia, on 10–12 August 1994, sponsored by the American Society of Naval Engineers, the Marine Corps Historical Center and Marine Corps Historical Foundation, the Naval Historical Center, the Naval Historical Foundation, the Naval Order of the United States, and the U.S. Naval Institute.

This conference will examine the momentous Allied offensive campaign against the Empire of Japan from August 1942 to August 1945. The analysis of well known military and naval historians, the remembrances of veterans of the war, contemporary film, artifact displays, and book exhibits will focus on this dramatic clash of arms that so influenced the late twentieth century.

The World War II in the Pacific Conference Program Committee welcomes single papers or entire sessions on such aspects of the war as grand strategy and policy, Allied coalition politics, the South, Southwest, and Central Pacific campaigns, the battles of Leyte Gulf, Okinawa, and Iwo Jima, combat leadership, military medicine, intelligence and code-breaking, the evolution of naval air and amphibious warfare doctrines, combat art and photography, technological development of ships, aircraft, and weapons, Marine Raider and Navy UDT operations, and logistics.

Please send one-paragraph abstracts of paper or session proposals, curriculum vitae, and related correspondence to Dr. Edward J. Marolda, Chair, Program Committee, World War II in the Pacific Conference, Naval Historical Center, Bldg 57 WNY, Washington DC 20374-0571. Deadline for submission of proposals: 30 November 1993.

The Baltic Sea in the Post – Cold War World

Commander Kurt B. Jensen, Royal Danish Navy

ALTHOUGH A RATHER CONSTRAINED AREA geographically, the Baltic region is one in which the impact of a number of profound changes, concentrated with unique intensity, is being felt.

Throughout the Cold War period, the Baltic area was regarded as, in a sense, a continuation of the Central European "Iron Curtain"; accordingly, its strategic significance was always in focus. Today, however, so precipitous are the changes in the Baltic environment that an effort to understand their implications is demanded. In general, these developments are positive and offer historic opportunities that the region's states must consider carefully. These opportunities are in various dimensions, especially the political and economic, but they will also affect security considerations for the whole zone. In time this environment of change will itself become the basis upon which each of the regional states approaches force planning issues.

This article addresses the strategic significance, in this regime of change, of the Baltic Sea.[1] It first sets out the Baltic's historical context in the traditional terms of shifting power balances. The implications of current changes on three levels—political, economic, and military—are then identified, leading to general conclusions as to regional strategic significance, prospects, and tendencies.[2]

Historical Context

As would be expected in an area with such a geographical configuration, the history of the Baltic Sea is marked by conflicts in which access has been a key factor. Up to the present century, these struggles have been driven by the opposing economic interests not only of the littoral states but also external powers who sought to exploit both the economic and military possibilities of the Baltic.

Denmark and Sweden, by virtue of their locations and trade policies, assumed active roles early on. From the twelfth to the sixteenth centuries, these two states,

Commander Jensen is a recent graduate of the Naval Command College of the U.S. Naval War College and also of the Defense Management Course at the Naval Postgraduate School, Monterey, California. He is the prospective commander of the 2nd Frigate Division of the Royal Danish Navy.

along with the towns of the Hanseatic League, dominated traffic within, into, and out of the Baltic.[3] In this period, the Hanseatic towns sought to make the Baltic a *mare clausum*, or closed sea, and Denmark, exploiting its strategic position, introduced the Oeresund Dues in 1429.

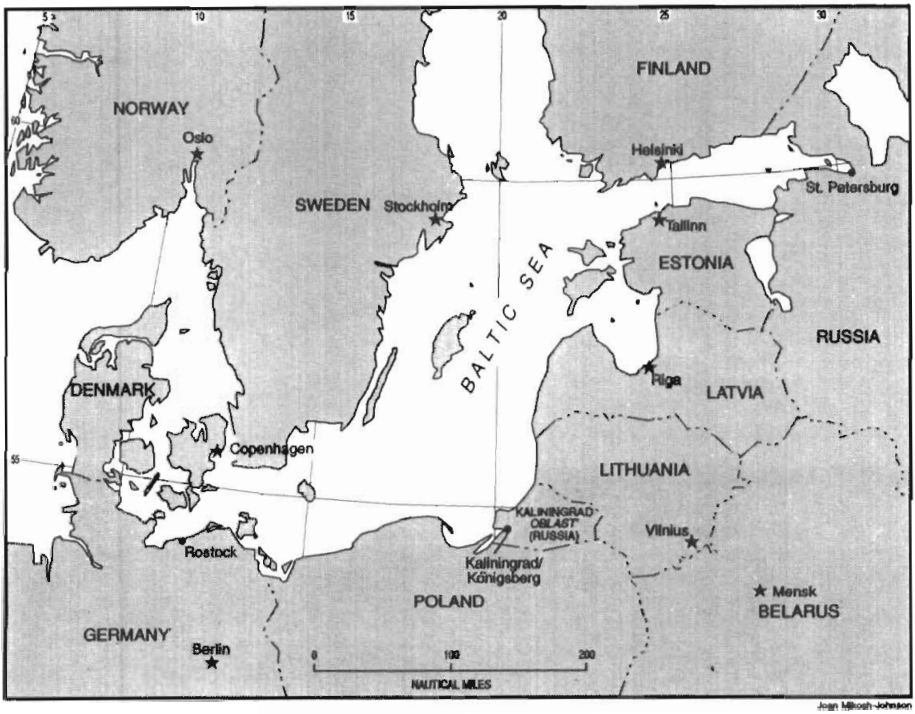
However, the importance of the region's markets also attracted the Netherlands, and the interest of that state in preserving free trade—i.e., a *mare liberum*—influenced the situation in the Baltic through the seventeenth century. The Dutch role as a major outside power affecting the internal Baltic strategic situation was later supplanted by England, which became the dominant regional naval power until the middle of the nineteenth century. The British interest was centered in a *mare liberum*, from both the economic and military perspectives.

A number of factors in the mid-nineteenth century caused a major shift in the Baltic strategic situation. First, the Industrial Revolution reduced the traditional economic importance of the Baltic itself; emblematic of the diminished importance of trade was the Sound Treaty of 1857, by which Denmark gave up the collection of dues. Secondly, the British withdrew from the arena as two littoral states, Russia and Germany, emerged as regional naval powers. Germany, with the achievement of a Baltic *mare clausum* regime as a distinct objective, now became the leading power in the area. It remained so to the end of the First World War, after which in the interwar years competing German and Russian spheres of influence gradually began to emerge.

The post–world war period was characterized by the dominance of the USSR in the Baltic; Soviet interest was in a closed-sea policy, with a resulting focus on the Straits. The new *mare clausum* regime was clearly challenged by the United States, the new external power—this time a superpower—having strategic interests in the region. The Baltic came to be viewed as an important part of the northern European power balance, and it functioned well as a buffer zone between the opposing interests of the two superpowers.[4]

What conclusions can be drawn from this historical context? Not surprisingly, observers differ as to strategic implications. However, there seems to be general acceptance of the following theses:

- First, the strategic significance of the Baltic Sea has been closely linked to the overall "rise and fall" of European great powers.[5]
- Second, while early in this millennium the area was dominated by economic factors, the military aspect has been central in the last century, reaching a peak in the Cold War.
- Third, sea power has clearly played a major role, specifically in the efforts of a dominant Baltic power to establish a *mare clausum* and those of an outside great power to assert a *mare liberum*.
- Fourth, Denmark's unique geographic position controlling the Straits (long exercised by the imposition of dues) has often led to involvement in regional



conflicts—without, however, serious challenge to its ability to exert controlling influence.

• Finally, the Cold War was a special case wherein the Baltic Sea was an important element in the balance between two superpowers, one of which, for the first time in history, was also the dominating regional power.

The Changing Political Environment

In the post–Cold War resettlement of European affairs we have witnessed changes both unprecedented and coming at a pace that none would have believed possible only three years ago. Moreover, it would seem that the process is not yet coming to a halt; rather it is likely to be a continuing one with which we will have to live for some time. It is true that an outside observer might feel that the Cold War also presented Europe with a series of significant political events, but that at length a resolution was reached and stability achieved. For the foreseeable future, however, a renewed status quo is not probable. We will have to continue to adjust to a changing environment, one in which force planning for the future will require flexibility.

Fragmentation. The predominant political development in Europe for the past three years has been fragmentation. The breakup of what could be called the

"Eastern Power Hemisphere" implies an arithmetic formula: 1→21. This expression describes the dissolution in December 1991 of the Soviet Union and both the formal emergence of fifteen new independent states (most of them loosely joined in a new Commonwealth of Independent States, or CIS) and the release of six Eastern European countries from the political, economic, and military dominance of the former USSR. For the Baltic region there are several major implications.

The most important is the achievement of independence by the Baltic States—Estonia, Lithuania, and Latvia. The arrival of three new littoral states, each with sovereign rights, will inevitably influence security issues in a powerful way. So far, however, their emergence has had only a minor impact, due to the fact that they have so far given priority to the complete and expeditious withdrawal of all CIS military forces based on their territories as a prerequisite to restoration of full state sovereignty.[6]

Second, and a consequence of the foregoing, Russian sovereign territory on the eastern Baltic has been reduced to two small bridgeheads, around Kaliningrad (the former Königsberg) and St. Petersburg. In addition, the former is located in a rather confined area (the Kaliningrad *oblast'*) surrounded by Poland, Belarus, and Lithuania, with which there are no agreements as to the use of corridors, etc., for military purposes.

Finally, the collapse of the Soviet bloc has brought the inauguration of new eras in the national existences of two major Baltic states. The disbandment of the Warsaw Treaty Organization in 1991 marked the passing of the last obstacle to the transformation of Poland into a democratic and free market-based society. The disintegration of the Soviet Union fundamentally affected Finland as well. The renegotiation of the Finno-Soviet Treaty of Friendship, Cooperation, and Mutual Assistance, completed in January 1992, led to the final disengagement of Finland from the overwhelming influence, formal and informal, of its eastern neighbor.[7]

Integration. Remarkably, however, if fragmentation has been the dominating characteristic of recent European developments, another important factor in the same period has been integration. First of all, the twelve member countries of the European Community (EC) proceeded along the path toward further and deeper integration with the removal of trade barriers at the end of 1992. The way ahead to political union had been laid down in the Maastricht Treaty of December 1991, after which the process continued without interruption until 2 June 1992, when the Danes voted by a very narrow margin against ratification. This outcome, and the very mixed French approval of the treaty in the referendum of 20 September, would suggest that prospects are weak for continuation of the process as scheduled. Nonetheless, there is little doubt that integration will proceed—and in fact the Danes reversed their vote in May

1993—albeit more slowly than had been anticipated. Similarly, there is little doubt that the EC will continue to be the core of European political development, a fact that Sweden and Finland seem to have acknowledged in their application for full EC membership, on the premises of the Maastricht agreement. Poland has clearly expressed its desire to obtain membership, and it seems likely that the Baltic States, when their domestic situation allows, will seek membership as well.

A second evidence of a tendency toward integration is the astonishing sequence of events that led to the reunification of Germany on 1 October 1990. On that date a littoral state disappeared from the Baltic map; the same date marked the reemergence of a former great Baltic power. Long recognized as the economic locomotive of Europe, Germany has now reached the end of the road to full sovereignty upon which it began after the Second World War. Clearly, renovation of the former German Democratic Republic will retain priority in the coming years, but there is little doubt that Germany will work toward a more significant political role.[8]

Cooperation. Yet a third general trend in post–Cold War Europe has been the establishment of new fora for regional cooperation. In relation to the Baltic region, the prime forum, the Nordic Council, dates back to 1953. Member states include Finland, Iceland, Norway, Sweden, and Denmark—that is, three Nato members, one neutral state, and one with a special relationship with the former USSR. This diversity of membership is commonly considered to provide the basis for the so-called "Nordic Balance."[9]

Poland has been actively involved in the establishment of two regional cooperation bodies in the aftermath of the Cold War. One is the Visegrad Group, founded by Poland, Hungary, and the former Czechoslovakia for the pursuit of common goals of economic reform and economic integration with the Western European countries. Another forum is what was originally known as the Pentagonale, established in 1990 by Italy, Austria, Hungary, Yugoslavia, and Czechoslovakia; the body was later joined by Poland, forming the Hexagonale.[10]

The newest and most remarkable cooperative body for the Baltic, however, is the Baltic Cooperation Council (BCC), founded in Copenhagen on 5 and 6 March 1992 by the foreign ministers of all the regional countries: Latvia, Lithuania, Estonia, Russia, Poland, Germany, Finland, Sweden, Norway, and Denmark. It is especially notable that Norway, not normally associated with the Baltic region, is a member. This initiative is seen by some observers as in effect a revival of the old Hanseatic League, but it is probable that its objective in fact will be to ease the transitions of Poland, Russia, Estonia, Latvia, and Lithuania into democratic and free market-based societies.[11]

To summarize, the political environment of the Baltic Sea has changed dramatically, with geopolitical impacts that are fundamental in many respects.

We are witnessing the disappearance of the European superpower; specifically, it is being deprived—in a process with important regional implications—of most of the assets that would allow it to reimpose Baltic supremacy. At the same time, a former great power has reemerged, one with long-term potential for greatly influencing the Baltic situation. In geopolitical terms we see a tendency toward a shifting of the European center of gravity away from Moscow and to Berlin. The continuation of the integrating process in Europe and extension of regional cooperative fora constitute a positive trend in political developments around the Baltic Sea.

Economic Prospects

The economic interests of the Baltic can be related to four factors: shipping, fisheries, exploitation of sea bottom resources, and recreation.[12] Each of these elements is likely to gain in influence in the aftermath of the Cold War. The sovereignty of all the littoral states will eventually lead to major emphasis on the sea as a transportation medium; intensified regional trade on the Baltic must be expected. A contributing factor is that the infrastructure of the former republics and satellites of the Soviet Union is now in a very bad state. Establishment there of a more developed industrial base will require increased use of the Baltic Sea for export and import.[13] This strong interest in a more rapid and rational development of maritime transport in the Baltic has already led to the establishment of a practical forum, the Baltic Port Organization, representing twenty-seven regional ports as of January 1992.[14]

Exploitation of natural resources is inevitably linked with the delimitation of maritime borders on the continental shelf. The shelf holds commercially valuable deposits of oil, phosphorite, glauconite, ferromanganese nodules, amber, sand, and till (the latter being a clay substratum containing sand and gravel).[15] The reunification of Germany and the independence of the Baltic States has added another level of complexity to what was already a sophisticated system of national maritime border declarations and agreements. Sovereignty of the Baltic States has not yet led to resolution of maritime boundaries with respect to territorial seas, exclusive economic and fisheries zones, or the continental shelf. The necessary bilateral and multilateral talks are yet to be held, and the Baltic States have not yet formally bound themselves to the 1982 Final Act of the Third United Nations Conference on the Law of the Sea (known as UNCLOS III).[16]

Exploitation of natural resources and recreational potential will be a major economic interest of all littoral states; associated with it, however, is the very demanding issue of environmental problems. It has recently become obvious to the outside world that development in the USSR grew out of a "growth at any cost" mentality, obsession with gigantism, and willingness to twist science to political ends. The price today is enormous—it can only be described as an

environmental nightmare ravaging the former Soviet republics. Similar problems also face Poland and the former East Germany.[17] Countering this enormous transnational threat effectively will inevitably require substantial and prolonged effort, which will in turn require extensive cooperation and the generation of vast amounts of funds within the Baltic region.

As the foregoing suggests, economic interests in the Baltic Sea are very likely to gain in importance. On one shore of the sea we find a region marked by economic underdevelopment, a cheap work force, and dramatic need for investment. On the other we find a highly sophisticated zone with a very expensive work force and a saturated market. Between these two most unequal economic regimes there is the Baltic itself, offering a safe and economical transportation medium. The basis for prosperity in the region is obvious; what is more important, however, is that both shores of the Baltic seem to show a positive will to take advantage of their remarkable opportunity.

Prospects for the future economic significance of the region have been described by a number of observers and officials, but the vision expressed by Uffe Ellemann-Jensen, the former Danish foreign secretary, in a statement of 23 January 1992 is probably typical of that of many: "The Baltic Sea is no longer a blind alley on the outskirts of Europe, but will once more become a centre of activity and prosperity. Become what some people refer to as the Baltic Growth Zone."[18]

It is in this prospect that we find the rationale for the establishment of the Baltic Cooperation Council. Undoubtedly the vision of the Baltic as a strong economic region in the future is the driving force behind present political interest in joining this forum. In a short-term, practical way, however, this body will form an initial framework for cooperation and coordination between the littoral states and will eventually lead the way to membership in the European Community for those states not presently members.

Security Implications

Security prospects for Europe in general arise from two recent significant changes. The first was the announcement in December 1988 by then-President Mikhail Gorbachev that the Soviets would unilaterally reduce their troops in Eastern Europe. This decision eventually led to the fall of the Berlin Wall in November 1989 and then to the dissolution of the Warsaw Pact and along with it the threat of a conventional Warsaw Pact attack on Western Europe. The second change began with the attempted Moscow coup of 19 August 1991, which led rapidly to the demise of the Communist Party and then of the USSR itself.[19]

The resulting framework confronts the Baltic area with a series of regional security issues. First and foremost is the problem of the withdrawal of all CIS

(formerly Soviet) military forces stationed in the Baltic States. For now, Russia's justification for keeping some 120,000 troops in the new nations is mainly economic; the argument is that the withdrawal cannot be carried out before housing and jobs at home can be guaranteed. The CIS military also insists that withdrawal is linked to a prior commitment to remove troops from Germany and Poland, and it is attempting to negotiate a target date of 1994 at the earliest for commencing the Baltic withdrawal.[20] The possibiliry of an unstated additional linkage to the large Russian minorities in all the Baltic States cannot be excluded, however. The fact that 34 percent of Latvia's population, 30.3 percent of Estonia's, and 9.4 percent of Lithuania's is ethnically Russian could be an important factor in any negotiated settlement of the troop-withdrawal issue.[21]

A second challenge is the Russian Baltic Fleet; its status is of particular relevance to the evolving regional security situation. A consequence of the independence of the Baltic States will be a gradual withdrawal of formerly Soviet naval units; so far, however, it is not clear where they will relocate. Recent statements seem to indicate that Russia is committed to keeping a large naval force in the Baltic Sea.[22] That all units will withdraw to St. Petersburg and Königsberg seems unrealistic, which could mean the transfer of many ships to the Northern or Pacific Fleets. The eventual reduction of Russian sea frontage to two relatively constrained strongholds—St. Petersburg is obstructed by ice for some part of each winter—would eventually degrade the capability of the Baltic Fleet and perhaps even challenge its stature as the dominant naval force in the area. Also, in a symbolic gesture befitting the new realities, the Baltic Military District has been renamed the Northwest Group of Forces, with headquarters presently in Latvia.[23]

Yet another effect of the changing security environment is that the geography of the potential battlefield has been altered. When the forces of the two alliances faced each other across the inter-German border, those of the Warsaw Pact were only 250 miles from Nato's English Channel ports. With the agreed withdrawal of its troops from the former East Germany by the end of 1994, the starting line for any future Russian offensive will move at least back to the German-Polish frontier, four hundred miles from the Channel. With the final removal from Poland, it will drop back another 250 miles. Possibilities for confrontation in the Baltic have changed likewise.[24]

Fourthly, it should be stressed that whereas the above-mentioned issues have to do with potential changes in the future, the actual situation in the Baltic with respect to hardware remains unaltered. In other words, though it may be argued that while recent developments may have deprived CIS forces of much of their "will," it is still difficult to find any change in their "capacity." A central factor here is the Conventional Forces in Europe (CFE) Agreement. CFE was meant to break down the military infrastructure of the Cold War order; in essence, it

became part of the self-destruction of the system designing it. In that context, the August coup can be seen as a last, desperate attempt by conservative elements in Russia to prevent what it saw as a selling-out of the ability to project power into Europe. Today, the fate of CFE is very much in doubt; a series of problems in implementation have arisen. Treaty equipment limitations were tied to the former Soviet military districts, some of which have now become separate states—which have, for a number of reasons, not ratified the agreement. This in turn means that for many years to come, force planning is bound to be based on the continued existence, as listed in such publications as *The Military Balance*, of large amounts of weaponry. To be realistic, force planning should assume complete implementation of the CFE treaty no earlier than 1995.

Finally, regional security considerations cannot exclude the factor of uncertainty. Uncertainty, first of all, attaches to future developments in Russia. We may hope that the most likely outcome is continued positive evolution toward democracy and a market-based economy. However, the possibility of a reversion to dictatorship or, in the worst case, chaos and civil war, cannot be excluded. The U.S. National Security Adviser during the Carter administration, Zbigniew Brzezinski, has recently expressed his pessimistic perspectives on the domestic developments in Russia. Mr. Brzezinski's concern is that the pains of transition to capitalism may well undermine the appeal of the democratic ethic. In that setting, there may be great proclivity to take refuge in more organic and more tightly binding beliefs such as ethnicity, xenophobia, or religion. The current difficulties Russia is experiencing could provide dangerously fertile ground for "a new form of fascism, that would fill the void of the black hole, that Bolshevism created in Russia, creating the conditions of coercive order—even if no longer of coercive utopia—that democracy and the free market may not have been able to insure." Should such fascism take root in Russia, he adds, it would "almost certainly spread to some of the non-Russian former Soviet republics" and also "infect the politically more unstable portions of Central Europe," even possibly spreading "to some portions of Western Europe."[25]

On the basis of these security factors, some general conclusions can be drawn. First, the Baltic Sea is no longer an arena of superpower confrontation; opposing military blocs no longer face each other across it; it is no longer the flank of a European front line. Second, military capacity is still present, notwithstanding the overall political changes. Third, while the risk of large-scale conventional aggression in the form of amphibious attack is now very much reduced, the danger of regional or low-level conflicts is very much alive. Finally, the current positive, downward trend in the overall potential for military conflict in the Baltic is very much dependent on events in Russia. A renewed dictatorship would have serious security implications.

Prospects and Tendencies

The purpose of this discussion has been to present the various factors relating to the three main dimensions of the Baltic environment in the post–Cold War period. How do these dimensions interact, and what are the overall strategic implications for the region?

To use any simple model to describe the strategic significance of the post–Cold War Baltic region is difficult; in fact, it requires a detailed analysis beyond the scope of this article.[26] The very term "post–Cold War" connotes a certain degree of resolution, of stability; the facts, as the foregoing makes plain, are more ambiguous. On the whole, however, it would seem that the economic element is rapidly gaining in influence, and the political as well, though somewhat less so, whereas the military component is somewhat reduced.

Any attempt to estimate future prospects and tendencies for the strategic importance of the Baltic Sea requires a resort to two scenarios, the difference between them being the role of Russia. In the better case, its economic reform process will succeed and democracy will continue to evolve, conservative elements and the military-industrial complex will be neutralized, and Russia will be gradually integrated in ever more binding international cooperative fora. In this case the likelihood that the Baltic will become a prosperous region is plain. In such a case, regional cooperation would advance, and, in a broad European context, economic cooperation, based most likely on the EC, would make the Baltic littoral an important growth zone. Economic considerations would be foremost in this scenario, followed by political ones, and military the least.

In the other, worse, case, Russian economic reforms fail and the evolution of democracy is upset by new authoritative, nationalistic leadership, perhaps bent on restoring the old Soviet empire by means of military power. The planned withdrawal of forces from the Baltic States would halt, and a real threat to the Baltic would result. A threat of military aggression against Western Europe would not necessarily result, but a restoration of something like the former power balance in the Baltic, with renewed emphasis on the military element, would be likely. Economic opportunities would be thrown away for a long period of time. This falling back to a "cold war" situation would put the military element ahead, followed by the political, with the economic last.

The Baltic has for centuries played an important role in the balance of power in Europe. During the Cold War this region even had a kind of frontline status as part of the superpower confrontation. The end of the Cold War has dramatically changed the situation; the fall of the Soviet Union and the rise of Germany—referred to by many as the winner of the Cold War in Europe—are

the dominant factors. Regionally, the present situation offers unique opportunities for the littoral states, some of them newly independent, to take advantage of economic opportunities. However, the demise of communism has raised the danger of regional and low-level conflicts in the area; the outlook is linked to internal and political developments in Russia.

The current situation offers positive trends in many respects. However, it seems realistic to join a Swedish admiral in the following statement: "For me it is quite clear, that the Baltic Sea is not yet a 'sea of peace.'"[27]

Notes

1. "Strategy" is typically used in compound terms like "national strategy" or "grand strategy," connoting the development and use of a government's entire range of resources to achieve objectives against the opposition of another government or grouping. See, among others, Henry C. Bartlett and Timothy E. Somes, "Long-Range Planning in a Changing World," *Fundamentals of Force Planning: Vol. III, Strategy and Resources* (Newport, R.I.: Naval War College Press, 1992), pp. 2–3.

However, the term has traditionally applied to four areas—political, economic, military, and diplomatic. This usage derives from General Beaufre, as cited, among other places, in Julian Lider, *Military Theory*, Swedish Institute of International Affairs (Gower, 1983), p. 196.

In this article, "Strategic" is taken as relating to one geographic area, the importance of which is evaluated along not four but three dimensions, diplomatic and political elements being combined.

2. It is recognized that a careful and thorough contemporary analysis of the strategic significance of a given region requires a three-level examination: first, the internal situations of the countries involved must be clarified; second, relationships with and between superpowers and regional powers must be investigated; and third, factors affecting the region as a whole must be traced, since they form the basis for strategic conclusions ultimately drawn. The emphasis of this article, however, is upon the latter, i.e., pan-regional elements. The other two levels of examination are addressed only in passing.

For a full-scale example of the three-level analytical model see the author's "NATO's Southeastern Flank," *Tidsskrift for Soevaesen*, nos. 5–6, 1988, pp. 193–312.

3. The Hanseatic League was an association of merchants and cities along the north German and Baltic coasts in the thirteenth to fifteenth centuries. It operated in a trading area based around the Baltic Sea. See Ole Waever, "Nordic Nostalgia: Northern Europe after the Cold War," *International Affairs*, January 1992, p. 77.

4. H. Smidt, "Oestersjoens strategiske betydning," *Tidsskrift for Soevaesen*, no. 3, 1992, pp. 134–37. Several sources offer in-depth analyses of the historical development of the Baltic. *The Baltic: Balance and Security*, by Mogens Espersen (Copenhagen: Information and Welfare Service of the Danish Defense Ministry, 1987), pp. 9–60, is an overview of different historical eras and an excellent source. His "The Security Policy History of the Baltic" in *The Baltic: Yesterday—Today—Tomorrow* (1981, by the same publisher) is a briefer alternative.

5. The term alludes to Paul Kennedy's *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000* (New York: Random House, 1990). This work is a major study, providing an excellent analysis of the rise and fall of the European powers, among others, within the relevant time frame.

6. Jeffrey L. Canfield, "The Independent Baltic States: Maritime Security Implications," *Naval War College Review*, Autumn 1992, pp. 55–81. Canfield's article offers a comprehensive analysis of this issue, with emphasis on the withdrawal factor.

7. The term "finlandization" is well known and describes a policy of a state's restricting itself politically in order not to offend a neighboring great power. See Det Sikkerheds—og nedrustningspolitiske udvalg, *Fred og Konflikt*, 1991, p. 355.

The new agreement on "Good Neighborliness and Cooperation" has no clauses about consultation or military assistance. Article 4 establishes a commitment for Finland to maintain a defensive capability to prevent its territory from being used for armed attack against the other party. See "The Military Balance in Northern Europe, 1991–1992" (Oslo: The Norwegian Atlantic Committee, 1992), pp. 27–28.

8. The impact of a unified Germany has caught the attention of several scholars. Among them is Peter Duignan, director of Western European Studies at the Hoover Insitution and the co-author of a 1992 booklet entitled *Germany: Key to a Continent*. Duignan expresses the importance of a unified Germany in this way: "In demographic, political, military and economic terms, Germany is the most powerful country in Europe. It

not only plays a crucial role within the European Community, but it dominates the market. The Germans have got relationships and plants in all the European countries." Cited from *World Traveller*, March 1993, pp. 28–38.

See also "Germany Demands Seat in UN Security Council," *The New York Times*, 24 September 1992, p. A1.

9. Waever, pp. 77-102. Waever gives a good presentation of the possibilities for survival of Nordic cooperation in post–Cold War Europe. An introduction to the concept of "Nordic Balance" appears on p. 79. For a complete discussion of the Nordic Council, see *Fred og Konflikt*, pp. 326–27.

10. Unal Cevikoz, "European Integration and New Regional Cooperation Initiatives," *NATO NYT* [NATO news], June 1992, pp. 23–24. The effect of the replacement of Czechoslovakia by two states is difficult to determine at this point. In the case of Yugoslavia, the Belgrade government was not able to fulfill its 1992 Hexagonale presidency, which subsequently reverted to Austria.

11. Cevikoz, p. 25.

12. See Klaus Carsten Pedersen, "The Economic Exploitation of the Baltic," in *The Baltic: Yesterday—Today—Tomorrow*, pp. 24–29.

13. Canfield, pp. 64–68, gives a solid and up-to-date review of the maritime transportation industry in the Baltic States.

14. *Jyllandsposten* (Aarhus, Denmark), 3 March 1992. The organization was founded in Copenhagen on 10 October 1991 by representatives of the ports of Copenhagen, Rostock, and Tallinn. The twenty-seven ports that were participating by January 1992 were in Estonia, Denmark, Finland, Germany, Larvia, Lithuania, Poland, Russia, and Sweden. The first General Assembly took place in Tallinn on 26–27 March 1992. The organization's objectives and the key issues it faces are:

- Rapid and rational development of maritime transport in the Baltic region. This development is to have the dual purpose of boosting economic development in the states of the region while creating efficient pathways for transfer of cargo and passengers from port to port.
- Coordination of cooperative measures agreed upon by member ports with regard to such matters as development, investment, specialization, etc.
- Exchange of information, technology transfer, port management services and other skills, rehabilitation of ports, etc.
- Education and training of personnel.
- Establishment and maintenance of a network of international contacts.
- Marketing the Baltic region as a strategic logistics center.
- Negotiation and decision-making with regard to the Organization's affiliation with other international bodies (such as the International Association of Ports and Harbonrs), whether on the basis of collective associate membership or individual membership for ports.

15. Canfield, p. 69.

16. See Canfield, pp. 68–71, especially the table of territorial sea claims on p. 70.

17. For a gloomy survey of the environmental disaster facing the former Soviet republics, see *U.S. News & World Report*, 13 April 1992, pp. 40–51.

18. Uffe Ellemann-Jensen, "The Rebirth of a Dynamic Region," Address to the Conference on Reintegration of the Baltic States in the World Community, London Chamber of Commerce, Chatham House, 23 January 1992. Quoted in Smidt, p. 155.

19. These changes were described by Secretary of Defense Les Aspin, when he was the chairman of the House Armed Services Committee of the U.S. Congress, as the two modern Soviet Revolutions. See Les Aspin, "From Deterrence to Denuking: Dealing with Proliferation in the 1990s," Compendium, National Security Decision Making Department, Naval War College, Newport, R.I., 18 February 1992.

20. Canfield, pp. 56–58, provides a detailed review of the withdrawal issue.

21. For the implications of these Russian minorities, see *U.S. News & World Report*, 22 June 1992, p. S3. As an example suggesting the importance of this issue, the Russian minority in Estonia was not allowed to participate in the presidential elections of 20 September 1992. The Russian government's reaction implied the likelihood of sanctions, perhaps affecting oil deliveries, and the possibility of delays in the troop withdrawal negotiations. On the presidential election, see Peter Marslew, "Weekendavisen," 25 September–1 October 1992, p. 8.

22. In a recent statement, Foreign Minister Andrei Kozyrev claimed that a raison d'etre for the Baltic Fleet was "to deter any future territorial claims on Kaliningrad from extremist groups in Germany and elsewhere." Reuter *News Highlights*, 16 March 1993.

23. Canfield, p. 61.

24. Strategic options in the Baltic have been investigated in historical perspective by Lt. Col. M.H. Clemmesen, "Change and Strategy in the Baltic," *Enjeux Atlantique*, no. 2, 1992.

25. Zbigniew Brzezinski, *Out of Control: Global Turmoil on the Eve of the 21st Century* (Scribner, 1993).

26. For a useful model, the "strategic tripod," see Henry C. Bartlett and G. Paul Holman, "Grand Strategy and the Structure of US Military Forces," *Fundamentals of Force Planning: Vol. III: Strategy and Resources* (Newport, R.I.: Naval War College Press, 1992), pp. 57–68.

27. Claes E. Tornberg, "Swedish Future Surface Ships and Submarines," *Naval War College Review*, Winter 1992, p. 55.

Ψ

So Long, American Flag
It Was So Nice to Fly You

Andrew E. Gibson

IN AN ARTICLE PUBLISHED one year ago in this journal,* the author asked a series of questions about the future existence of a viable American merchant marine. In an attempt to stimulate thought about measures that might be taken to reverse the decline of the U.S. maritime industry, the article took a Socratic approach. The several questions it asked can be briefly summarized as follows:

- Is the Congress able to pass legislation that would eliminate most, if not all, of the shackles that put the American merchant marine at a disadvantage in world competition?
- Is it willing, after two hundred years of misguided effort, to separate aid to American shipbuilders from a system of archaic restrictions on American ship operators?
- Is the administration, and this means chiefly the Department of Defense (DoD), sufficiently concerned about the emergency manning of the Ready Reserve Fleet (RRF) by qualified merchant seamen to provide the funds necessary to make up the difference between the wages foreign seamen get and those an American shipowner must pay to provide American seamen with a decent standard of living?

I

Shortly after the article appeared (and totally unrelated to it), the Bush administration proposed a sixteen-point program that, if adopted, would have gone a long way toward retaining at least a nucleus American merchant fleet for

Professor Gibson is currently an Advanced Research Fellow at the Naval War College. For many years he was a senior executive of the Grace Line and was later president of Delta Steamship Company. He served as Assistant Secretary of Commerce for Maritime Affairs from 1969 to 1972.

* See Andrew E. Gibson, "After the Storm," *Naval War College Review*, Summer 1992, pp. 21–27.

the future. However, after arguments within the administration, and particularly after amendments by congressional committees in response to constituent pressure were in place, the program was doomed. In spite of all the hopeful rhetoric that had been generated, the answer to the questions posed above was a resounding "No"!

While the committees gave serious consideration to much of the administration's program, behind-the-scenes lobbying was such that even in greatly amended form the program was never brought to a vote. Had it been, in its final form it contained so many provisions objectionable to the administration that it would undoubtedly have been vetoed.

First and foremost among the things that contributed to the program's demise was the timing. Though President Bush had been in office for almost four years, the program was offered only on the eve of the November 1992 elections. Even at that, much of the program's substance came not from the Maritime Administration but from two major American companies, each of which had recognized that it could not live long under the existing restrictions. Both of them, American President Lines and Sea-Land, declared publicly that if those restrictions could not be eliminated, they would have to lower the U.S. flag from the sterns of their ships, replacing it with that of another country. In the meantime, because they wanted to remain under the American flag, the two companies would do everything possible to encourage enactment of meaningful maritime reform legislation.

What drove those companies in that direction? Let us examine each firm separately.

Sea-Land is unsubsidized. Accordingly, it has wide latitude in its operations: like those of a foreign shipping company, its operations are guided primarily by managerial judgment. It can enter any trade route it wishes without commitment to the type or duration of the service it will provide. It also has the decided advantage of operating the U.S.-built part of its fleet in the protected trade between American ports, a trade denied to a subsidized company.* Its ships operating to Puerto Rico, Alaska, and Hawaii, not being subject to foreign competition, have provided much of the company's profits. Another part of its business that has (until recently) been profitable is the carriage of military cargoes, primarily containerized goods and equipment for U.S. troops and their families overseas. This cargo is also protected from foreign competition, but unlike for the coastal trades, the law does not mandate that ships carrying these cargoes be U.S.-built to qualify. Only United States registry is required, meaning that the

* This trade is protected by the Jones Act. Part of this 1920 law reserves all trade in coastal waters and to offshore states and possessions (Hawaii, Alaska, Puerto Rico, and Guam) to vessels built, crewed, and owned by Americans.

vessels have to be U.S.-owned and crewed by Americans. This important part of Sea-Land's business began to diminish with the draw-down of U.S. troops overseas. Therefore, with the exception of its domestic fleet, by 1992 the company no longer had any business reason to bear the added cost imposed by American registry.

American President Lines (APL) had quite a different problem, although the decline in military cargoes has affected it as much as Sea-Land. In order to keep the U.S. flag flying on its ships engaged in foreign trade, APL's crew wages are subsidized by the Maritime Administration. But the subsidy contract expires in 1997, and the Bush administration had made it plain that the contract would

"Apparently [the American shipbuilders'] congressional supporters hoped that by making these threats they would force foreign governments to come meekly to a bargaining table. This was a highly dubious prospect."

not be renewed. APL made it equally plain that it could not wait until 1997 before acting; even with the subsidies supplied by the government, APL had recently been barely breaking even. Plainly, without government help there was (and is) no hope of the line's surviving as an American-flag operator.

Although the Bush administration can be faulted for its failure to promote the merchant marine during its first three and a half years, the blame cannot be put to Andrew Card, Bush's final secretary of transportation. Members of the Senate Commerce Committee warned Mr. Card during his confirmation hearing in January 1992 that they expected him to produce a maritime program soon. Within a few months he was leading the effort to develop a consensus within the administration for a new initiative, and in presenting the resulting program to Congress he was the chief spokesman. His was the most impressive effort undertaken on behalf of the American merchant marine in recent years.

Card drew attention to the serious decline of the country's shipping assets. He noted that the United States now ranked sixteenth in the world, with only 393 seagoing merchant vessels. He projected that by the turn of the century—that is, in less than eight years—this fleet would shrink to 117 ships if no action were taken. By then, all that would remain would be old ships, and most would be sailing with Jones Act protection. Active merchant seamen, who in 1960 had totaled 100,000, in 1992 numbered only 27,000. A drop of another two-thirds by the year 2000 was projected.

In presenting the administration's program to Congress, Secretary Card stated at the outset that there was no intention of changing any existing requirement of the Jones Act, and that the proposed program was directed solely to U.S. ships operating in foreign trade. While the Jones Act is in need of substantial revision, his decision to avoid trying to change it was, unfortunately, politically wise; as

modest as the proposed program was, it was guaranteed to draw enough fire without assaulting a law that many consider untouchable.

II

Of Card's sixteen program elements, only five required legislation. All five were intended to make investment in U.S. ships more attractive. The first of them dealt with the fact that many foreign shipowners pay no taxes. Those who do, enjoy tax advantages generally unavailable to Americans. Some countries allow profits earned from ship operations to be placed in a tax-deferred account to be used for the improvement of existing ships or acquisition of future tonnage. Though Americans have a similar tax shelter, these funds can be used for domestic building only; therefore, domestic yards being as expensive as they are, except for those few ships built for the coastal trades the provision is almost worthless. The new program would allow such money to be used for building U.S.-flag ships abroad.

A second proposal by the administration was to relax the requirement that owners be U.S. citizens to participate in maritime promotional programs such as carrying military and foreign aid cargoes. Secretary Card reasoned that such a change would allow American shipowning companies to attract more foreign equity and that it would make it easier for U.S. shipping companies to enter into joint ventures with foreign partners.

Third, a 120-year-old law imposing a fifty-percent tax on all repair work done in foreign shipyards, a burden borne by no other country's ship owners, would also have been reduced incrementally over a five-year period. One wonders why its final elimination should take five years; as things turned out, the burden will remain.

As its fourth legislative point, the administration intended to attract newer and more efficient ships to carry cargoes covered by the cargo preference laws (e.g., those in the domestic trade). It was to be done by abolishing a requirement that a ship must be under American registry for three years before she is eligible to participate. Obviously, the three-year waiting period was designed to discourage Americans from using foreign-built ships. With few exceptions it has been completely successful; as a result, most of this country's foreign aid cargoes are transported in ships that should have been scrapped years ago. Because of their inefficiency, too much of the public funds intended to feed starving people overseas goes in fact to maintain worn-out vessels. Few if any of these ships were considered worth using in the recent Gulf war.

The fifth and final provision requiring legislation was a proposal to reestablish a tax deferment formerly given for income from ships owned by Americans but operated under a foreign flag. The Bush administration's proposal was intended to encourage increased American investment and participation in international

shipping. Without exception, such American-owned ships are available to the government for use in time of emergency. The deferment was canceled in 1986 at the urging of one of the maritime unions, which imagined that U.S. multinational companies would then be forced to register their ships under the American flag and accordingly to employ American seamen. Just the opposite has happened. These American companies must compete with foreigners employing Third-World crews and paying little in taxes, if anything. As a result, these U.S. companies are slowly getting rid of their ships. This is hardly in the national interest. The present owners—the major American oil, aluminum, and steel companies, who are increasingly dependent on the flow of raw materials from abroad—are also becoming more dependent than ever on foreign-owned, foreign-flag ships. However, the Secretary deferred this proposal, sending it to the Department of the Treasury to be "considered comprehensively" in the future. In so doing he probably condemned it to a bureaucratic purgatory.

III

The program's eleven other proposals would have required no legislation. One was to abolish the requirement that a shipowner have government approval to transfer an American-registered ship to a foreign flag, a regulation that applies to all ships, even those in which the government has no equity interest. No foreign investor in his right mind would accept such a restriction. In the future, few Americans will be willing to do so either. The Secretary's proposal, in any case, limited the provision to ships that "are not militarily useful." Since that determination undoubtedly would have been made by DoD, an American owner could still have gone bankrupt awaiting a decision.

The most controversial aspect of the Secretary's program would have virtually eliminated the current requirement that in order to participate in government programs, ships must be built in American yards. Though this intent was clearly implied, it was not specifically stated; nonetheless, it was not missed by the American shipbuilders. No effort to appease them succeeded. The program did, however, address a project that the shipbuilders have been actively promoting—their attack on foreign shipbuilding subsidies. The program stated that "the Administration will continue to work vigorously toward the elimination of subsidies provided by foreign governments to their shipyards." It went on to say that "where neither elimination of subsidies nor agreements are attained, the Administration will pursue disciplinary measures against [such] countries. . . ."

What had led to the U.S. shipbuilders' charge of discrimination? After the Civil War, when American shipbuilders could no longer sell their wooden ships in foreign markets, the high cost of American iron and steel became their explanation for their subsequent inability to compete in building iron and steel vessels. There was considerable merit to this argument, but the fact remained

that the U.S. shipbuilders lost their ability to sell abroad. After American steel became cheap early in the twentieth century, the blame for the builders' failure was laid to the high cost of American labor—again, with some validity. By the 1980s, however, it had become apparent that American shipbuilding labor rates were virtually equal to those in Great Britain and Japan and were well below those in the Scandinavian countries, the Netherlands, and Germany. A new villain had to be found to explain the shipbuilders' inability to compete: it turned out to be foreign subsidies. The new claim had such obvious appeal that it found members of Congress eager to lend support, and it was never seriously challenged.

Claims of unfair international competition are heard by the U.S. Federal Trade Commission, and if it sustains them the Commission can order punitive action. The FTC, a non-political arm of the government, did hear the shipbuilders' arguments and concluded that while the cost difference between U.S. and average foreign building was an estimated 96 percent, world shipbuilding costs would rise, if all subsidies were eliminated, by only 5.9 percent. In short, American shipyard costs were so out of line that "the elimination of subsidies is unlikely to make US shipyards competitive." The shipbuilders cried "foul" and urged passage of Congressman Sam Gibbons's bill retaliating against those benefiting from subsidies.* This bill would have barred any foreign ship built with a government subsidy from calling at a United States port until the shipowner had repaid it.

Whenever legislation has been proposed to aid the U.S. merchant marine, the shipbuilders have shown their muscle in Congress, demonstrating that if a bill does not provide substantial assistance for the shipbuilders, it is going nowhere. Secretary Card's efforts were to be no exception. Congress made it clear that unless the provisions of the Gibbons bill were included in the package, there would be no package. When the Secretary's legislation went to the Senate, it was rewritten so that any U.S. shipbuilder's complaint against a foreign line would be heard by the Federal Maritime Commission (FMC) and that if the claim was sustained, the FMC could take action that precluded the offending line from trading to the U.S. In this amended form the Gibbons bill was effectively attached to the administration's program.

The underlying assumption seemed to be that the Germans, French, British, Japanese, Italians, etc., would all stand still while being subjected to such claims without attempting to retaliate. In fact, the indirect subsidies provided by the Jones Act and the tax on foreign repairs have not escaped their attention. However, the "offending" companies would obviously be entitled to due process, and the charges would have to be fully examined. It is doubtful that

* Sam Gibbons (D-Fla.) is vice-chairman of the House Ways and Means Committee and chairman of the Sub-Committee on Trade.

American shipbuilders have much interest in demonstrating to the public their low level of productivity. Apparently their congressional supporters hoped that by making these threats they would force foreign governments to come meekly to a bargaining table. This was a highly dubious prospect.

The final provision of the administration's initiative was called the Contingency Retainer Program. It was intended to provide the funds necessary to offset U.S. crew costs currently provided by Federal subsidy. The plan was patterned after the Civilian Reserve Airlift Fleet program, in that a certain number of ships (in fact, seventy-four) would be placed at the disposal of the government in time of emergency in return for an annual payment.

The plan had flaws. The first was that the companies had already agreed to make their ships available, without any payment. This concession was obtained by the Military Sealift Command (MSC) years ago as a condition for allowing the firms to bid on MSC contracts. The second problem involved the high level of funding for the seven-year program. The initial payment was to be "$2.5 million per ship per year for the first two years, phasing down to $1.6 million per ship in the final year." The figure was undoubtedly established to offset the high crew costs incurred by both Sea-Land and American President Lines. However, by using the wage rates currently being paid by many unsubsidized companies

"It is an unfortunate fact that within the largest trading nation on the earth, the economic advantages of maintaining a viable merchant marine are not generally appreciated."

and by scaling down crew size through the use of existing technology, the necessary offset cost could have been reduced substantially. In the event, Congress insisted on up-front budgeting for the program, and that required DoD support. Since that support was lacking, Card could not earmark the necessary funds in the time available.

Probably the most important problem with the Contingency Retainer Program was that the payment appeared to be a subsidy to the ship operators. While there is much talk of the need to provide trained crews for the Ready Reserve Fleet, the proposal failed to establish the necessary linkage. Worse, the American shipowner has never successfully made the case that he is competing against very efficient foreigners and that his income is derived from rates identical to theirs. He has rarely convinced the public that he cannot survive if he must pay costs significantly higher than those of his competitors. In contrast to the ship operators, the shipbuilders have been clever: they have managed to appear to be unsubsidized. Even when the U.S. government subsidized shipbuilding overtly, the shipowner had to assume the stigma of accepting the subsidy and passing it along to the builders, whose prices were fifty percent higher than those

in the rest of the world. The high cost of ships built to trade only in the U.S. domestic market is paid, in the form of higher prices for the goods they buy, by the consumers who live and do business in Puerto Rico, Alaska, and Hawaii. Building primarily for the Navy, the shipbuilders have no foreign competition. The taxpayers have willingly paid billions of dollars for naval programs over the last twelve years to improve the country's defenses, but, lacking a foreign benchmark, they have never seriously questioned the high cost of the ships produced.

In the event, because the contingency retainer program presented by Secretary Card looked like a federal subsidy to a private industry, the Department of Defense balked at making the payment involved. While it was being debated within the administration, a memorandum was signed by the Assistant Secretary of Defense for Production and Logistics stating that the armed forces would not need American President Line and Sea-Land ships for "surge shipping" in any future contingency foreseen "in the most demanding scenario." He added that "the issue of the two major U.S. flag containerships operators disposing of their U.S.-flag fleets is primarily an economic issue, rather than a national security issue, and should be treated accordingly." Although senior military officers continue to give U.S.-flag shipping verbal support, asserting the defense need for a strong merchant marine, that statement appears to be the position of the Department of Defense today.

IV

The Clinton administration may attempt to bring forth some form of legislation to assist the maritime industry later this year. If it does not, Congress will. This effort it will succeed only if some fundamental lessons from recent experience are learned.

First and foremost, legislation to aid the shipbuilders must be separated from that intended to promote the merchant marine. It is clear that neither the Congress nor the administration is willing to provide subsidies sufficient to allow the shipbuilding industry to produce ships for the world market. One reason for the U.S. shipbuilders' campaign *against* foreign subsidies instead of *for* them for themselves is that to compete against a country like Germany, whose shipyard workers receive at least five dollars an hour more than American workers, they would need many times the support the Germans provide for their own shipbuilders. It should also be remembered that the German shipowner has no requirement to buy from the domestic builder, and he does not. The German shipbuilder receives government subsidies to enable him to compete effectively against the Chinese, Taiwanese, and Koreans—and he does.

When the debate is once again renewed, it might be helpful for the Navy to state the building capacity needed to build and modernize its fleet. To date, the

Navy has resisted doing so. Its traditional position has been that it needs more capacity than it has funds to sustain, and that this difference has to be made up by commercial building. If the Navy believes this, then it might also demonstrate how this can be done. It is also important for the policy makers to become fully aware that "in the most demanding scenario" there is no time to build even a single ship. One goes to war with what one has. Hence the argument that a shipbuilding industrial base has to be maintained for use in time of war to build merchant ships is without foundation. It is true that a viable commercial ship *repair* industry is required to activate the RRF, but that sector is totally separate from naval shipbuilding. (Ship repair is in fact an efficient part of American industry, and it derives more than half of its business from foreign shipowners. It is worthy of much greater recognition than it receives.) If the Navy accepts the shipbuilders' thesis that, in time, they could learn to compete successfully with the foreign builders, then it, as the domestic builders' only customer of significance, might develop some of its building programs in such a way as to assist the transition. To allow the builders to continue holding the U.S. shipping industry captive will only kill the shipping industry. It will not aid the shipbuilders.

The question of how the U.S. shipbuilder can regain a place in the foreign market is not a new one. In 1868, a congressional committee inquiring into "the causes of the great reduction of American tonnage in the foreign carrying trade" quickly shifted its emphasis to concentrate not on the plight of the merchant marine but on that of the shipbuilder. Shipowners attempted to explain to the committee why they could no longer buy from U.S. yards: not only were costs too high, but the American shipbuilders lacked the experience necessary to build iron ships competitively. One witness noted that the first vessels would be experimental, and that it might take four or five years to acquire the necessary skill to build iron ships "as cheap and as good as they were now built on the Clyde." He also noted that "very few shipowners were willing to try that experiment." In other words, no shipowner in foreign trade was then, or is now, going to buy a ship unless the quality, price, and delivery date are guaranteed.

The second lesson of recent experience is that the only justification that the DoD might accept for use of its funds to support the merchant marine is to provide crews for the RRF. In 1990, while the reserve fleet was being activated for Desert Shield, Secretary of Transportation Samuel Skinner noted that "putting less than half of the emergency fleet [the RRF] in service has nearly exhausted the nation's supply of merchant mariners." In a few years, as the number of ships purchased for the RRF increases and the number of mariners declines, activating the fleet will be impossible. Theoretically, the Navy could develop a reserve program to man the RRF from other sources, but this can be done only, if done properly, at a higher cost.

If the billions spent to acquire and maintain the RRF are to have future value, payments should be made directly to those for whom they are intended, in return for a reserve commitment. However, if the shipping companies are to be involved, it should be only as the government's administrative agent. To do otherwise, as has been seen in the recent legislative effort, would carry the stigma of a "subsidy." More than one hundred years of various subsidies, no matter how disguised, to assist the maritime industry has ultimately resulted in failure. The programs have not worked, either because a later congress or administration was unwilling to provide the necessary funds, or because the bureaucratic process inevitably involved drove many of the most competent operators to other flags.

All the arguments in this essay supporting the merchant marine are defense oriented; that is because, in the United States, these are generally familiar and easily understood. It is an unfortunate fact that within the largest trading nation on the earth, the economic advantages of maintaining a viable merchant fleet are not generally appreciated. Yet other people, notably the Japanese and many Europeans, still maintain merchant fleets although they have little or no defense requirement to do so. These countries not only place no excessive burdens on their merchant marine, but they are highly supportive, both inside and outside of government.

All these nations have a standard of living that approaches or exceeds that of the United States. Their fleets are modern and efficient. Clearly, they are not cheap. Yet they fly their nations' flags. These states understand that, in the last analysis, only in this way can they be sure of controlling their foreign commerce. The United States has had this lesson brought home repeatedly. However—partly because the lesson has not had to be relearned in recent years, and partly because many of our policy makers assume that past problems will not happen again—the lesson has had no value. When that which has happened before, happens again, those in power will be thunderstruck. All that they will be certain of is that they are facing a condition without precedent. What *we* can be certain of is that they will be wrong, and that they will probably be unable to find an economical way of setting things right again.

Ψ

Chester Nimitz and the Development of Fueling at Sea

Thomas Wildenberg

WHEN ADMIRAL CHESTER W. NIMITZ took command of the remnants of the U.S. Pacific Fleet on 31 December 1941, he could not have foreseen the dramatic events that would culminate in the Navy's spectacular victory at Midway six months hence. Although a great deal has been written about the intervening carrier raids and the Battle of Midway itself, the critical contribution of fueling at sea during this period has been frequently overlooked. Yet fleet oilers, mostly those of the new *Cimarron* (AO 22) class, accompanied every major task force during this period, providing underway refueling for both the carriers and their escorts. (See table.) West of Pearl Harbor there were no advanced bases or protected anchorages that could have been used for this purpose. Fast carrier task forces, however, were prodigious users of fuel, and it is doubtful whether these raids could have been conducted had the Navy not perfected the technique of fueling at sea prior to the commencement of hostilities.[1] Admiral Nimitz's role in developing the procedures used in refueling ships at sea is not generally known, even though he was one of its earliest pioneers.

Nimitz first became acquainted with the problems of fueling at sea while serving aboard the USS *Maumee*, commissioned on 23 October 1916 as the Navy's second fleet oiler.[2] Because of his prior experience with diesels, Nimitz, then a lieutenant, had been appointed to supervise the construction and installation of the ship's engines, the *Maumee* being the first large U.S. naval vessel equipped with this type of power plant. After the ship was completed,

Thomas Wildenberg works in the field of industrial marketing and holds a bachelor of science degree in mechanical engineering and also a master of business administration degree. He recently completed a comprehensive study of the design, development, and procurement history of U.S. Navy World War II fleet oilers.

The author gratefully acknowledges the assistance of Professor William N. Still, Jr., of East Carolina University, who was instrumental in locating the records of the USS *Maumee* cited herein.

Lieutenant Nimitz was assigned to the *Maumee* as executive officer and chief engineer.[3] This arrangement—a billet combining traditional "line" duties with engineering duty—was not unusual for naval vessels such as the *Maumee*, which had a relatively small crew.

After an extended shakedown cruise, the *Maumee* participated in fleet training exercises in the Caribbean, where she was actively engaged in the business of delivering oil and water to all types of vessels, both large and small.[4] Under the prevailing doctrine, fueling between ships at sea was conducted only in protected waters with the vessels moored together. As the *Maumee*'s crew gained proficiency during the exercise in the use of their specialized fueling gear, they began to discuss the possibility of refueling ships while underway and made tentative plans to test this concept. The ship was much too busy supporting the fleet to conduct experiments at sea.

Once the ship returned to port however, the men of the *Maumee*, under the command of Lieutenant Commander (later Captain) Henry C. Dinger, began serious efforts to devise an acceptable means of refueling destroyers at sea while underway.[5] Although preliminary experiments with this important innovation had previously been conducted between the USS *Arethusa* and the destroyer *Warrington*, they had been attempted only in a calm sea.[6] The *Maumee*'s crew began by obtaining blueprints of the various classes of destroyers showing the location of fuel filling valves, chocks, bitts, and strong points for towing. After careful study, they made up sketches indicating the fueling gear and towing rigs that would be needed for each class. It seemed only a matter of time before the United States would be drawn into the conflict then raging in Europe, and the problem of getting destroyers across the Atlantic may have been foremost in the minds of the *Maumee*'s officers as they worked out the details of the means proposed for refueling these ships.

When war was declared on 6 April 1917, the Secretary of the Navy immediately ordered a division of U.S. destroyers, under Commander Joseph K. Taussig, across the Atlantic to assist the hard-pressed British fleet in combatting the German submarine threat, which was close to strangling the British Isles. Shortly thereafter, the *Maumee* was sent to a position in mid-Atlantic to serve as a mobile fueling station for the destroyers that followed after, which did not (unlike Taussig's ships) have sufficient range to cross the Atlantic without refueling en route.[7]

Before the *Maumee* put to sea, Nimitz was assigned responsibility for preparing the equipment that would be needed during the forthcoming operation. He was assisted by Lieutenant (j.g.) G.B. Davis, Chief Boatswain's Mate M. Higgins, and Lieutenant F.M. Perkins, the Destroyer Force Engineer, who had come aboard to assist. Together they devised a means for refueling destroyers while underway, one that required the *Maumee* to tow the destroyer alongside so that fuel lines could be secured between the vessels—a procedure known as the

riding-abeam (later called the "broadside") method. The fueling gear they devised consisted of a ten-inch towing hawser, two six-inch breast lines, and a number of fifty-foot lengths of three-inch-diameter rubber fuel hose. The team decided to pump fuel through two hoses at the same time to increase the rate of flow and thereby reduce the time needed to refill each destroyer's tanks. The hoses would be attached to the regular fueling connections on the *Maumee*, the other end passed to the other ship and inserted into the open manhole of the fuel bunker to be filled. To keep them clear of the sea, the hoses would be supported by a wooden hose carrier, or saddle, suspended from the oiler's cargo booms. These would be rigged in or out and up or down as necessary to facilitate the fuel transfer.[8]

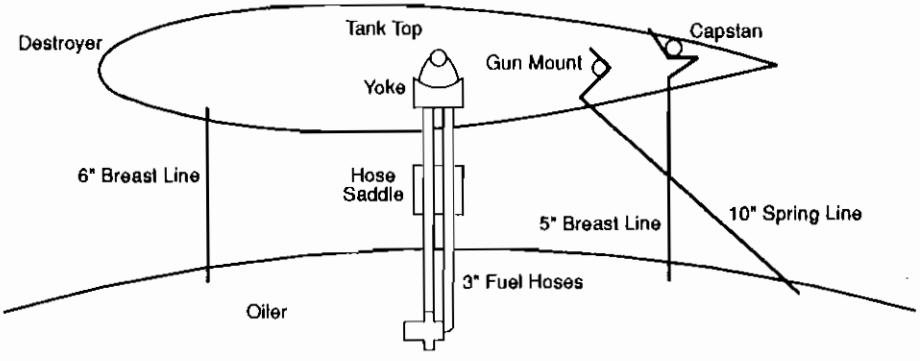
The first ships the *Maumee* met were those of the Fifth Destroyer Division.[9] All were 750-tonners, with a limited fuel capacity.[10] Using the procedures and equipment devised by Nimitz's team, *Maumee* successfully refueled the entire division (the *Patterson*, *Jenkins*, *Drayton*, *Paulding*, *Trippe*, and *Warrington*) in a single day. This marked the first time that fueling at sea had been used during a wartime operation. It was also the first time that the transfer of fuel oil between ships underway had been attempted in anything but a flat calm. Sea conditions during the operation were moderate, with a long cross swell that caused *Maumee* to roll from ten to twenty degrees, with considerable pitching. Although conditions were far from ideal, the *Maumee* was able to transfer almost twenty thousand gallons of fuel (at the rate of thirty-two thousand gallons per hour) to each destroyer. Despite the fact that all the crews were "green," the times from approach to disconnect averaged just seventy-five minutes for each destroyer, even though a hose carried away while the last ship was being fueled. The entire operation was completed in ten hours and thirty-five minutes—an extraordinary feat considering the inexperience of the crews and the poor sea conditions.[11]

Although Nimitz credits Captain Dinger for the conception, design, and execution of this important achievement, Nimitz himself was mentioned for his role in preparing and operating the gear employed.[12] Promoted to lieutenant commander while aboard the *Maumee*, he was soon transferred back to submarine duty, becoming chief of staff to the Commander Submarine Force Atlantic Fleet, a position he held throughout the remainder of the war. Nimitz would not become involved with fueling at sea again until another twenty years had passed.

During the intervening years the Navy would perfect the riding-abeam method for refueling destroyers at sea, a procedure continually refined and practiced throughout the 1930s. Attempts were also made to apply this method for larger vessels, but these were quickly discontinued in accord with the recommendations of the officer in charge of the initial exercises.[13] During the middle 1920s, the Navy did conduct experiments with an alternative approach to fueling capital ships, an arrangement known as the over-the-stern method.

Though some success was achieved, this approach proved of limited value due to the small amount of fuel that could be transferred through the single hose then in use.[14] The Bureau of Construction and Repair was authorized to "continue experiments [of this method] with a view to increasing the rate of delivery of fuel"; however, no additional work seems to have been undertaken before the project was officially terminated in 1931.[15]

When Nimitz reached the rank of rear admiral in 1938, no further progress had been made on the problem of fueling large vessels at sea, even though it had been advocated by one of the Navy's most senior officers, Admiral William V. Pratt. In 1929, when Commander in Chief U.S. Fleet, Admiral Pratt had recommended that "battleships and aircraft carriers . . . be equipped and trained



The Riding-Abeam ("Broadside") Method

After an original obtained from the U. S. Naval Historical Center

J. R. Nunez, Jr.

for oiling at sea from tankers by the riding abeam method."[16] There is no record, however, that the Navy took any action whatsoever concerning this suggestion. In fact, the complete absence of any further effort to test the broadside method on battleships, carriers, or heavy cruisers during the early 1930s suggests that most officers within the Department considered such an operation simply too hazardous to attempt under any conditions. It must be noted though, that the Navy was then operating under such austere budget constraints that funds even for routine repairs and maintenance were severely limited. Needless to say, no captain wanted to be responsible for incurring damage to his ship that would involve additional repair costs. It is easy to understand how this climate could dissuade any commanding officer from practicing a potentially dangerous maneuver such as then envisioned for refueling large vessels at sea using the broadside method.

The first indication of a change in the Navy's attitude came in the fall of 1938, when it became increasingly obvious that when war came, cruisers and aircraft carriers would be required to conduct offensive operations far from base. In October of that year, the Chief of Naval Operations (or CNO), Admiral William D. Leahy, issued a memorandum to the commander in chief of the U.S. Fleet requesting that he undertake all steps (including the acquisition of equipment) necessary to develop means for fueling battleships, carriers, and cruisers from tankers while underway.[17] The impetus for this action appears to have originated within the War Plans Division of the Office of the CNO, which had prepared a lengthy draft of Leahy's memo in September.[18] Apparently, War Plans had become at that time particularly concerned with the problem of fueling cruisers and carriers, "especially when operating or maintaining station in areas distant from [their] own bases."[19] What triggered the war planners' anxiety is not entirely clear; there is considerable evidence, however, that the high rate of carrier fuel consumption was at the heart of the matter.

This shortcoming had first surfaced during Fleet Problem XV of 1935. While participating in this exercise, the USS *Lexington* (CV 2) became critically low on fuel after just five days of operations.[20] During Fleet Problem XVI as well, conducted the following year, the *Saratoga* (CV 3) consumed copious amounts of fuel—as much as ten percent of her total capacity in a single day—when operating aircraft.[21] The latter exercise, which involved extensive movements of the fleet from its bases on the West Coast to Midway Island and back, revealed in general that flight operations by carriers accompanying the fleet resulted in extremely high fuel consumption for the ships involved. In order to launch and recover aircraft, a carrier had to steam at relatively high speed and, necessarily, into the wind—thus usually on a course different from that of the main units of the fleet. After recovering aircraft, she would need to maintain high speed again in order to catch up. Steaming at high speeds, of course, used up enormous amounts of fuel. At twenty-five knots, a carrier's normal speed for operating aircraft in light winds or for trying to overtake the fleet, the fuel consumed by the *Saratoga* exceeded thirty tons per hour![22] At this rate, her steaming radius was only 4,421 nautical miles, much less then the ten thousand miles (at ten knots) specified by her designers.[23] As a result of these problems, the General Board recommended that the fuel capacity of both the *Lexington* and *Saratoga* be increased.[24] It is likely that in the interim, someone in War Plans decided that the carriers would have to be refueled at sea.

Admiral Claude C. Bloch, Commander in Chief U.S. Fleet, wasted no time in responding to Leahy's memo. On 27 October 1938, he instructed the commanders of the Battle Force and the Scouting Force to submit plans and recommendations for refueling the respective ship types assigned to their commands.[25] Admiral Edward C. Kalbfus, Commander Battle Force, responded with a suggestion that a preliminary study of the information already available

on refueling large vessels be made and that a conference be held to outline the scope and procedures of the prospective tests.[26] While data was being collected, Admiral Bloch assigned responsibility for conducting the tests to Rear Admiral Nimitz, who was now commander of Battleship Division One.[27] Nimitz, who would be left on the West Coast when the fleet cruised to the Caribbean in the spring of 1939 for Fleet Problem XX, was instructed to conduct the new tests at that time using units of Task Force Seven left behind with him.[28]

The selection of Nimitz for this task was quite fortunate, for he was probably the only flag officer then in the Navy who had personally planned and conducted fueling operations at sea. Within two weeks of Bloch's order, he had prepared a detailed study of the problem of fueling large vessels at sea, with references to

"In fact, the complete absence of any further effort to test the broadside method . . . during the 1932–1937 period suggests that most officers . . . considered such an operation simply too hazardous. . . ."

no less than sixteen documents, some going back as far as 1925.[29] Citing the fleet's familiarity with the broadside method for fueling at sea and the limited capability of the over-the-stern method, Nimitz recommended "that the fueling experiments . . . be limited to the fueling of a heavy cruiser at sea under favorable conditions by the 'Broadside' (or some approximation thereto) method."[30]

Nimitz's recommendation to try the broadside approach is not surprising, considering his prior experience aboard the *Maumee*. Reading his report, however, one is struck by the careful manner in which Nimitz structured his argument for testing this method. As remarked previously (see note 13), the broadside method was still considered extremely hazardous for any ship larger than a destroyer. The fact that none of the considerable correspondence regarding procedures to be used mentions any method other than the over-the-stern approach indicates the extent to which this attitude prevailed throughout the fleet. Nimitz's report is particularly revealing because it demonstrates his prudence in overcoming this unfounded bias as well as his willingness to accept the inherent risk of an untried procedure.

The recommendations put forth by Admiral Nimitz proved remarkably insightful. Instead of trying to adapt the over-the-stern method, as commanding officers of the "fleet train" tankers universally proposed, Nimitz had the foresight and courage to approach the problem afresh and suggest that the broadside method be tried instead. Despite the greater risk of collision, Nimitz felt that it was important to test the broadside method because of its potential to deliver fuel at a much higher rate than appeared possible using the over-the-stern approach. It would significantly shorten fueling time, a considerable concern

when one recognizes that the relatively slow speeds and straight courses required during the operation greatly increased the danger of attack by submarine.

Admiral Nimitz proposed to test the broadside method in April using the oiler *Brazos* (AO 4) and either the heavy cruiser *Chester* (CA 27) or *Vincennes* (CA 44).[31] No records of this exercise have been located. It is known, however, that during the winter of 1938–1939, extensive station-keeping tests were conducted between the *Chester* and the *Mugford* (DD 389).[32] The ease with which the latter were accomplished appears to have paved the way for the fueling exercises that were subsequently scheduled between the oiler *Kanawha* (AO 1) and the aircraft carrier *Saratoga*.

In the early morning of 13 June 1939, the *Saratoga* departed the port of Long Beach in company with the *Kanawha*, headed for a position off the California coast where the ships intended to test the feasibility of the broadside method to refuel the *Saratoga* while underway. The two ships had spent the previous day at sea practicing the procedures and maneuvers required, though without actually attempting the transfer of fuel. Upon reaching the fueling area on the 13th, the *Kanawha* approached *Saratoga* to a position close alongside so that the necessary lines and hoses could be transferred between the ships. At 10:43 A.M., a breast line was passed to the *Kanawha* and made fast; it was quickly followed by a towing line, a telephone line, and two fuel hoses. Pumping of fuel oil from the *Kanawha* to *Saratoga* commenced shortly after 11:00 and continued without interruption for several hours, the two ships steaming in company at seven knots and making at least one course change during the process. A separate hose for gasoline was also conveyed to the *Saratoga* so that this fuel too could be pumped aboard. When the *Kanawha* cast off at 1:48 P.M., the practicality of the broadside method for fueling aircraft carriers at sea had been conclusively demonstrated.[33]

The broadside method used to fuel *Saratoga* was quickly adopted by the fleet for fueling cruisers, aircraft carriers, and battleships, but the shortage of oilers limited further development of this technique for large vessels. Although the Navy had begun to acquire new oilers of the fast *Cimarron* class, budgetary constraints severely limited the number of ships that could be procured until the "Two Ocean Navy" bill of the late spring of 1940. After the passage of this bill, five more of these "National Defense" tankers were acquired from the Maritime Commission and quickly added to the fleet. The need for oilers was so great at this time that their fitting-out was given first priority, over new construction.[34] Four of the five tankers acquired from the Maritime Commission were rapidly converted for naval use and commissioned as fleet auxiliaries before the year 1940 was out. By the beginning of 1941, seven *Cimarron*-class oilers had been commissioned—the *Cimarron* (AO 22), *Neosho* (AO 23), *Platte* (AO 24), *Sabine* (AO 25), *Kaskaskia* (AO 27), *Sangamon* (AO 28), and *Santee* (AO 29)—with another, the *Salamonie* (AO 26), undergoing conversion.

Early Operations Involving Fleet Oilers

Task Force (Carrier)	Oiler	Action	Strike Date
TF 14 (*Saratoga*)	*Neches*	Relief of Wake	December 1941 (Cancelled because of fueling problems)
TF 11 (*Lexington*)	*Neches**	Strike on Wake	January 1942 (Cancelled after *Neches* loss)
TF 8 (*Enterprise*) TF 17 (*Yorktown*)	*Platte* *Sabine*	Strikes on the Marshalls and Gilberts	1–2 February 1942
TF 16 (*Enterprise*)	*Sabine*	Bombardment of Wake	24 February 1942
TF 17 (*Yorktown*) TF 11 (*Lexington*)	*Guadalupe* *Platte* *Tippecanoe* *Neosho* *Kaskaskia*	Strikes on Salamaua and Lae on New Guinea coast	10 March 1942
TF 18 (*Hornet*) TF 16 (*Enterprise*)	*Cimarron* *Sabine*	Tokyo raid	16 April 1942
TF 11 (*Lexington**) TF 17 (*Yorktown*)	*Kaskaskia* *Tippecanoe* *Neosho**	Battle of Coral Sea	7–8 May 1942
TF 16 (*Enterprise*, *Hornet*) TF 17 (*Yorktown**)	*Platte* *Cimarron* *Guadalupe*	Battle of Midway	6–7 June 1942

*Sunk by enemy action

With the exception of the *Tippecanoe* and *Neches*, both of which were built in 1920, all listed oilers were of the new (eighteen-knot) *Cimarron* class.

As more oilers were added to the Pacific Fleet, it became possible to schedule practice fueling exercises with them. Unfortunately, the rapid expansion of the fleet after April 1940, coupled with the added logistic support required to maintain the fleet at its unaccustomed base at Pearl Harbor, continued to strain the Navy's oiler capacity. Nevertheless, the *Kaskaskia* was able during her first year of operation to test her fueling gear off Johnston Island (southwest of Oahu) in fueling exercises with a battleship, a heavy cruiser, several destroyers, and a submarine.[35] The added knowledge gained during this and similar exercises was applied to improving the equipment and further refining the broadside method for fueling large ships at sea.[36] Instructions later issued for broadside fueling indicate that one of the vessels involved (usually the larger) was to tow the other alongside at a comparatively close distance, i.e., forty to eighty feet. This operation was not considered a dead-weight towing task but rather an "*exercise in position keeping* aided by a towline."[37] Although the towline was intended to act as in aid in station-keeping, experienced crews quickly learned that they could make do without it, leaving just the fuel hoses, their handling lines, and a thin telephone wire between the two ships.[38] Without a towline, one vessel would maintain position on the other by adjusting her engine speed and using "seaman's eye" to correct for small changes in course or for drift due to wind so that the two vessels could be maintained on the same course and speed. While this required excellent seamanship, it simplified the process of connecting the two ships, reducing the time and effort involved so that a number of ships in succession could be rapidly fueled.

The perfecting of fueling at sea during these operations opened the door for the wide-ranging carrier raids conducted during the first months of the war. Nimitz's contribution to developing this revolutionary aspect of naval logistics should not be overlooked; it is unlikely that the procedures used to refuel carrier task forces at sea would have been developed had he not had the confidence and foresight to recommend new tests of the broadside method for large ships. It is uncertain what effect such a failure would have had on the early carrier operations, but it seems unlikely that these raids would have been conducted without the timely development of the fueling-at-sea procedures finally demonstrated by ships assigned to Task Force Seven.[39]

Notes

1. The first of these attacks, a planned raid on Wake, had to be canceled when the oiler accompanying the task force, the *Neches*, was torpedoed and sunk by a Japanese submarine. See Samuel Eliot Morison, *History of United States Naval Operations in World War II*, v. 3 (Boston: Little, Brown, 1948), p. 260.

2. The *Maumee* was later designated "AO 2."

3. Chester W. Nimitz, "The Navy's Secret Weapon" (reprint), *Petroleum Today*, Spring 1961.

4. *Ibid.*

5. *Ibid.*

6. Deck Log of USS *Arethusa*, 22 February 1913 to 31 August 1913. Washington: National Archives, Record Group 24 (hereafter RG 24, NA). The entry for 13 April confirms that a test of fueling at sea was

conducted with the *Warrington* on that date in "clear and pleasant weather." Few details were given, although it appears that the tests were conducted with a 2-1/2-inch fuel hose using a method first used by the British. For details see Spencer Miller, "Refueling Warships at Sea," The Society of Naval Architects and Marine Engineers (SNAME) *Transactions*, v. 22, 1914, p. 176. The *Arethusa* was the Navy's first tanker (as opposed to fleet oiler), purchased in 1898 to transport bulk lubricating oil. She was eventually designated AO 7.

7. These were the "750-tonners" authorized in 1908–1910. Taussig's division was composed of the newer "1,000-tonners."

8. H. C. Dinger, letter from USS *Maumee*, no. TC-60, dated 2 June 1917, as quoted by Albert Gleaves, Commander Destroyer Force, letter to Destroyer Force dated 9 June 1917. Washington: Navy Department Library (Naval Historical Center), microfilm reel 13, WWI, ME-11 (hereafter Dinger Letter). Photocopies furnished the author courtesy Prof. William Still, East Carolina University.

9. Deck Log of USS *Maumee*, 23 October 1916–31 December 1917, RG 24, NA. The entry for 28 May 1917 summarizes the events described by Dinger, thus establishing this date as the first time that the *Maumee* conducted fueling at sea while underway. Nimitz's memory of the event, recalled more than forty years later in an article published by *Petroleum Today*, appears to be faulty, as the author has found no evidence that Tanssig's ships (the first destroyers to cross) were refueled at sea. Although the author has not consulted *Maumee*'s log, Dinger's letter and Nimitz's description of the weather conditions indicate that the Fifth Division must have been the first ships refueled by the *Maumee* at sea. Unfortunately, Dinger's letter does not include the date of the fueling operation described therein.

10. Norman Friedman, *U.S. Destroyers: An Illustrated Design History* (Annapolis, Md.: Naval Institute Press, 1982), chap. 2.

11. Dinger Letter. Although only two hoses were used, Lt. Cdr. Dinger reported that it would be possible to obtain a transfer rate of up to 100,000 gallons per hour if additional hoses were rigged—an accurate projection later validated by the *Brazos* (AO 4) when, during Fleet Problem XIV (1934), she deployed seven fuel hoses at one time while fueling two destroyers simultaneously, one along each side.

12. Dinger Letter.

13. "In the opinion of the Commanding Officer, fueling alongside of any ships longer than destroyers would prove impracticable in any but flat calm. Swells of any magnitude would result in damage to hull or rigging." Deck Log, USS *Cuyama* (AO 3), 11 January 1924, as repeated in a memo by J.R. Sullivan, Commanding Officer, USS *Cuyama*, to Commander Base Force, 9 December 1938. Washington: National Archives, Record Group 313, U.S. Fleet, Base Force Gen. Adm. Files 1931–39[38], Secret & Confidential, File S55-1 (hereafter Base Force File S55-1).

14. Fueling-astern tests (four in number) conducted between the *Kanawha* and *Arizona* between 1924 and 1926 relied upon a four-inch hose suspended between the ships on a long cable wound around a special tension engine needed to keep the fuel hose from dipping into the sea. The transfer rate thus obtained, about 15,000 gallons per hour, was limited by the relatively small diameter of the hose and the great length required. This rate was significantly less than the 50,000 gallons per hour minimum considered acceptable by the fleet for normal operations. The physical difficulties involved in handling multiple or larger-diameter hoses was never satisfactorily addressed, leading to the abandonment of this method of fueling at sea for all but emergency purposes.

15. Chief of Naval Operations to Chief of Bureau of Construction and Repair, 14 April 1927; Commander in Chief Battle Fleet (CinCBatFlt) letter S55-1(1)/FF2(1725) of 27 March 1929, described in a pencil note attached to Director of War Plans memorandum to Director of Material Division, "Fueling at Sea," 16 April 1931. Washington: National Archives, Record Group 19, Bureau of Construction & Repair, Gen. Corr. 1925–40, File S55-(9) (hereafter C&R File S55-(9)), v. 2.

16. Chief of Naval Operations to Chief of Bureau of Construction and Repair, 14 April 1927.

17. William D. Leahy, Chief of Naval Operations, to Commander in Chief U.S. Fleet, "Fueling at Sea—Large Vessels," 20 October 1938. C&R File S55-(9), v. 5.

18. Chief of Naval Operations to Commander in Chief U.S. Fleet, "Fueling at Sea, Large Vessels," undated but attached to SecNav letter 1569 of September 1938. Washington: Naval Historical Center, WPD File, Box 78. Copy furnished author by Edward S. Miller of Stamford, Conn.

19. *Ibid.*

20. Norman Friedman, *U.S. Aircraft Carriers: An Illustrated Design History* (Naval Institute Press, 1981), p. 49.

21. *Ibid.*, p. 51.

22. USS *Saratoga* Trial Data, in George H. Rock, "Some Observations on the Design of Airplane Carriers," SNAME *Transactions*, v. 36, 1928, p. 69.

23. Friedman, *Aircraft Carriers*, p. 50. See also data for USS *Lexington* (CV 2), the class leader.

24. *Ibid.*, p. 51.

25. Commander in Chief U.S. Fleet to Commander Battle Force/Commander Scouting Force, "Fueling at Sea Large Vessels," 27 October 1938. C&R File S55-(9), v. 5.

26. Edward C. Kalbfus, Commander Battle Force, to Commander Base Force, "Fueling at Sea—Large Vessels," 10 November 1938. Base Force File S55-1.

27. Commander in Chief U.S. Fleet to Commander Task Force Seven (ComBatDiv One), 25 November 1938. C&R File S55-(9), v. 5.

28. *Ibid.*

29. Chester W. Nimitz, Commander Task Force Seven (Commander Battleship Division One), to Commander in Chief U.S. Fleet, "Fueling at Sea—Large Vessels," 13 December 1938. Base Force File S55-1. (Conspicuously absent was any reference to the negative comments of the *Cuyama*'s commanding officer in 1924 (see note 13), though Admiral Nimitz must have been intimately familiar with the details of this operation since they were extensively quoted by him a few days later. See Commander Task Force Seven to Commanding Officers, USS *Vincennes*, *Chester*, and *Brazos*, 17 December 1938, Base Force File S55-1.)

30. *Ibid.*

31. *Ibid.*

32. Statements by Admiral Arleigh Burke, commanding officer of the *Mugford* during these exercises, as cited in Marvin O. Miller, John W. Hammet, and Terence P. Murphy, "The Development of the U.S. Navy Underway Replenishment Fleet," *Transactions of the Society of Naval Architects and Marine Engineers*, v. 95, 1987.

33. Deck Log of USS *Kanawha* (AO 1), 1 January 1939 to 31 December 1939, RG 24, NA. Experiments to develop fueling-at-sea gear for use between destroyers and CVs had been conducted by the destroyer *Tarbell* and the *Saratoga* in 1930. It appears likely that such gear was subsequently installed on board the *Saratoga*, thus providing the capability to pass the various lines and hoses to *Kanawha* as *noted in the latter's deck log* referenced herein. (See Commandant [Mare Island, N.Y.?] to Chief of the Bureau of Construction and Repair, date-stamped 5 February 1931. C&R File S55-(9)). This would also explain why station-keeping exercises were conducted between the *Chester* and the *Mugford* whereby the *Mugford* was used to simulate the actions of the approaching ship as opposed to the ship to be fueled.

34. Chief of Naval Operations to Bureau of Ships, subject: *Esso Richmond*, *Esso Trenton*, *Seakay*, 19 October 1940. Washington: National Archives, Record Group 80, Records of the Secretary of the Navy, Gen. Corr., File QS1/L4.

35. Bill Upton, Chief Boatswain's Mate USN, Ret., 21 January 1992, correspondence to the author. (Mr. Upton served aboard USS *Kaskaskia* (AO 27) between 1940 and 1943.)

36. Upton to author, 13 January 1992. The importance of this exercise and the subsequent improvements described by Mr. Upton made to the fueling rig is hard to assess. Mr. Upton's account of the difficulties encountered by the *Kaskaskia*, combined with an examination of photographs of fueling-at-sea operations in the Pacific during World War II, provides ample evidence of the problems experienced by oiler crews when attempting to conduct these operations in heavy seas. It may be that the lack of adequate fueling gear contributed to the problems encountered by Admiral Fletcher in his attempts to refuel from the *Neches* during the abortive operation to reinforce Wake. If such were the case, then the success of later operations can probably be attributed to the modifications suggested by *Kaskaskia*'s crew as a result of their experience off Johnston Island. For example, see the photograph of the *Neosho* fueling *Yorktown* in heavy seas, in Morison, v. 4.

37. Commander in Chief U.S. Fleet (P-2), "Fueling At Sea Instructions," November 1944, p. v, Washington: Naval Historical Center, Operational Archives Branch, Fleet Records of World War Two, File FX-40. (Emphasis original.)

38. This procedure eventually evolved into the so called "close-in method," a terminology that was not adopted until after the introduction of the wire-span method—also known as the "Elwood" method—first tested in December 1944.

39. While it is conceivable that these raids could have been conducted using the astern method, the increased risk of submarine attack would have caused great concern. It is likely that the added risk would have mitigated against its use, especially in light of the subsequent loss of the *Neches* and torpedo damage to the *Saratoga*—both casualties occurring while the vessels involved were steaming at relatively low speeds in a known war zone.

Ψ

Fuel stands first in importance of the resources of the fleet. Without ammunition, a ship may run away, hoping to fight another day but without fuel she can neither run, nor reach her station, nor remain on it, if remote, nor fight.

Alfred Thayer Mahan

A Commander's Dilemma
Admiral Yamamoto and the "Gradual Attrition" Strategy

Captain Yoji Koda,
Japan Maritime Self-Defense Force

ANY MILITARY COMMANDER HAS THE ULTIMATE responsibility for achieving his missions and objectives. In most cases, however, the commander must overcome deficiencies that hinder the achievement of his mission. These shortcomings may include insufficient force, poor equipment, and, sometimes, unsuitable military strategy. These deficiencies can be seen as a discontinuity between planned factors, such as strategy, tactics, forces, and training, and the actual execution of the mission. But whatever they may be, the operational commander must overcome them and make the best use of the forces assigned to him. Normally, the smaller the discontinuity, the easier it is to achieve the mission.

In this article I propose to extract the pertinent lessons from a real case and develop ideas for minimizing these discontinuities.

The Strategy of the Imperial Japanese Navy: "Gradual Attrition" of the U.S. Pacific Fleet

Before World War II, the major threats to modern Japan were traditionally Russia and China. In the late nineteenth and early twentieth centuries, Japan fought two wars, on the Korean peninsula and in Manchuria. The major objectives of these campaigns were to halt the expansion of China and Russia and to establish a buffer zone between those countries and Japan. These objectives were partially achieved by the advantageous treaties that ended the wars. Later, Japanese interests were believed to lie in Manchuria, and the Japanese

Captain Koda is a 1972 graduate of the Japan Defense Academy. A surface warfare officer, he has commanded the destroyer JDS *Sawayuki* (DD 125) and has served as a strategic planner in the Plans and Policy Section at the Maritime Staff Office (MSO) in Tokyo. He has been assigned to the United States three times, most recently as a member of the Naval Command College class of 1992 at the Naval War College. He is currently Chief, Surface and Subsurface Systems Section, MSO.

concern was how to protect those interests from the northern threat. Russia, and then the Soviet Union, accordingly occupied the center of Japanese national strategy for many years. During this period and into the 1920s, the United States was not perceived as a major national threat to Japan.

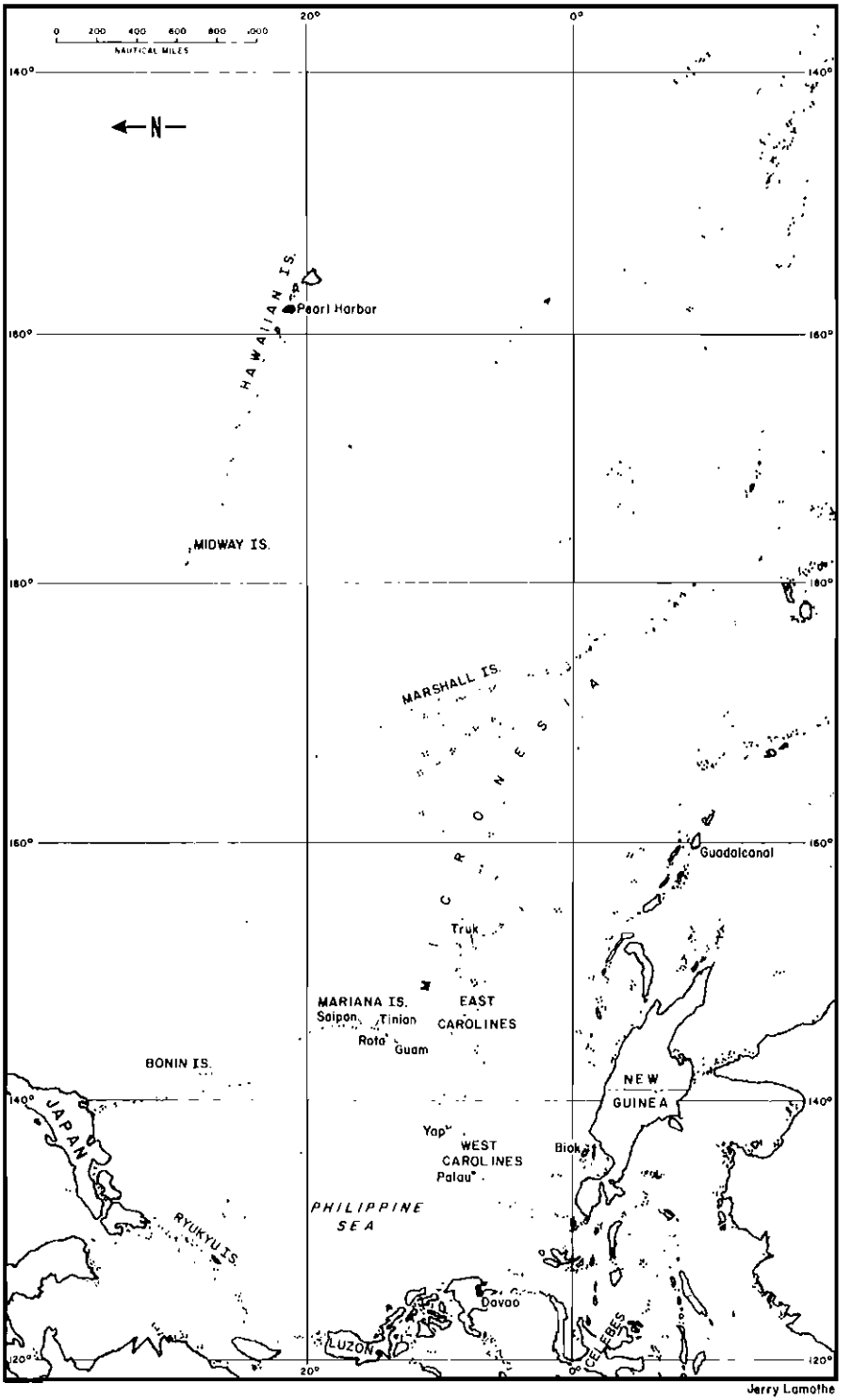
With regard to naval strategy, the objectives of the Imperial Japanese Navy, or IJN, before the end of the Russo-Japanese War in 1905 were to secure the lines of communication between Japan and the Korean peninsula and the eastern part of China, including Manchuria. This was to be done by establishing sea control around Japan—that is, in the Sea of Japan, the Tsushima Strait, the Yellow Sea, and the East China Sea. To accomplish this, the strategy of the IJN had long been to destroy the Chinese or Russian fleet in the region. If the enemy, or an ally of his, attempted to bring in reinforcements, the Japanese naval goal would become to destroy the enemy forces separately, before they could be combined.

The IJN fully achieved its objectives during the wars with China and Russia. Therefore, because practically no naval threats remained nearby capable of countering the IJN, its main mission after the Russo-Japanese War was to preserve the status quo in the region.

Shortly after the end of that war, and in fact two or three years after the U.S. Navy began work in 1907 on its "Plan Orange" for a war with Japan, the IJN started a staff study at its own war college focusing on a hypothetical war with the United States. The intent was to counter the Orange Plan, about which Japan had learned; however, the response long remained merely a "staff study" in nature. Its focus was on how to destroy a U.S. fleet steaming westward across the Pacific toward Japan during war; it concluded that the best IJN strategy would be to assume a defensive posture in the western Pacific. That is, the Japanese fleet would first destroy, in the early phase of the war, the small U.S. naval forces already deployed in Asian waters, then ambush and intercept the main U.S. fleet in Japanese waters. To accomplish this with a fifty-percent chance of success in the fleet engagement, the study indicated that at a minimum the Japanese fleet must be seventy percent as large as the U.S. fleet.

The idea of intercepting the U.S. fleet in Japanese waters (that is, south of the Bonins) and the supporting seventy-percent theory spread very quickly throughout the Imperial Navy. Soon these two ideas dominated the navy, as if the U.S. fleet were the real enemy.

After the naval limitations treaties in Washington (1922) and London (1930), the IJN began to sense seriously its numerical inferiority to both the United States and the British navies. This sense was exacerbated by the fact that the treaties defined the ratio of Japanese capital ships to those of the United States and Great Britain as sixty percent (5:5:3, or in actual numbers after 1930, 15:15:9), which was ten percent lower than Japan's naval theorists believed necessary and had proposed to the treaty framers.


0 200 400 600 800 1000
NAUTICAL MILES
N
20°
0°
140°
160°
180°
120°
HAWAIIAN IS.
Pearl Harbor
MIDWAY IS.
MARSHALL IS.
MICRONESIA
Guadalcanal
Truk
MARIANA IS.
Saipan
Tinian
Rota
Guam
EAST CAROLINES
BONIN IS.
JAPAN
NEW GUINEA
Yap
WEST CAROLINES
Palau
Biak
PHILIPPINE SEA
RYUKYU IS.
Davao
LUZON
CELEBES
Jerry Lamothe

Early in the 1930s, the Japanese navy reviewed and revised its earlier study, now known as the "gradual attrition" strategy. Radically new ideas were introduced into it, while preserving its defensive posture. New equipment, tactics, training, and even fleet organization were then developed to support this strategy.

After 1937, as differences between Japanese and American perceptions of China emerged as a major problem, for the first time the Japanese navy began to see the U.S. Navy more as a realistic threat and less as a hypothetical one.

Operational Concepts, Tactics, Equipment, and Training. The main objective of the Imperial Navy's strategy of gradual attrition was to reduce U.S. fleet strength to equality with that of the Japanese fleet before the culminating battleship engagement could begin. To achieve this, the navy planned a series of engagements by submarines, aircraft, and other forces during the U.S. fleet's long transoceanic expedition. The battleship engagement would not take place until the Americans had reached Japanese waters and was intended to be the final battle in a decisive campaign. Its winner would have total sea control in the western Pacific. The victor's government would then offer to negotiate the terms by which the war would be ended.

The Imperial Japanese Navy expected to be that victor and developed various means to ensure the success of its concept. These means included the vigorous use of submarines, the fleet air force, and night torpedo actions by heavy cruisers and destroyers. The ships and aircraft to be so employed were of very high quality, as were their officers and men. Their operational and tactical employment went far beyond existing naval practice elsewhere. All together, they were expected to make up for Japan's numerical inferiority.

Submarines. The concept was for submarines to attack the U.S. fleet, especially its battleships, incessantly, beginning at the moment that the fleet sortied from the West Coast or Hawaii and then continuing throughout its Pacific transit. After the initial submerged torpedo attacks, the submarines were to retire tactically but maintain contact from over the horizon. They were to proceed simultaneously to successive ambushing positions, attack again, and then repeat the process, over and over. This task required that the natural handicaps characterizing submarines of that time be overcome. These handicaps were their short endurance, poor seakeeping qualities, low surfaced speed compared to that of other combatant ships, poor communications, and inadequate reconnaissance capability.

The Imperial Navy overcame these handicaps in its newest and best submarines. These submarines displaced 2,500 tons, much more than their counterparts in other navies. This size gave the boats both longer endurance than other submarines and room for more torpedoes needed to make the repeated attacks the concept called for. Also, their large hulls guaranteed much better

seaworthiness and a sustainable top speed of twenty-three knots, which exceeded the cruising speed of U.S. battleships by five knots. This advantage was expected to enable the submarines to overtake their intended victims even while remaining over the horizon. To make up for their poor reconnaissance capability, these boats carried a collapsible seaplane. Furthermore, Japanese submarine tenders and light cruisers that were flagships of submarine squadrons had excellent seaplane facilities, along with good command-and-control capabilities.

But the submarines' designers had to pay a price for this high performance. For it they traded habitability, noise suppression, covertness, and the ability to produce the new submarines in large numbers.

Land-Based Naval Aviation. The Japanese navy came to pay unusual attention to land-based air because such aviation was not included in the two naval arms reduction treaties. Hence, it relied heavily on that arm to help offset the fleet's numerical inferiority in all types of surface ships. The employment concept for land-based attack aircraft was for them to coordinate their torpedo attacks on U.S. battleships with those of the submarines as the enemy approached the chain of Pacific islands under Japanese trusteeship.

The aircraft were to make their torpedo attacks at very long distances from the bases, before those bases could be attacked and destroyed by U.S. carrier strikes. They practiced mainly simultaneous massed torpedo assaults at extremely low altitude. High-altitude level bombing was their secondary mission. It was foreseen that using numerous island air bases would offer flexibility and mobility; therefore, when the treaties which had prohibited the fortification of these islands became null, many air bases were planned and built on them.

In spite of Japan's relatively poor industrial capability, the Imperial Navy endeavored to develop aircraft suitable for this mission. Proposed characteristics included a payload of one two-thousand-pound, eighteen-inch aerial torpedo and an operational radius that substantially exceeded that of U.S. carrier-based aircraft. The navy developed two successful types of twin-engine models, the Type 96 (Nell) and the Type 1 (Betty) attack aircraft. These traded self-protection for their long endurance and high payload.

Carrier-Based Air Forces. Until 1941, when the Japanese navy developed the idea of a multi-carrier task force, the Japanese concept of carrier (CV) employment was similar to that of the United States and British navies of the time. These two navies expected their carriers to engage other CVs as well as battleships. The latter were considered to be the more difficult target; accordingly, the carrier's mission was simply to damage them and then pass the wounded victims to "friendly" battleships for finishing off. In a CV-versus-CV engagement, the main mission of carrier aviation was to destroy the enemy before they could launch their own attack aircraft or, failing that, to intercept the enemy attack before it reached friendly battleships.

Accordingly, various kinds of carrier-based fighters, dive bombers, and torpedo bombers were developed in the IJN. It was extremely difficult, however, to reverse the long-standing reliance on battleships; the Japanese carrier aviators had to wait until the fleet exercise of 1940, when the new Zero fighter, the Type 99 dive bomber (Val), and the Type 97 torpedo bomber (Kate) showed their overwhelming superiority over battleships.

The Imperial Navy was confident that only one, or maybe two, fleet engagements would be needed to bring the war to an end. It expected little attrition of its CV air force. Unfortunately, therefore, prior to the Second World War it had built up no substantial reserves of CV air wings and aviators.

Surface Torpedo Forces. A massive surface torpedo attack was to be the last event before the battleship engagement, and it was expected to all but destroy the U.S. fleet. Because of the torpedo's destructive power, the Imperial Navy laid extreme emphasis on development of, and tactics and training for, this weapon. One notable technical advance was the "Long Lance" torpedo, which had a longer range, a higher speed, a larger warhead, and made less wake than any torpedo in any other navy. There were two types of Long Lance, the twenty-four-inch-diameter weapon for use on board surface ships and the twenty-one-inch for submarines. (As already noted, aircraft torpedoes were smaller than either of these.) At the same time, the navy developed a torpedo reloading system for destroyers and cruisers that was second to none at that time. Unlike all other navies, the IJN planned to employ its heavy cruisers (CAs) in the torpedo engagement. So, alone among navies, all of Japan's heavy cruisers had a heavy torpedo battery with both a fire control system and the rapid reloading arrangement.

Thanks to the superb performance of the Long Lance, daytime attack at extreme range, ten to twenty nautical miles, became the standard Japanese torpedo tactic. Each ship was capable of launching eight torpedoes at one time, with eight reloads. At that range, four ships—for a total of thirty-two torpedo fire-lines—were to launch at each U.S. battleship.

The Imperial Japanese Navy also practiced night torpedo assault at closer range, about five miles or less, in order to take advantage of the enemy's confusion in the darkness. The Imperial Navy persevered for decades in training at these tactics in spite of several severe accidents. These mishaps mainly involved destroyers and their light cruiser leaders during high-speed night assault runs. But the strong sense of purpose that the navy's torpedo men felt overrode such difficulties. Thus, the navy eventually gained a quiet confidence and pride in its night torpedo operations—about which its prospective opponents were completely unaware.

Battleships. Battleships had been the capital ships in all navies for decades. The Japanese navy was no exception and had taken the lead in introducing fourteen and sixteen-inch guns. The lessons of the First World War, especially

the Battle of Jutland, accelerated the tendency in all the major navies to seek extremely long-range engagements with large-caliber guns. This view dominated most naval leaders, including those of Japan.

To maintain qualitative superiority and maneuverability under the treaty constraints, the designed top speed of Japan's battleships was twenty-five knots, which made them faster by four knots than the United States' battleships. In order to make possible a successful long-range gun engagement, the IJN also developed an optical spotting and range-finding system that gave better performance than those of other navies, even at a distance of over 40,000 yards. The range finders and spotting gear were installed at the tops of very tall bridge structures more than forty meters high. To make best use of this advanced equipment, battleship gun spotters were specially selected from among teenaged sailors and then trained for years. They were regarded as the treasures of the Imperial Navy.

Thus, the navy believed that a battleship gun engagement against the U.S. fleet, a fleet whose strength would have already been reduced to equality or less by the cumulative effect of earlier attacks, would be the culminating phase of its gradual attrition strategy.

Order of Battle. The order of battle of the Combined Fleet closely reflected its strategy. The fleet's standard order of battle before 1940 was: 1st Fleet, a battleship force with escorts, for decisive gun engagements; 2nd Fleet, comprising cruiser and destroyer forces, for torpedo engagements; carrier divisions, support forces for the 1st and 2nd Fleets; Advanced Force, the submarines; and, the Land-Based Air Force.

The Discontinuity between the Plan and Its Execution

A new Japanese national objective, that of securing vital natural resources in the Dutch East Indies and Malaya, arose in 1939–1940, reflecting the international situation at that time. The additional task changed Japan's national security concept rapidly and drastically. Independently of this development, the remarkable performance of the carrier air force triggered the development of a new fleet operational concept in which the carriers were to concentrate and become the Combined Fleet's main striking force. Primarily, then, in order to comply with a changed national objective, the Imperial Navy had to change its strategy from defense of its country's territory and possessions against a fleet coming from the east to a new offensive strategy, one that would both secure the necessary resources to the south and also take full advantage of the revolutionary new carrier air force.

A new offensive operational plan was developed during 1941 in a number of argumentative meetings between the Naval General Staff in Tokyo and the headquarters of the Combined Fleet. It is a fact that the idea of a carrier striking force was brilliant. However, the new offensive plan was far different from the long-understood strategy upon which the navy had built and trained its fleet. The problem was, then, how well the navy would integrate all its resources into the framework of the new concept.

Admiral Isoroku Yamamoto, Commander in Chief Combined Fleet, initiated the idea of the Hawaii operation by the carrier striking force. His chief dilemma was how, in a very short time, to reorganize and retrain his fleet as well as reeducate his officers. Another was that his resources, which had been designed for the defensive concept, were insufficient for the offensive operations necessary first to secure and then to hold the widespread Southeast Asian regions. More than that, Admiral Yamamoto had to make sure that Japanese shipping could sail safely between these regions and Japan.

The Combined Fleet's actual order of battle as it was reorganized to meet its new missions at the beginning of the Second World War in the Pacific is given in the table. The table gives, when compared to the previous order of battle described above, an idea of the magnitude of the deviation of the new plan from the traditional one. Consequently, the Japanese navy only barely managed the first phase of the war, and what came next was, as is well known, devastating.

There were several reasons for the failure. Admiral Yamamoto tried to bridge the discontinuity between the fleet he had and the tasks he had to accomplish by applying the new operational concept of the carrier striking force. However, the gap was too large for a single admiral to close. The Imperial Japanese Navy had concentrated its efforts on the strategy of gradual attrition too much and too long to adjust itself quickly to the new concept, and consequently it failed. Additionally, Japanese industrial capability was too primitive to support the navy's quick conceptual change.

Lessons for the Future

Other leaders have been in similar situations, and will be in the future. This case presents some important lessons for today's strategic thinkers and operational planners.

Coordination between Political Objectives and Military Capabilities. Political leaders must give service chiefs and operational commanders sufficient flexibility to prepare their forces fully to support national war objectives. On the other hand, service chiefs and operational commanders should not make easy compromises with politics; they should not lightly acquiesce in impractical political

Combined Fleet Order of Battle, 1941

- **Main Force** (strategic reserve): BBs, CVLs, CLs, DDs
- **Hawaii Force** (CV striking force): CVs, BBs, CAs, DDs, SSs
- **Advance Force**: SSs
- **Southern Force**: BBs, CAs, DDs
- **Malaya Force**: CVLs, CAs, DDs, SSs, Land-Based Air
- **Philippines Force**: CVLs, CAs, CLs, DDs, SSs, Land-Based Air
- **South Pacific Force**: CAs, CLs, DDs, SSs, Land-Based Air
- **Wake Island Force**: CLs, DDs, SSs
- **Gilbert Island Force**: DDs, SSs
- **Midway Island Force** (shore bombardment): DDs
- **Northern Force**: CVL, CLs, DDs

Key:

CV—Aircraft Carrier
CVL—Light Aircraft Carrier (Seaplane Tender)*
DD—Destroyer
SS—Submarine
BB—Battleship
CA—Heavy Cruiser
CL—Light Cruiser

*An IJN CVL was a seaplane tender, and its air wing deployed as an attacking force.

aims. This is especially meaningful when there is a substantial change in national objectives.

Admiral Yamamoto was not given sufficient time to prepare his forces to meet the new objective and to develop its supporting strategy. He had to go into the war as the navy's "ace" with insufficient force to carry out the new strategy.

With regard to compromises with politics, Admiral Yamamoto has been considered to have made a fatal one in keeping silent when the government was deciding on war. Earlier, during his tour as vice navy minister, Admiral Yamamoto had made strong political efforts to avoid war with the United States. However, after he assumed the duty of Commander in Chief Combined Fleet, he rarely made his political views known. In general, so far as the navy was concerned, political affairs had been the province of the navy minister; as the navy's leading war fighter, Yamamoto's silence seems correct. But he himself knew that his Combined Fleet was not prepared and could not win final victory

over the U.S. fleet. He should have made a straightforward input into Tokyo politics, through the navy minister, Admiral Shimada, or the Chief of Naval Staff, Admiral Nagano, but he did not. Of course, to do so was not the responsibility of Admiral Yamamoto alone but of all three naval leaders at that time. All made that fatal easy compromise with Prime Minister Tojo and his supporters that led the nation to disaster.

Alternative Strategies Able to Meet Various Conditions. Military leaders must develop strategic alternatives for fluid situations. In addition, force buildup, tactics, and training must be flexible enough to cover more situations than just those hoped for. Leaders should not depend on a single strategy, for that narrows their future choices, perhaps fatally. We should bear in mind especially that a poor strategy cannot be made up for by even superb equipment, tactics, and training.

Its long reliance on a single strategy fundamentally narrowed the Japanese navy's options and hindered its quick and smooth transition into the new concept imposed upon it. The U.S. Navy's approach to the problem was in strong contrast. The Americans had developed several "Orange" and "Rainbow" plans; that gave them a certain degree of flexibility, which in turn enabled them to shift smoothly from their initial defensive stance to an offensive one.

Technological and Conceptual Flexibility. Because the impact of technological and conceptual developments on naval strategy and tactics is tremendous, a navy's operational doctrine must be flexible enough to absorb such future development. In other words, however close to perfection doctrine may be, if its technology and concepts are stale, it will be made completely obsolete and worthless when confronted by the new.

The tactics of the Japanese navy's torpedo force and land-based aviation were successful; the surface actions around Guadalcanal and the air engagement against the HMS *Prince of Wales* and *Repulse* are examples enough of that. However, they failed to make decisive contributions to the end results of the war. Both torpedo forces and land-based aviation needed the support of that strong maritime air superiority which only a sufficiently powerful and resilient carrier-based air force can provide.

Furthermore, even the IJN's highly developed torpedoes and excellent night torpedo tactics, combined with its optical fire control systems and splendid gun spotters, could not match the powerful and modern technology of radar that the Americans had. In contrast to the Japanese, who had brought old technologies and skills to the peak of perfection, the Americans brought to a powerful new technology new skills that not only overshadowed those of the Imperial Navy but stood at the beginning of their developmental potential, not at the end.

Proper Extraction of Lessons from the Previous War. One of the most important things military leaders and planners must do in developing strategy and tactics is to draw the proper lessons from the previous war. They must then implement those lessons in their future strategy and tactics. If they labor under some misconception, planners will be unable to develop healthy strategies and tactics.

The Imperial Navy's employment concept for submarines, which was developed from the lessons of the First World War, is an example of such a misunderstanding. Perhaps more than any other navy, the Japanese navy saw in the capability of submarines a large part of the solution to its problem. It tried to extract lessons from the viewpoint of a fleet engagement, not of commerce raiding or the protection of shipping. Accordingly, the Japanese navy concluded that if proper tactics were developed, submarines would be vital in future fleet operations. But as we know, the navy had overestimated the value of the battleship engagement; indeed, it tried to justify its long-held decisive battleship-engagement concept, or "dream," in various battles of the Second World War. True, Japanese submarines had some important successes, such as the torpedoing of the USS *Saratoga* (twice), *Yorktown*, *Indianapolis*, *Wasp*, and *North Carolina*. However, their overall operations in the war have been generally considered to be a failure.

Because the navy failed to extract lessons about the impact of submarine warfare on shipping, it was little prepared when Japan went to war in 1941 to protect the nation's merchant ships from enemy submarines. Despite the fact that the survival of Japan was heavily dependent on that shipping, which connected the distant Southeast Asian regions with Japan, the navy's antisubmarine warfare concepts, tactics, and training were primitive. When the navy's leaders realized the problem, it was too late to recover.

Lessons such as those discussed above are easy to understand but not easy to practice. Nonetheless, it is the responsibility of military leaders and planners to recognize and fully utilize them.

In the case of Admiral Yamamoto, there were too many serious difficulties for him to overcome. His choice of action, to attack the main enemy fleet in its base on the first day of war, might have been the best available. No one could have made a more brilliant decision than to employ carriers in a way that made them the prototype of today's carrier battle force. However, even Yamamoto could not bring victory to his fleet and nation. Of course, the final result of the Pacific War as a whole was a matter of differences of national capability; whatever its strategy and tactics might have been, there was no possibility for Japan to gain final military victory over the United States. But the question still remains: how well did the Imperial Japanese Navy make the transition from the long-dominant

strategy of gradual attrition to the new one at the beginning of the war? Or, what would have happened if the navy had started the war with its familiar gradual attrition strategy?

The United States now stands at a turning point in terms of national objectives and strategy, in a drastically changed international situation. Consequently, its navy has just reviewed its strategy and has produced a new approach far different from the familiar one. One change involves a transition from a long-dominant blue-water strategy to one focused on green (that is, shallow) water. In this process, the leaders of the U.S. Navy also have many problems and will encounter many gaps. But the responsibility of preparing the navy to carry out the task that the national strategy will require—or, making no easy compromises, telling their own leaders it cannot be done—remains firmly on their shoulders and on theirs alone.

As a force of global importance, the U.S. Navy should not repeat the kind of mistake that the Imperial Japanese Navy made in the first half of this century. It is the eternal responsibility of the operational commander to fill the gaps between pre-hostilities planning and the real situations he faces. There is no other person who can bear this heavy responsibility.

Ψ

This Issue's Cover

The guided missile frigate USS *Fahrion* (FFG 22), with photographer Nancy Lurie onboard, breaks away from the port side of the Military Sealift Command oiler USNS *Leroy Grumman* (T-AO 195). USS *Samuel Eliot Morison* (FFG 13) remains connected to starboard, and a third frigate takes waiting station astern. The underway refueling occurred off Mayport, Florida, in late 1992 during a four-day exercise involving six FFGs, all Naval Surface Reserve Force ships, and the *Leroy Grumman*. Note that while the oiler's hull number is painted in the traditional way, that of the frigate alongside is darkened, using a Nato paint scheme to make it less conveniently readable for adversaries or potential adversaries. Official U.S. Navy photo, courtesy of the Public Affairs Office of the Naval Education and Training Center, Newport, R.I.

The Canadian-American Alliance, 1955–1988
Some Maritime Considerations

Greg C. Kennedy

Any sound coalition strategy must not only influence enemy perceptions but reassure our allies.

Sir Michael Howard
in Robert W. Komer,
Maritime Strategy or Coalition Defence, 1984

AT THE END OF WORLD WAR II, North America contained the first and third-largest navies in the world: the United States Navy (USN) and the Royal Canadian Navy (RCN). The necessity for the United States to maintain large naval forces in the face of the Soviet Cold War threat was readily accepted, given the Western superpower's growing global obligations and dependencies.[1] Canada, however, lost little time in demobilizing a substantial part of her fleet, which consisted almost totally of small antisubmarine warfare (ASW) vessels.[2] Canada's major maritime contribution to the coalition's war effort had been in the area of convoy defence, ensuring that vital war materials reached Great Britain and Europe from the North American arsenal.[3] With the formation of Nato in 1949, Canada naturally continued that task within the new North Atlantic alliance structure.

While a sense of close cooperation and common missions has characterized the relationship between the USN and the RCN, there have been differences in mission priorities, national support for the services, technological and equipment demands, and levels of international responsibility.[4]

For the United States as a democratic superpower, international support, both diplomatic and military, were crucial factors in Cold War naval planning. The

Mr. Kennedy is a Ph.D. candidate in history at the University of Alberta, in Edmonton. He has published a number of works on maritime subjects, especially Anglo-American naval cooperation. His thesis, now in progress, concerns Anglo-American naval relations in the Pacific, 1930–1941.

The author would like to thank Professors Lawrence Aronsen and Joel J. Sokolsky for their helpful comments on an earlier draft of this work.

continued acquisition and maintenance of international allies was one of the most critical tasks facing U.S. foreign relations.

This article investigates the naval requirements of the United States from 1955 to 1988 and discusses how Canada and the RCN fit into those missions as a Nato and North American ally. Also, this investigation attempts to ascertain what level of cooperation has existed between the USN and RCN by analyzing the roles, missions, strategies, and equipment of each service throughout that period. The article highlights the substantial divergences in strategy, missions, and equipment that existed between the two maritime forces.

In the immediate post–World War II era, Canada and the United States were linked by a number of joint command and planning organizations. The close cooperation achieved during the battle for the sea lanes of the Atlantic was voluntarily continued and was embodied in such organizations as the Canadian-U.S. Permanent Joint Board on Defence (PJBD), the Canada-U.S. Military Cooperation Committee (MCC), and a Nato planning body, the Canada-U.S. Regional Planning Group (CUSRPG).[5] In addition, Canadian and American maritime forces consulted and operated together under a number of Nato commands and groups: the Allied Command Atlantic (whose head, the Supreme Allied Commander Atlantic, or SacLant, was always an American admiral and also the commander in chief of American naval forces in the Atlantic); the North Atlantic Ocean Regional Planning Group (NAORPG); and the Standing Naval Force Atlantic (StaNavForLant, established in 1967). In direct contrast to the bitter struggle that had occurred between the RCN and the USN over areas of operation in the early years of the war, Canada sought NAOPRG membership only in its sub-group B, on "The Atlantic Ocean Lines of Communication," obtaining it in October 1949. This sub-group was responsible for planning against submarine and aerial attacks on transatlantic shipping in central ocean areas.[6] Such limited maritime involvement with Nato revealed Canada's desire to remain committed to naval roles that its ASW-oriented navy could perform with minimum change to doctrine or command organization and with no expensive modifications to existing naval weapons or vessels.

This desire for economy in conjunction with closer defence ties with the United States was acknowledged by Prime Minister Louis St. Laurent in an address to the Rensselaer Polytechnic Institute in Troy, New York, on 14 October 1949. The prime minister stated that "We cannot undertake to manufacture all the many and complicated and costly items of arms and equipment for modern military forces: many of these things we must obtain from your manufacturers. But, in order to pay for them, we must be in a position to provide you with certain other items for your forces which we can provide efficiently in Canada."[7] The Joint Industrial Mobilization Committee had been set up to that end in April of 1949. The net result of all of Canada's involvement

in these joint organizations, with regard to its strategic position generally, was that Canada acknowledged its dependence on the United States for security, even in maritime matters. The USN had assumed the role once held by the Royal Navy—protecting Canada, through a coalition defence, from European aggression.

This dependence was revealed by the RCN's numerical strength. In 1955 its combat strength was one aircraft carrier, three destroyers, and seven frigates on operational status; two cruisers, three submarines (on loan from the United Kingdom), seven destroyers, and five frigates were involved with training.[8] This small force was tasked primarily with the defence of the Nato sea lanes, or lines of communication, running across the Atlantic to Europe. It was envisioned that, in a repeat of the World War II strategy, RCN forces would assist other Nato units (primarily USN and Royal Navy (RN) units, at that time) in escorting convoys to Europe.[9]

Nato naval war planning in the 1950s envisaged a Soviet repeat of Hitler's attempt to strangle Great Britain into submission through the use of submarines.[10] Nato analysts assumed that upon the outbreak of European hostilities, large numbers of Soviet submarines would enter the Atlantic in an attempt to interdict shipping between North America and Europe.[11] The speed required for reinforcing Nato ground forces, given fears that a large-scale Soviet ground offensive would quickly overwhelm the weakened European nations, dictated that Canadian and U.S. naval strategy allow no delay.[12] Ensuring the timely arrival of those reinforcements required the neutralization of the large Soviet submarine fleet, which made ASW a top priority in Nato maritime planning.[13]

The Canadian rationale for this type of commitment to Nato was that Canada's equipment and operational experience lent itself to such a continuance of its World War II contribution. In 1955, faced with a seemingly enormous Soviet submarine threat that could seriously impede Nato reinforcements needed in a European conflict, the fact that the RCN undertook an ASW role as Canada's maritime contribution to Nato solved two problems simultaneously for the Canadian navy.

The first problem was the need to provide a credible reason for maintaining a large peacetime maritime force. Membership in Nato provided Canada with a serious threat that required substantial forces to counter.[14] Due to the high speed required in responding to any Soviet aggression, adequate forces had to be in place at all times; World War II mobilization schedules would not be sufficient to save Europe from the Soviet advance. Thus, the RCN was seen as a necessary force-in-being, one that could not be reduced to its dismal pre-war levels. Secondly, the specialisation resulting from such a clear, one-dimensional tasking allowed slim Canadian defence funds to be used most efficiently, without any diversion of monies having to be made toward attempting to construct and maintain a general-purpose fleet, complete with carriers and carrier aviation,

submarines, cruisers, destroyers, amphibious warfare craft, and accompanying logistical support.[15]

However, the validity of the decision to continue Canada's Cold War contribution to collective defence along the same lines as those of World War II is questionable. Given Soviet geography and certain technological weaknesses, which were obvious even in the 1950s, there were reasons for Canada to question the naval role it had decided to play within Nato. But such challenges in Canadian defence issues did not find an authoritative voice within either Parliament or the Department of National Defence.

"The independent actions of the RCN during the Cuban missile crisis and the manner in which the USN today shares information indicate a close and long-standing inter-service connection that may even extend beyond official channels."

Geographically, the Soviet Union of 1956 faced a situation similar to that of Nazi Germany in 1939: a lack of ports that opened directly upon major oceans, and a lack of U-boats in sufficient numbers and of adequate size to be able to implement an immediate blockade of Britain. Hitler's admirals had been able to deploy their short-range U-boats into the Atlantic effectively only because the fall of France made available French ports on the Atlantic.[16] The Soviet Union in the 1950s possessed one port, Vladivostok on the Pacific coast, that had something like ready access to an ocean and, most importantly, was free of ice for most of the year. Murmansk had access to the Atlantic and the Norwegian Sea as well, but it suffered from not only severe climatic conditions but a serious geographic disadvantage as well, especially for surface ships and any conventionally powered vessels. In general, Soviet naval forces, surface or subsurface, had to pass through strategic choke points at the entrances to the Norwegian, North, Baltic, Black, and Mediterranean seas, making their detection by Nato surveillance forces quite likely.

Also, the need to counter the powerful maritime threat posed by strong Nato naval forces, particularly the U.S. Navy's fast attack carrier groups, forced the Soviets to devote a large part of their strength to their own coastal areas, leaving little free to pursue large-scale offensive operations in the Atlantic sea lanes or in the Pacific. The Soviet asset that would be most effective in ambushing Nato forces approaching the coast of the USSR was its large submarine fleet. Such strategic demands could, and did, create a large strain on Soviet submarine forces, limiting the number available to be sent into the Atlantic on interdiction missions.[17] The United States Navy, in a report compiled by Admiral Low for the Chief of Naval Operations in April 1950, estimated that of the 225 Soviet submarines under fourteen years old, only seventy-eight were capable of ocean

patrols (with a range of from 7,400 to 15,000 miles).[18] The Soviet navy, while a moderately strong force, was not as serious a threat to the well-being of the two Western navies as was the interservice rivalry that was building in North America.

The RCN's development was affected by larger strategic issues, in particular the policies of the United States. Both the RCN and the USN in the 1950s were under severe pressure to justify their existence. Given the growing belief that the nuclear bomb and the rising predominance of air power had made limited war, and therefore conventional weapons, irrelevant, many questioned why navies were needed at all. In 1956, the Canadian minister of defence, Ralph Campney, thought that "at the present time the retaliatory force of the free world is provided by bombers of the U.S. Strategic Air Command (SAC) with nuclear weapons produced by the United States." His feelings towards the Canadian contribution to Nato and the role of the RCN were that:

> 1. Canada's primary role in NATO's collective security is the contribution to early warning and air defence.
> 2. Canada's naval role is the defence of our coastal areas, as always, and co-operation with our NATO allies in defence of vital sea lines of communication, particularly in view of Soviet concentration on building up a modern submarine fleet. . . . The RCN has 40 warships currently earmarked as this country's contribution for the defence of coastal waters in the Canada-U.S. region and for the NATO naval forces under control of SACLANT.[19]

Such attitudes towards the defence of the North American continent, and toward the predominant role air power played, also directly affected the missions of the USN and the development of certain weapons.[20] The operational, strategic, and tactical choices made by the USN during its own battle to justify its existence had an important influence on the RCN of the 1950s and 1960s.

In the late 1950s and early 1960s, the United States Navy was primarily concerned with developing effective nuclear-powered submarines, both SSN (attack) and SSBN (ballistic missile) types, and with expanding its carrier forces into a nuclear role. The well documented struggles of Admiral Hyman Rickover and the battle between the U.S. Air Force and the Navy (as well as the struggle within the Navy itself, between submarine and carrier proponents) over which service or arm was to provide the bulk of America's strategic forces, do not require elaboration here.[21] What is important is that the USN became financially committed to two very expensive weapons programs: the nuclear submarine and a new generation of attack aircraft carrier (CV). The RCN, on purely economic grounds, could not hope to emulate such programs, nor was it clear that the USN wanted it to. The USN saw the RCN as having a complementary role. The USN itself neglected general-purpose units to some extent in this period, particularly surface ASW forces, because of the antisubmarine capabilities

of the new SSNs;[22] Canada's concentration on surface ASW helped the U.S. Navy fill a gap in its own force structure.[23] Even more important was Canada's desire to operate, in any meaningful way, only in the Atlantic. Such limitation assured the United States of an ASW-capable ally in that ocean, leaving U.S. naval forces free to maneuver in response to global requirements.

This mutually beneficial adoption of roles by the RCN and the USN did not last. By 1965, the beginning of America's formal involvement in Vietnam, the submarine and CV programs, as well as the nuclear-powered carrier (CVN) project, were well into production. Funding had been approved and appropriated for the construction of forty-one SSBNs and five submarine tenders, a project that would not be completed until the late 1960s.[24] Twenty-nine SSBNs were operational by 1965, as were twenty-one SSNs. The USS *Enterprise*, commissioned in 1961 as the world's first CVN, was now fully operational. The RCN, on the other hand, was struggling in the early 1960s with a mission definition problem, as well as with a need to update obsolete equipment with new technology. Both factors appeared to involve costly, long-term expenditures.

The question of what mission a navy is to perform is most often asked when major equipment purchases are to be made. This is due to the extremely high costs and very long lead times involved in producing naval vessels; a clear and precise definition of what roles they are to perform is mandatory before such an important commitment is made.[25] The RCN's struggle became manifest in 1961. In that year an inquiry, which would produce a document known as the Brock Report, was held to determine Canada's naval needs.[26]

In the Brock Report, the RCN considered all of these issues in preparation for acquiring new technology and new vessels to bolster its now aging fleet. The main focus of the report was to define what the primary roles and operational missions of the RCN were, and what equipment and structure the RCN would require to fulfil them. The report defined the role of the RCN as:

(a) defending Canada's interests against attack from the sea;
(b) meeting our commitments to collective security arrangements;
(c) contributing to other external undertakings;
(d) supporting the Canadian Army in actions arising out of (b) and (c); and
(e) establishing and maintaining Canadian sovereignty over the Arctic.[27]

The operational tasks of the RCN were determined to be:

(a) to defend sea lanes of communication through control, escort and convoy of shipping;
(b) to detect, locate and destroy enemy submarines;
(c) to contribute to early warning of missile attack by submarines;
(d) to patrol the coastal areas and approaches to Canadian waters;
(e) to keep our ports, anchorages and approaches free of mines;

(f) to provide logistic support afloat for the fleet;
(g) to transport, land and support Canadian Army contingents as required;
(h) to provide mobile command and base facilities for external undertakings;
(i) to carry out and support Arctic surface and under-ice operations.[28]

The report also indicated how advances in technology would influence the strategy and tactics of the RCN, and what Canada and its navy could do in the face of such rapid changes.[29]

The report pointed out that the RCN was expected to operate under two very different conditions of war: nuclear and limited (i.e., conventional). The committee emphasized that in the aftermath of a nuclear war, the United States and Canada might be rebuilt through the use of the undamaged portion of the Western merchant fleet. Surviving vessels could carry material, personnel, and supplies from the undamaged South American, African, Australian, or other areas, which would then be used to reconstruct the devastated North American continent. Under such circumstances it was vital that the ability of these convoys to carry out their mission be assured. The RCN would be responsible, along with any other surviving North American naval units, for safeguarding these valuable vessels from any Soviet naval forces that existed in the post–nuclear war period.[30]

Such a series of events, however, was considered less likely than the second war-fighting scenario: limited, or conventional war. In the conventional war scenario, a balanced fleet, at least to the extent that the World War II fleet had been balanced, was thought the most desirable.[31] The report advised, however, that in order to make conventional forces as realistic a deterrent as possible, tactical nuclear weapons should be given to the RCN.[32] Also, close ties with the United States and its navy were considered a prerequisite if the RCN were to attain an effective level of operational capability. Collective security in conjunction with the USN was a must, not only geographically and politically but also technologically. Only by sharing in the weapons technology development carried out by the United States (and to a lesser degree by the United Kingdom) could Canada maintain a modern naval force at an acceptable price.[33] One clear example of the desire of the RCN to share in U.S. naval technology was the question of purchasing SSNs.

The RCN faced a dilemma over whether or not it should obtain SSNs for its fleet. The most important issues revolved around the increasing costliness of sophisticated sonar-equipped surface ships, the growing concern that land and sea-based fixed-wing aircraft were no longer effective in countering the new Soviet nuclear submarines, and the rising belief that only SSNs could perform effective ASW against other SSNs, or SSBNs.[34] The Brock Report acknowledged the high ASW performance of the SSNs but rejected them as too expensive for Canada's navy.[35] The 1964 White Paper on Defence echoed this assessment, stating that the "question is to determine as precisely as is possible

the proportion of weapons systems which will provide the maximum intensity of surveillance and maximum defence potential for the least cost."[36] In a pattern very characteristic of Canadian defence procurements in the twentieth century, a cheaper solution was sought and found. Canada's ASW forces of the future would be centered around a relatively new concept, the helicopter-carrying destroyer.

Both helicopters and fixed-wing ASW aircraft operated from Canada's aircraft carrier, the HMCS *Bonaventure*, but as early as 1960 it was acknowledged that flying them from the carrier was vastly more expensive in both manpower and money than from destroyers.[37] Experiments with helicopter-carrying destroyers had been carried out between 1955 and 1958. These trials resulted in the conversion of the *St. Laurent* and *Annapolis*-class destroyers to helicopter carriers and signaled the beginning of a new orientation in RCN ship construction.[38] To extend the combatants' time on station, the HMCS *Provider*, an underway replenishment vessel, joined the fleet in 1963.[39] These innovations—the helicopter-carrying destroyers and the *Provider*—constituted an operational response to the perceived threat of the growing number of Soviet submarines, especially the missile-firing ones.[40] The helicopter-carrying destroyers' most dangerous challenge came not from prospective enemy action, however, but from the Canadian government itself.

The helicopter-carrying destroyer programme had to survive a change in government in 1963, when the Liberal party defeated Prime Minister Diefenbaker's Progressive Conservatives in a federal election. The new Liberal minister of defence, Paul T. Hellyer, initially cancelled the Conservative's new destroyer program but announced in 1965 that a revised naval building program would be carried out under the 1964 White Paper. It would consist of "four new helicopter-equipped destroyers and two operational support ships for our Maritime forces, new anti-submarine helicopters and a conversion program of seven destroyer escorts involving the installation of improved detection devices and other equipment which will significantly improve their submarine protection capability. In addition, these destroyer escorts will also be equipped with a rocket-assisted homing torpedo delivery system, known as ASROC, which has a much greater range than the present anti-submarine weapons in these ships."[41] While the Liberal government appeared at that point to be offering hope for a bright future in defence spending, the RCN would soon find that the Liberal government, and particularly its leader (after 1968), Pierre Elliot Trudeau, were not staunch supporters of a strong defence policy.

The effects of the Trudeau administration on the Canadian armed forces have been discussed at length in many other works. However, the single most important point concerning the Trudeau government and defence policy, and therefore the Canadian navy, was Trudeau's perception concerning any wartime scenario. The prime minister saw the emergence of the Third World and the

reemergence of Europe as challenges to Canada's ability to compete in the world economy; he believed that more emphasis should be put upon meeting that challenge than on preparing defence measures.[42] Further, Canada needed a stable and prosperous world to ensure a wide pattern of foreign trade.[43] It was in Canada's self-interest to contribute to world peace, but in a collective security arrangement such as the United Nations.[44] All of these issues were directly linked to Trudeau's belief that any major war would be a nuclear disaster that no one would survive. In his view, there was no reason to spend enormous amounts of money on defence, because there was to be no winning the next war.[45] Trudeau hoped that improving the economic and commercial aspects of the country would help stabilize the world order and thereby provide some measure of security. A strong Canadian economy could help provide food, education, security, and stability to the Third World, which was, in the prime minister's view, the most destabilizing area.

Thus, Canada's defence agencies began a period of decline as the Liberal government oriented its foreign policy towards creating a stable international world environment in order to protect Canadian national interests.[46] Such a peaceful approach to Western security promised a small role for the Canadian navy. This was in distinct contrast to the struggle in which the United States and the USN found themselves during the 1960s and early 1970s.

America's containment policy had been faced with one of its greatest challenges, the Cuban missile crisis of 1961.[47] The loss of face suffered by the Soviet Union when the United States and its powerful navy forced the withdrawal of Soviet missiles from Cuba inspired a new era of naval awareness in the USSR. The lessons the USSR learned in Cuba about sea power and the need for a superpower to wield it would come back to haunt the USN in the late 1970s and early 1980s, when an intensive Soviet naval building program would challenge American predominance. But in the late 1960s and early 1970s, the greatest challenge for America and its navy was the Vietnam conflict.

Although the Vietnam war was never a contest between two rival naval powers, the USN played a large role. More importantly, advances in technology and weapons development, spurred by combat operations, received a high priority. This search for technologically advanced weapons had a direct influence on the U.S. Navy, in that the Navy became the recipient of enormous increases in funding. In total, the Vietnam war cost the United States $331 billion (in 1984 U.S. dollars);[48] while the majority of this sum was spent on war-related items, the renewed vigor and interest in technology and defence resulted in many new naval programs being started and other older projects being greatly enhanced, especially in the antiair warfare (AAW) and ASW areas.[49] As well, the American development of a "flexible response" policy for Europe in the early 1960s and the adoption of that policy by Nato in 1967 emphasized the

new demand for effective conventional weapons and ships to counter growing Soviet naval capability.[50]

"When the U.S. Navy went into harm's way in the new naval environment, America's Nato partners were expected to follow; for the technologically inferior RCN warships . . . the chances of survival were becoming very low."

In 1965, one-third of the entire U.S. naval appropriation was spent on ASW-related programs.[51] The high-power AN/SQS-26 sonar was developed; the lower-power but highly capable AN/SQS-23 sonar program was completed and installed in older destroyers and frigates.[52] The underwater Sound Surveillance System (Sosus) was completed. Improvements to and procurement of large numbers of the antisubmarine rocket (Asroc) and Drone Antisubmarine Helicopter (Dash) systems occurred, and the Mark 46 antisubmarine torpedo was introduced into the fleet. Advances in sensor equipment for the SSNs, exhaustive testing of new SSN classes (especially the *Permit* class), and introduction of the P-3A Orion land-based antisubmarine aircraft and of SH-3A Sea King helicopters with improved sonar all gave added detection capability and firepower. The establishment of the Atlantic Undersea Test and Evaluation Center and other test facilities indicates the vast importance placed upon ASW at that time by the United States Navy.[53] These programs, vessels, and weapons were a response to the growing fear of the increasing ability of Soviet submarines to use missiles against not only the mainland but also the core units of the American fleet, the carrier battle groups.

Such devotion to creating new and improved antisubmarine weapons resulted in a quantum leap by the USN in the technology and equipment necessary to perform effective ASW, both tactical and strategic (that is, against Soviet SSBNs), an advance that left the RCN far behind. But this emphasis on ASW changed in the 1970s, as American naval planners reacted to the improved Soviet capability to saturate American carrier group defences with "stand-off" missiles delivered by submarine, aircraft, and surface vessels. In fact, the introduction throughout the 1970s and the early 1980s of a new generation of Soviet aircraft, surface vessels, submarines, and missile systems evoked yet another major technological reaction from the USN, one broadly conceived both to defend against missiles and attack the "platforms" that carried them.[54] Even in the post-Vietnam period, when withdrawal of monies for defence purposes was common, programs already initiated survived. The Harpoon and Tomahawk cruise missiles, the F-14 carrier-based air-superiority fighter, airborne early warning aircraft such as the E-2 Hawkeye, the *Sturgeon*, *Los Angeles*, and improved *Los Angeles*–class submarines, the battleship revitalization program,

Aegis air-defence cruisers, DDG 51–class destroyers, general-purpose *Oliver Hazard Perry*–class frigates, improved amphibious and sea-lift capability, and a host of new sonar, radar, satellite, and electronic warfare advances all appeared between 1973 and 1988—an awesome display of economic, technological, and industrial strength.[55] Those weapons and platforms provided the foundation upon which an American perception of command of the seas through a high-intensity, high-technology, offensive doctrine, the "Maritime Strategy," was based.[56]

The Maritime Strategy was developed under the guidance of the Chief of Naval Operations, Admiral Thomas B. Hayward, and thereafter of his successor, Admiral James D. Watkins, with major input by the Strategic Studies Group at the Naval War College in Newport, Rhode Island. It emphasized the U.S. Navy and Nato allies engaging Soviet forces, both maritime and continental, on a global scale. Soviet attempts to concentrate in the Western European theatre would be distracted by flanking attacks that made the maximum use of Western naval mobility and striking power. In particular, ensuring Norwegian sovereignty and that nation's ability to contribute to the Nato war effort was a central concern of this strategy of peripheral operations.[57]

The naval force required to realize the total command of the sea demanded by the Maritime Strategy was termed the "600-Ship Navy" by many supporters and detractors alike. The estimate of the numbers and types of vessels specifically required was: fifteen aircraft carriers and four battleships (with both carrier and battleship battle groups requiring highly advanced Aegis-capable or Aegis-interactive escorts); one hundred nuclear attack submarines; thirty-seven maritime patrol aviation squadrons; 100–110 frigates (with significant quantities of cruise missiles and "smart" weapons); a Marine expeditionary force and lift (shipping) for a Marine expeditionary brigade; thirty minesweepers; support ships to match all the above; and strategic sea lift to support overall U.S. military capabilities.[58] No other nation in the world could build, or indeed even consider building, such a naval force, one based on such expensive and sophisticated weapon systems and incorporating such advanced technologies at all tactical and command levels.[59]

The strategy had many opponents, not the least of whom were some Nato countries. The European nations feared that such a strategy did not fully guarantee the protection of German, Belgian, or even Norwegian soil, the traditional land-oriented Nato goals.[60] As well, adoption of the new maritime strategy required new equipment purchases or development on the part of the other Nato countries to permit their navies to be able to participate (and survive) in joint operations with the USN.[61] When U.S. Navy ships went into harm's way in the new naval combat environment, America's Nato partners were expected to follow; for the technologically inferior RCN warships forward-

deployed with American naval units under the Maritime Strategy, the chances of survival were becoming very low.[62]

Still, in the face of accusations by the United States that European nations (and Canada) did not contribute to Nato defence to the same extent that the U.S. did, such objections and protests were put aside; the other Nato governments and their navies entered into the Maritime Strategy force planning process in the early 1980s.[63] As with Flexible Response, the U.S. had brought the Maritime Strategy into the Nato environment, where it was accepted as the basis for policy because of the dominant position of the USN and the United States within Nato planning groups.[64] If the largest naval force on earth maintained such a policy, what options were open to coalition allies who desired maritime protection at a low cost to themselves? This rapid and expensive series of developments, combined with over a decade of neglect, left the RCN in a very awkward position at the beginning of the 1980s in terms of supplying a credible force for Nato and North American maritime operations.

The naval procurement program outlined by Paul Hellyer in 1965 did indeed become reality, but it also signaled the last significant contribution that Canadian government would make to the Canadian navy. Most of the recommendations made by the Brock Report for a general-purpose fleet never came to pass.[65] The completion of the DDH-280, or Tribal-class, destroyers, was the navy's last sizable acquisition until the Tribal Update and Modernization Program (Trump) in 1983 and the White Paper on Defence of 1987.[66] This neglect was due to Prime Minister Trudeau's government's having little time for the traditional Nato defence policy.[67] What arose in its stead in the 1970s was a concentration by the Canadian government on defence planning centering around the idea of sovereignty protection.[68] The Canadian navy's existence within this new sovereignty-oriented policy was largely justified (and would continue to be right up to 1988) by two implausible assertions: that Canada was a maritime nation, with maritime commerce and trade that required protecting; and that there was a need to guard Canadian sovereignty interests in the Arctic.[69]

Canada had never in the twentieth century been a major ocean trading power, with the exception of the anomalies that were the First and Second World Wars.[70] Without government aid, private vessels were unable to operate. By 1950 it had been determined that Canadian deep-sea ships were unable to compete against low-cost, foreign-flag rivals. At that point, a policy of laissez faire was adopted, and thereafter more reliance was placed on foreign vessels for Canada's oceanic transportation needs.[71] In 1967, on a value basis, selected deep-sea trade represented twenty-eight percent of total Canadian exports and only two percent of total imports, with less than seven percent of the entire trade being carried by Canadian ships.[72] By 1969 Canada possessed only 895,900 gross

tons of ocean shipping, twenty-sixth in the world; oceangoing cargo vessels represented less than 70,000 gross tons of that figure.[73]

The majority of Canada's trade was directed towards and received from the United States. Two-thirds of Canada's exports in 1985 went to the U.S., a market that did not require deep-sea transport or a navy to protect the flow of goods to it.[74] Also, while Canada benefited from overseas trade in both the Pacific and Atlantic, the bulk of the responsibility for protecting that trade in time of war (even under terms of a collective defence) should have logically fallen upon the nations that relied upon the strategic raw materials that Canada supplied to them, much as Great Britain had in the interwar period and the early years of World War II. This view was recognized by the United States. Much of the American criticism of the lack of foreign naval defence spending in the 1970s and early 1980s focused on urging nations to take a greater role in protecting their own sea lanes. Such a hard line by the Americans concerning naval forces was indirectly beneficial to the Canadian government and to the RCN, both of which were unable to meet alliance commitments regarding maritime Nato operations.[75]

In Canada, the government focused attention upon the fact that defence monies were being spent to protect Canadian sovereignty.[76] Such an emphasis was one of the few reliable ways by which money for the modernization of the RCN, as demanded by Canada's Nato allies, could be obtained in the face of the needs of the expanding Canadian social support system. Protection of fisheries, offshore oil, waterways, Canada's undefended Pacific coast, and of future ocean-bed resources were all goals that could command some widely based public support. For these reasons, the most important issue was seen to be the protection of Canada's sovereign waters. Thus, the Arctic sovereignty issue provided the most nationalistic and "safe" rationale for the continuance and perhaps improvement of the Canadian navy.[77]

The 1987 White Paper proposed the purchase of between eight and twelve SSNs for the Canadian navy, along with a number of new Canadian Patrol Frigates (CPFs).[78] The rationale used to justify the eight-billion-dollar, fifteen-year total commitment was, predominantly, that Canada required nuclear submarines to patrol beneath the Arctic ice in order to protect its sovereignty from both Soviet and American vessels. The new surface forces, for their part, would carry modern countermeasures, surface-to-surface missiles and AAW weapons, and sensor systems that would allow them to escort convoys that traveled near the prospectively very dangerous "GIUK" (Greenland-Iceland-United Kingdom) "gap." While operations around the GIUK gap were not the preferred scenario for USN or Canadian planners, the planned RCN technological advances were necessary if RCN vessels were to play any role in the American Maritime Strategy, even that of simply convoying material across the Atlantic.

Both the SSN and CPF designs were technologically advanced by USN standards and well able to perform the missions set out by the strategy for their classes. Given the high cost of the two types, it is a safe assumption that such a contribution to the Maritime Strategy was indeed their hidden rationale. If simple Canadian sovereignty had in fact been the main driving force behind the 1987 naval program, then a smaller number of SSNs (perhaps two or three) and less sophisticated, more generalized weapons for the CPF (no antiair or surface-to-surface system, but rather continued concentration on ASW) would have sufficed.[79]

It is most likely that Nato (specifically American) pressure upon Canada to upgrade its navy to levels that would allow it to perform its naval duties within the alliance caused Prime Minister Brian Mulroney's Progressive-Conservative government to investigate the possibility of constructing such a radically new navy.[80] However, divided Canadian opinion, lack of a solid defence policy establishing the need for SSNs, anti-American feelings in some quarters, and the huge price tag associated with the submarine program eventually conspired to assure that the latter did not progress much beyond the speculative stage.[81] On the other hand, the CPF part of the White Paper did survive, due mainly to the extremely antiquated state of Canada's surface fleet and the pressing need to upgrade it.

Clearly, Canadian and American naval policies have arisen from two extremely different national points of view. Drawn together by connections forged in World War II and continued in Nato, the maritime needs of a superpower and those of a smaller power have diverged over the years. The shared experience and struggle during the war created some common ground and beliefs for their two navies to draw upon. The USN regarded the RCN as a trusted and valued ally during and immediately after the war. That respect was based on Canada's actual naval strength and its geographic and political importance for America's international operations. The independent actions of the RCN during the Cuban missile crisis and the manner in which the USN today shares information indicate a close and long-standing interservice connection that may even extend beyond official channels.[82]

This relationship suffered from the late 1960s until the early 1980s, during the rule of Liberal governments in Canada. Perhaps partially in an effort to distance itself from the Vietnam-tainted and "imperialistic" United States, Canada under Trudeau seemed determined to find its own maritime defence strategy. During this period, the costs resulting from rapid technological changes and innovations in naval warfare caused Canada to lose the national will and ability to continue to develop its navy to the USN pattern. However, no viable

or reliable alternative policy was established. Finding an alternative role was made more difficult by the increasingly limited capabilities and questionable alliance value of the RCN. The growing American perception in that period that Canada was getting a "free ride" on defence at the expense of the United States was even more evident once the Maritime Strategy came into play. All this conspired by the early 1980s to diminish the material value of the RCN for any Atlantic Nato–Warsaw Pact conflict.

Although Canada had not been a consistent material supporter of American naval policy, neither did it have to be in order to maintain its position as a valued maritime ally of the United States. The maritime defence of the United States from Soviet actions required, by simple geography, the defence of Canada. Even when U.S. naval planning became more offensive and global in nature, the Canadian contribution to the defence of North America—through land-based aircraft, airfields, and naval bases—was a valued addition. As a source of ASW vessels for North American and Atlantic waters (with the potential to increase operations fairly rapidly during an emergency, due to a relatively highly industrialized economy), as a dependable political ally (as demonstrated during the 1991 Gulf War), and as a strong trading partner, Canada and her antiquated navy could afford to bask in the benevolent glow of the powerful neighbor to the south and contribute what they could to collective defence.

After the Vietnam war, fielding a sophisticated and fully capable ASW fleet and acquiring the technology to fight the Cold War meant spending enormous amounts of money, money the Canadian Liberal governments were unwilling to spend.[83] The Progressive-Conservative government of Brian Mulroney adopted a similar attitude towards the overall strategic rationale for the RCN, failing to deviate substantially from the Liberals' approach of contributing the minimum required for the upkeep of Canadian maritime forces. In terms of naval strength, Canada dropped below even the level of a middle power when the RCN's Second World War technology could no longer fulfill the tasks demanded of it.[84] For U.S. naval planners, this meant that Canada had become a potential, not an actual, maritime ally. Just as before the First World War and in the interwar period, Canada after 1964 relied on the mantle of a larger power for protection of its foreign policy and of the state itself. After a brief and artificial period of autonomous Canadian naval strength, the United States, in coalition with other Nato nations, had replaced Great Britain as the Canadian maritime protector.

Several rationales put forth by various interest groups, including academics, naval officers, politicians, industrialists, and ecologists, have been used to justify the existence of the Canadian navy. Still, the reality has remained that without the USN and collective defence, the Canadian maritime commitments over the years make no sense.[85] From 1955 to 1988, the RCN was a valued, if not always a materially valuable, part of the Nato maritime alliance, particularly the

American-Canadian effort to protect western Atlantic ocean areas. However, as the global picture realigns in the post–Cold War period, one may muse about what the price for such protection will be in the future, or even whether the United States and the U.S. Navy will be willing again to offer such services in the name of alliance building. The questions of what Canada's maritime strategy is (not only for itself but in terms of alliances with the U.S. and other nations), and of what the role of the RCN is to be, are therefore yet to be answered.

Notes

1. See John E. Endicott and Roy W. Stafford, eds., *American Defense Policy*, 4th ed. (Baltimore: Johns Hopkins Univ. Press, 1977), chap. 2. Even so, the American navy was reduced a great deal, along with the other armed services, in the immediate post-war demobilization.

2. Sharon Hobson, *The Composition of Canada's Naval Fleet, 1946–1985* (Halifax, N.S.: Centre for Foreign Policy Studies, Dalhousie Univ., 1986), p. 57.

3. See Marc Milner, *North Atlantic Run: The Royal Canadian Navy and the Battle for the Convoys* (Toronto: Univ. of Toronto Press, 1985); Marc Milner, "Royal Canadian Navy Participation in the Battle of the Atlantic Crisis of 1943," James A. Boutilier, ed., *The RCN in Retrospect* (Vancouver: Univ. of British Columbia Press, 1982), pp. 158–75; W.G.D. Lund, "The Royal Canadian Navy's Quest for Autonomy in the North West Atlantic," *The RCN in Retrospect*, pp. 138–58; and W.A.B. Douglas and Jurgen Rohwer, "The Most Thankless Task Revisited: Convoys, Escorts and Radio Intelligence in the Western Atlantic, 1941–1943," *The RCN in Retrospect*, pp. 176–87.

4. While unification of the Army, Royal Canadian Air Force, and Royal Canadian Navy in 1968 created new commands and titles for each of the services, for clarity this paper will refer to the Canadian navy as the "RCN" throughout.

5. Jerome D. Davis, "To the NATO Review: Constancy and Change in Canadian NATO Policy, 1949–1969," doctoral thesis, Johns Hopkins Univ., Baltimore: 1973, pp. 125–26.

6. Lund. See also Joel J. Sokolsky, "Canada and the Cold War at Sea, 1945–1968," a paper presented to the Conference on the Canadian Navy in the Modern World, Halifax, Nova Scotia, 1985, pp. 47–48.

7. Danford W. Middlemiss, "Economic Defence Co-operation with the United Sates, 1940–63," Kim R. Nossal, ed., *An Acceptance of Paradox, Essays in Canadian Diplomacy in Honour of John W. Holmes* (Toronto: Canadian Institute of International Affairs, 1982), pp. 89–90.

8. Hobson, pp. 71–72.

9. In 1953 the United States Navy contributed eighty percent of the naval forces in the Atlantic that were under Nato control. USN, RCN, and Royal Navy forces, combined, constituted ninety percent of the Nato commitment in the Atlantic. Sokolsky, "Canada and the Cold War at Sea," p. 35.

10. This planning was strongly influenced by American, British, and Canadian opinion within Nato. See D.W. Middlemiss and J.J. Sokolsky, *Canadian Defence: Decisions and Determinants* (Toronto: Harcourt Brace Jovanovich Canada, 1989), pp. 16–25; Sir Peter Hill-Norton, *No Soft Options: The Politico-Military Realities of NATO* (Montreal: McGill-Queen's Univ. Press, 1978), pp. 16–27; William T.R. Fox and Annette B. Fox, *NATO and the Range of American Choice* (New York: Columbia Univ. Press, 1967), pp. 59–76; Roger Hilsman, "NATO: The Developing Strategic Context," Klaus Knorr, ed., *NATO and American Security* (New Jersey: Princeton Univ. Press, 1959), pp. 11–36; and Lawrence S. Kaplan, *NATO and the United States: The Enduring Alliance* (Boston: Twayne Publishers, 1988), pp. 49–51.

11. Planning for such a scenario took the form of such joint Nato exercises as "New Broom V," in which Canadian, U.K., and U.S. vessels participated in antisubmarine exercises with a convoy passing from Norfolk to Gibraltar. *NATO Letter*, June 1956, p. 20.

12. Nato's Supreme Allied Commander Atlantic (SacLant) in 1956, Admiral Jerauld Wright, estimated that there were four hundred Russian submarines, with eighty to eighty-five being completed every year. He believed that the three tasks of Nato—the defence of Western Europe, the defence of North America, and the defence of the Atlantic—were interdependent and that if Nato failed in one it would fail in all. The sea lanes were the life-lines of Nato. *NATO Letter*, v. 4, June 1956, p. 21. These lifelines were clearly emphasized to Nato early on by Canadian Lt. Gen. Charles Foulkes in the "Foulkes Plan," which proposed the United States and Canada as a strategic reserve for Nato. See Douglas L. Bland, *The Military Committee of the North Atlantic Alliance: A Study of Structure and Strategy* (New York: Praeger, 1991), pp. 118–19.

13. While Brain Cuthbertson's work correctly acknowledges the primacy of the ASW role during this period, he does not make the critical connection of the dedication to the Supreme Allied Commander Europe (SacEur) and the primacy of the land element to continental defence that Sokolsky and others make in connection with collective defence and maritime planning. Cuthbertson tries, unconvincingly, to persuade the reader that if there had been a different strategic threat, the RCN would have created the proper force to counter it. Cuthhertson, *Canadian Military Independence in the Age of the Superpowers* (Toronto: Fitzhenry and Whiteside, 1977), pp. 132–43. This is an interesting but flawed analysis, given the lack of nuclear weapons development in the RCN, although various reports and projects, such as the Brock Report, advocated that the RCN acquire such weapons to make the navy a more viahle deterrent force.

14. Joel J. Sokolsky, "Seapower in the Nuclear Age: NATO as a Maritime Alliance," doctoral thesis, Harvard University, Cambridge, Mass.: 1984, pp. 118–19.

15. *Ibid.* On the death of Canadian naval aviation and the events leading up to the scrapping of the *Bonaventure*, see Stuart Soward, "Canadian Naval Aviation, 1915–1969," *The RCN in Retrospect*, pp. 271–85.

16. Marc Milner, "The Battle of the Atlantic," *The Journal of Strategic Studies*, March 1990, pp. 45–66.

17. Some of the most insightful and controversial work on the Soviet navy is hy Michael MccGwire. His studies show quite clearly the limited geographic and strategic options that the Soviet submarine forces had during this period. Although the situation would change to some extent with the advent of nuclear-powered SSNs and SSBNs (equipped with suhmarine-launched hallistic missiles, or SLBMs), Soviet submarines in the 1950s were tasked primarily with coastal defence. They were to prevent carrier task forces or amphibious formations from successfully operating along the shores of the Soviet Union proper. See K.J. Moore, Mark Flanigan, and Robert D. Helsel, "Developments in Submarine Systems," Michael MccGwire and John McDonnell, eds., *Soviet Naval Influence: Domestic and Foreign Dimensions* (New York: Praeger, 1977), pp. 151–84; Michael MccGwire, Ken Booth, and John McDonnell, eds., *Soviet Naval Policy: Objectives and Constraints* (New York: Praeger, 1975); and Michael MccGwire, ed., *Soviet Naval Developments: Capability and Context* (New York: Praeger, 1973).

18. Sokolsky, *Canada and the Cold War at Sea*, p. 28. While seventy-eight submarines is more than were possessed by Nazi Germany at the beginning of the Second World War, the technical ability of these vessels remained largely unchanged from those employed by the Germans at the end of the war. Range, number of torpedoes carried, and the snorkel had all added to the capahilities of the Nazi U-boats by 1945. The Allies had countered with changes in tactics, weapons, radar, and sonar. The success enjoyed by Allied land-based aircraft, escort vessels, and hunter-killer ASW groups, all using a high level of technology against the numerous U-boats in the later stages of the war, leads one to believe that such ASW responses available to Nato in the early 1950s would have served well against the conventional Soviet submarine threat of the late 1950s, except of course for nuclear-powered submarines. For discussions on the type XXI and Type XXII U-boat and Allied ahilities to counter them, see Marc Milner, "The Dawn of Modern ASW: Allied Responses to the U-Boat, 1943–1945," *Royal United Services Institute Journal*, Spring 1980, pp. 14–29. However, the importance of Ultra (decryption of high-level German codes) to Allied ASW operations and also continuing U-boat improvement by the desperate German navy make any firm judgment on immediate post-war USN ASW capabilities against Soviet submarines very problematical. See Brian McCue, *U-Boats in the Bay of Biscay: An Essay in Operations Analysis* (Washington: National Defense Univ. Press, 1990); and David K. Zimmerman, "The Royal Canadian Navy and the National Research Council, 1939–45," *Canadian Historical Review*, v. 69, no. 2, 1988, pp. 203–221. For a recent argument to the contrary, which assumes that Soviet SSNs would act in the same manner as those commanded by American or Nazi naval officers (both groups sharing a traditional set of tactics and beliefs that represented each group's unique wartime submarine experience and that did not necessarily reflect any Soviet tactical or strategic preference), see Richard Hegmann, "Reconsidering the Evolution of the US Maritime Strategy, 1955–1965," *Journal of Strategic Studies*, September 1991, pp. 299–336.

19. *NATO Letter*, August 1956, p. 16.

20. Campney has obviously confused, or deliherately combined, Nato and North American defence roles in a manner in which most analysts would not. The two missions are usually considered to have been independent of one another, North American defense requiring early warning and air defence, Nato commitments requiring assigning forces to the defence of Europe. Still, his statement indicates that the RCN most likely suffered in its relative ranking within the Department of National Defence when budgets and funds were considered. The construction of the North American Air Defense (Norad) early warning radar lines and the acquisition of interceptors for the air force was no douht at the expence of the navy and the army.

21. The American admirals were afraid that the increasing capabilities of new bomber types, mated to the destructive power of the nuclear bomb, would cause a reduction in operational roles of, and therefore funding for, new aircraft carriers and carrier wings. See Kenneth J. Hagan, *This People's Navy: The Making of American Sea Power*, chap. 12 (New York: The Free Press, 1991), pp. 333–61; Clay Blair, *The Atomic Submarine and Admiral Rickover* (New York: Holt, 1954); Francis Duncan, *Rickover and the Nuclear Navy* (Annapolis, Md.: Naval Institute Press, 1990); and Harvey M. Sapolsky, *The Polaris System Development: Bureaucratic and Programmatic Success in Government* (Cambridge, Mass.: Harvard Univ. Press, 1972), pp. 14–61.

22. Komer, *Maritime Strategy or Coalition Defense?* pp. 27–37; Carl H. Amme, "Seapower and the Superpowers," United States Naval Institute *Proceedings* (hereafter USNIP), October 1968, pp. 26–35.

23. Budget figures for the USN at this time tend to support this assumption. See U.S. Department of Defense, "United States Navy, Programs and Expenditure," *Annual Reports* for 1958–1964 (hereafter DoD *Annual Report*) (Washington: U.S. Govt. Print. Off.).

24. DoD *Annual Report*, 1964, p. 243. Nine SSBNs were commissioned in 1964, bringing the total to twenty-one. Construction was begun in that year on the final six SSBNs.

25. For an example of such discussion, see Reuven Leopold, "Surface Warships for the Twenty-First Century," James L. George, ed., *Problems of Sea Power As We Approach the Twenty-First Century* (Washington, D.C.: American Enterprise Institute for Puhlic Policy Research, 1977), pp. 269–92.

26. Canadian Department of National Defence, Directorate of History (DHist), *The Report of the Ad Hoc Committee on Naval Objectives* (hereafter the Brock Report), July 1961. The purpose of the RCN, according to the report, was to "ensure that Canada, in concert with allied and friendly nations, will be able to use the seas for our own purposes in peace and war." (p. 69)

27. *Ibid.*, p. 70.

28. *Ibid.*, p. 73.

29. *Ibid.*, "Letter to the Chief of the Naval Staff from the Chairman of the Ad Hoc Committee on Naval Objectives."

30. Brock Report, p. 56.

31. *Ibid.*, pp. 56–57. See also, Hobson, p. 30.

32. Brock Report, pp. 36–37.

33. *Ibid.*, pp. 49–50. It was noted, however, that the Canadian sovereignty question might have led to conflicts with other nations, even close allies. This created many interesting problems concerning an American-armed Canadian navy being used to stop American violations of Canadian sovereignty.

34. *Ibid.*, pp. 93–94, 64–66; and "The RCN in 1963," Statement by Vice Admiral H.S. Rayner, *The Canadian Military Journal*, v. 29, nos. 7–8–9, 1963, pp. 37–38.

35. Brock Report, pp. 63–64. At $30 million (Canadian) per unit (for surface vessels), the committee recommended that Canada no longer send sonar equipment to sea (i.e., no new surface units with outdated sonar would be built) until research and development found a cheaper method. Such reasoning was characteristic of the report, which stressed the "small, cheap, and many" concept in vessel and weapon acquisition for the RCN.

36. Larry R. Stewart, ed., *Canadian Defence Policy, Selected Documents, 1964–1981* (Kinston, Ont.: Centre for International Relations, 1982), p. 5.

37. Hobson, p. 26. See also Soward, pp. 282–85.

38. Hobson, pp. 26-27.

39. The importance placed on Canada's acquiring its own tactical support ships was a departure from World War II practices. Then, supplies were obtained from U.K. or U.S. logistical systems. Such a development can be seen as a step toward some level of autonomy. *Canadian Military Journal*, v. 30, nos. 7–9, Summer 1964, p. 11.

40. Rayner, "The RCN in 1963." In this article, Vice Admiral Rayner estimates that the Soviet submarine threat consisted of 515 vessels, but he recognizes that only twelve were nuclear-powered, and that of the remaining 503 conventionally powered submarines, only a handful were more advanced than the WWII-type craft. See also Hobson, pp. 30–31.

41. Address of the Minister of National Defence, Paul T. Hellyer, to the Empire Club, Toronto, 18 February 1965, reprinted in *The Canadian Military Journal*, v. 13, nos. 4–5–6, Spring 1965, p. 5.

42. *Canadian Defence Policy, Selected Documents, 1964–81*, a policy statement issued 29 May 1968, pp. 10–12.

43. Margaret V. Royal, "Canadian American Relations: The Last Option. A Study of the Third Option in Canadian Foreign Policy," doctoral thesis, Queen's University: Ontario, 1985, p. 2.

44. Statement by Secretary of State for External Affairs, Mitchell Sharp, 1 March 1969, *Canadian Defence Policy, Selected Documents, 1964–1981*, pp. 13–15.

45. *Canadian Defence Policy*, policy statement of 29 May 1968, pp. 10–12.

46. *Ibid.*, excerpts from an address by Prime Minister Trudeau to the Alberta Liberal Association, 12 April 1969, pp. 18–21.

47. Interestingly, the RCN was put on a higher alert level during the Cuban missile crisis by high-ranking RCN officers *without* instructions from the appropriate civilian authorities. Long-range Royal Canadian Air Force ASW aircraft were directed to cover areas left vacant in the Atlantic due to American quarantine operations. Surface vessels conducted exercises and patrols in important areas of the Atlantic. Such close ties between the USN and the RCN were without equal in the Norad command and demonstrated the depth to which the informal ties between the two services had reached. Sokolsky, "Canada and the Cold War at Sea," pp. 55–56.

48. Komer, *Maritime Strategy or Coalition Defense?*, p. 13.

49. Navy programs for fiscal year 1965 totaled $15.1 billion in direct obligational authority. Of that amount, $13.7 billion, or 90.6 percent, was concentrated on general-purpose forces, general support, and research and development.

50. Komer, p. 6. See also Sokolsky, "Seapower in the Nuclear Age," pp. 188–90.

51. DoD *Annual Report*, 1965, p. 24. It must be pointed out that the lead-time for any class of naval vessel (that is, the time required to design, develop, and construct the first ship) is approximately ten years.

52. In 1964, two new ASW destroyers were added to the fleet, with another sixteen building or contracted for. DoD *Annual Report*, 1964, p. 246.

53. *Ibid.*, p. 20; Dod *Annual Report*, 1965, pp. 23–25, 258–80; DoD *Annual Report*, 1966, pp. 23–27, 228–311; and DoD *Annual Report*, 1968, pp. 29–33, 315–43.

54. The appearance of the Tu-16 Badger, Bear-H, and Tu-22M Backfire bombers; the Charlie, Echo II, Victor, and Alfa-class SSNs and SSGNs (nuclear-powered cruise-missile submarines); the *Kiev*-class carriers; the Kara, Kresta I and II, and improved Kynda guided missile cruisers; and, in the 1980s, the *Kirov*-class nuclear-powered guided missile cruiser—many of these platforms carrying improved cruise and guided missiles such as the AS-4 and SS-N-19—created the fear within naval circles that the USN had not only lost the quantitative edge but the qualitative as well. See Norman Polmar, ed., *Soviet Naval Developments* (Annapolis Md.: Nautical and Aviation Publishing, 1979); and Lawrence Korb and Linda P. Brady, "Rearming America: The Reagan Administration Defense Program," Steven E. Miller, ed., *Conventional Forces and American Defense Policy* (New Jersey: Princeton Univ. Press, 1986), pp. 3–7.

55. Between fiscal years 1981 and 1986, the budget for research, development, testing, and evaluation increased eighty-six percent. Joseph Kruzel and George E. Hudson, eds., *American Defense Annual, 1985–1986* (Lexington Va.: D.C. Heath, 1985), pp. 55–56. It should also be pointed out that the growing concern over America's ability to project military force successfully into the Middle East, quickly and in sufficient strength, prompted many programs and developments in the areas of not only advanced weapon systems but also in sea and airborne heavy-lift systems, such as improved Galaxy C-5A and Hercules C-130 models, and SL-7 fast containerships. See Brad Meslin, "Superpower Intervention in the Gulf: The Capabilities Equation," David Leyton-Brown and R.B. Byers, eds., *Superpower Intervention in the Persian Gulf* (Toronto: Canadian Institute of Strategic Studies, 1982), pp. 48-78. These systems would be vital to the Maritime Strategy as well. See also U.S. Department of Defense, *Annual Report to Congress, Fiscal Year 1983* (Washington: U.S. Govt. Print. Off. 1984), pp. III-18 to III-123; *Ibid.* for fiscal year 1985, "Naval Forces"; *Ibid.* for fiscal year 1987, "Naval Forces" and pp. 175–94. Also see Michael McGwire's *Soviet Naval Influence, Soviet Naval Policy, Soviet Naval Developments*, and also "A New Trend in Soviet Naval Development," *Canadian Defence Quarterly*, Autumn 1980, pp. 8–14. As well, see C.G. Jacobsen, "Strategic Considerations Underlying the Development of Soviet Naval Power," *Canadian Defence Quarterly*, Spring 1980, pp. 25–29; Joseph T. Jockel and Joel J. Sokolsky, "Emphasizing the Assets: A Proposal for the Restructuring of Canada's Military Contribution to NATO," *Canadian Defence Quarterly*, Autumn 1979, pp. 17–20; Thomas B. Grassey, "Selling Sea Power," USNIP, July 1989, pp. 30-35; Admiral James D. Watkins, USN, "The Maritime Strategy," General P.X. Kelley, USMC, "The Amphibious Warfare Strategy," and Secretary of the Navy John F. Lehman, Jr., "The 600-Ship Navy," all in USNIP, January Supplement, 1986; John Allen Williams, "The US and Soviet Navies: Missions and Forces," *Armed Forces and Society*, Summer 1984, pp. 507–528; and Matthew Allen, "Forward Maritime Strategy," *The Naval Review*, April 1988, pp. 128–33.

56. There was an equivalent high-technology, high-intensity strategy for the land battle in Europe, known as "Air/Land Battle 2000." It has been suggested that the economic show of force required by these two strategies bankrupted the Soviets, because the USSR was unable to compete at such a high and intense technological and financial level, and that therefore this "buying out the pot" poker analogue assisted directly in bringing about the end of the Cold War.

57. Joseph Kruzel, ed., *American Defense Annual, 1987–1988*, (Lexington: D.C. Heath, 1987), pp. 32–25.

58 Keith A. Dunn and William D. Staudenmaier, *The Washington Papers/107: Strategic Implications of the Continental-Maritime Debate*, v. 12 (New York: Praeger Special Studies, and Washington, D.C.: Georgetown Univ. Center for Strategic and International Studies), 1988, pp. 7–11. See also Kruzel, *American Defense Annual, 1986-1987*, pp. 121–36.

59. While earlier years saw a greater number of ships deployed by the USN (653 in 1950, and roughly 1,000 on average for ten to fifteen years after the Korean War), the cost of the technology that the Maritime Strategy relied upon was the real expense. The costs of new aircraft types, missiles, assault craft, helicopters, and other equipment were at levels never before seen. It was that cost, and not merely the number of hulls in the water, that caused a great deal of questioning of the strategy. See Paul Denarie, "A Political and Strategic Strike Force: The Aircraft Carrier, a Mobile Air Base," *International Defense Armament*, April 1988, pp. 48–53; and John D. Alden, "Tomorrow's Fleet," USNIP, May 1986, pp. 201–08.

60. Komer, pp. 67–70. Articles that tend to support Komer's argument about allied support for the strategy, and not only in the European theatre, are: Stanley J. Heginbotham, "The Forward Maritime Strategy and

Nordic Europe," *Naval War College Review*, November-December 1985, pp. 19–27; Matthew Allen, "Forward Maritime Strategy," *The Naval Review*, April 1988, pp. 128–33; and James A. Nathan, "How's the Strategy Playing with the Allies?", USNIP, August 1988, pp. 57–62.

61. A survey of *Jane's Fighting Ships* for the years 1985 to 1989 will show that a modernization of the West German, Belgian, Dutch, Danish, and Norwegian fleets took place at that time. Such building was perhaps in order to allow their vessels to take a more active part in the Maritime Strategy, but more likely came about because of U.S. pressure on these countries to contribute more to the overall defence of Europe within the Nato framework.

62. Nathan, pp. 57–62; and Martin Shadwick, "National Defence: The Protection of Canada/NATO/North American Defence/Peacekeeping/Equipment Programs," R.B. Byers and Michael Slack, eds., *The Canadian Strategic Review, 1985–1986* (Toronto: Canadian Institute of Strategic Studies, 1988), pp. 125–87.

63. Dan Smith, *Pressure: How America Runs NATO* (London: Bloomsbury, 1989), p. 39; Barry R. Posen and Stephen Van Evera, "Defense Policy and the Reagan Administration: Departure from Containment," Miller, ed., *Conventional Forces and American Defense Policy*, pp. 51–55. See also Komer, pp. 23–25, 51–76.

64. The Nato document of most importance to these discussions is the "ConMarOps" (Concept of Maritime Operations).

65. In fact, the navy had its very existence again called into question between 1964 and 1967, due to the debate over the effectiveness of anti-ballistic missile systems and whether such a system would make ASW operations against Soviet SSBNs redundant. *Canadian Defence Policy, Selected Documents, 1964–1981*, "White Paper on Defence, 1964," pp. 89–90.

66. The major units of the Canadian navy in 1985 were three submarines, four Tribal-class destroyers, thirteen frigates (average age twenty-three years), and four replenishment ships. Hobson, *The Composition of Canada's Naval Fleet*, pp. 44–45, 118.

67. Trudeau supported Nato in the spirit of collective defence, but only insofar as it related to the defence of North America. Margaret Royal, p. 60. See note 42 of this article.

68. The 1971 White Paper on Defence listed the new defence priorities as: "(a) surveillance of our own territory and coast-line, i.e., the protection of our sovereignty"; "(b) the Defence of North America in co-operation with U.S. forces"; "(c) fulfillment of such NATO commitments as may be agreed upon"; and "(d) performance of such international peacekeeping roles as we may from time to time assume." Colin S. Gray, *Wellesley Paper 1/January 1973: Canada's Maritime Forces* (Toronto: Canadian Institute of International Affairs, 1973), pp. 8–12.

69. For a striking example, see R.B. Byers, "Canadian Maritime Policy and Force Structure Requirements," *Canadian Defence Quarterly*, Spring 1983. Byers assesses the five major naval roles of the navy as being strategic deterrence, strategic antisubmarine warfare, sea control and denial, projection of power ashore, and naval presence. The Canadian navy of the 1970s and 1980s was singularly incapable of performing any of these roles, even in limited joint operations with the United States. See also Martin Shadwick, "National Defence," R.B. Byers and Michael Slack, eds., *The Canadian Strategic Review, 1985–86* (Toronto: Canadian Institute of Strategic Studies, 1988), pp. 125–86; R.B. Byers, "What Roles for Canada," Brian MacDonald, ed., *High Tech and the High Seas* (Toronto: Canadian Institute of Strategic Studies, 1985), pp. 27–39; and D.B. Bindernagel, "Planning for Future Ship Requirements," *Canadian Defence Quarterly*, Autumn 1984, pp. 22–27. A firsthand look at the navy's point of view is J.A. Fulton, "What Model Fleet for Canada," in MacDonald, ed., *High Tech and the High Seas*, pp. 152–61; this argument also follows this traditional line of rationalization. Such approaches echo the ruminations of Admiral R.H. Falls, Admiral Timbrell, and Vice Admiral John Allan, who all cited the Soviet threat as the main concern of the Canadian navy in 1978–1980 (*Canadian Defence Policy, Selected Documents, 1964–1981*, pp. 115–38), but paid homage to the politically expedient Arctic sovereignty question.

70. *Report to the Minister of Transport, Task Force on Deep-Sea Shipping, April, 1985* (Ottawa: Government Publications, 1985), pp. 14–16.

71. *Ibid.*, p. v.

72. Canadian Transport Commission, *Summary of Canadian Merchant Marine Analysis of Economic Potential* (Ottawa: Government Publications, December 1970), pp. 1–2.

73. *Ibid.*, p. 1. Tables and figures in Ernest G. Frankel's *Management and Operations of American Shipping* (Boston: Auburn House, 1982), p. 63, do not list Canada as even having a major merchant fleet in 1977.

74. *Task Force on Deep-Sea Shipping*, p. 2; see also Frankel, pp. 70–71.

75. In the post–Falkland War period, it became painfully clear that Canadian DDH–280s and other RCN combat vessels were sorely lacking in surface–to–surface missile systems, antimissile and electronic countermeasures, and AAW capability. Such technological weakness rendered them almost defenseless against any serious threat and prime targets even in an alliance force such as an American carrier battle group. Valuable for the long range aod endurance of their Sea King helicopters, Canadian vessels figured to fare poorly if used in the Maritime Strategy purposed by they USN.

76. Colin S. Gray, *Canada's Maritime Forces*, pp. 30–48.

77. F.W. Crickard, "An Anti-Submarine Warfare Capability in the Arctic a National Requirement," *Canadian Defence Quarterly*, Spring 1987, pp. 24–30; Jean-Jacques Blais, Minister of National Defence, "The 1984 Defence Budget," *Canadian Defence Quarterly*, Summer 1984, pp. 8–12; Joel J.Sokolsky, "Canada's Maritime Forces," *Canadian Defence Quarterly*, Winter 1985, pp. 24–30; and Joel J. Sokolsky, "Parting of the Waves? The Strategy and Politics of the SSN Decision," David G. Haglund and Joel J. Sokolsky, eds., *The U.S.-Canada Security Relationship* (Boulder, Colo.: Westview Press, 1989), pp. 267–295. Speaking against the Canadian SSN procurement program, see S. Mathwin David, "Nuclear Submarines for Canada: A Technical Critique," Haglund and Sokolsky, eds., *U.S.-Canada Security Relationship*, pp. 215–38.

78. R.F. Archer, "The Canadian Patrol Frigate," *Canadian Defence Quarterly*, Autumn 1984, pp. 13–20, and see note 69.

79. If simple sovereignty protection had been the main mission for RCN submarines, a diesel-electric combination would have sufficed, even though it would not have fit the Arctic sovereignty "red-herring." However, a diesel-electric submarine has limitations when operated offensively that an SSN does not, mainly in the areas of speed and endurance. The standard use of such diesel-electric submarines is ambush-style area-protection missions (for which the largest operator of diesel-electric submarines, the Soviet navy, used them).

80. This debate pitted those who wanted the SSNs for hunting Soviet SSBNs and SSGNs thought to be lurking under the ice cap (Sokolsky, Byers, and Crickard) against those who believed such an offensive strategy to be unnecessary (Michael McGwire). Both camps agreed that Soviet SSBNs and SSGNs, along with the bulk of the Soviet navy and its supporting land-based aircraft, would be found in and around Soviet SSBN "bastions" (protected operating havens) and not off the coasts of North America or in other seas far from the Soviet coast. The Soviets' concerns over protecting their strategic nuclear capability caused them to draw their SSBN forces closer to home as the range of their SLBMs increased. The main mission of the remainder of the Soviet fleet was to protect these bastions from American SSN, ASW, and carrier forces. See Sokolsky, "Parting of the Waves?" pp. 279–81. For other perspectives on the use of the SSN and Soviet capabilities, see the various works of James M. McConnell, Milan Vego, and J.S. Breemer, whose works have appeared frequently in USNIP and the *Naval War College Review* over the last ten years.

81. There is much debate over whether or not the U.S. was particularly interested in seeing Canada acquire nuclear technology, and under-ice capability particularly. See Suzanne M. Holroyd, *A RAND Note: U.S. and Canadian Cooperative Approaches to Arctic Security*, N–3111–RC, June 1990; and Joseph T. Jockel, "The U.S. Navy, Maritime Command and the Arctic," *Canadian Defence Quarterly*, December 1989, pp. 23–33.

82. Sokolsky, "Canada's Maritime Forces," p. 26.

83. One of the best works on the impact of technology on warfare, coalitions, and nations is still William H. McNeill, *The Pursuit of Power: Technology, Armed Force, and Society Since A.D. 1000* (Illinois: Univ. of Chicago Press, 1982).

84. The Netherlands, with a coastline of several hundred kilometers, had forty-three ships and 17,000 personnel, while Canada, with a coast line of 7,300 kilometers, had thirty-eight ships (generally older models) and 10,000 personnel in 1985. J.A. Fulton, *What Model Fleet for Canada?*.

85. Sokolsky, "Parting of the Waves?" pp. 275–77.

Ψ

[The author] represents, perhaps, the abstraction with which the fashionable intelligentsia of the capitalist West can contemplate warfare, towards what may be the end of almost half a century of unprecedented peace in their part of the world.

The Oceans and Geopolitics
A World United

Vice Admiral Guy Labouérie, French Navy, Retired

NOTHING ILLUSTRATES BETTER our contempt of the oceans than a map of the world from the nineteenth century that we find not only in our schools and universities but see daily in France during the news broadcasts on channels 1 and 5, where it is used as a backdrop. While one might say that all maps are by definition flawed by their projection method, this map is nonetheless representative of nineteenth-century ideas that exist even today. If we ignore its euro-centered orientation (Europe—center of the world!) we can still note the following:

• The Pacific Ocean has disappeared! It either does not exist or is deemed to be more than Europe can handle. The Europeans were quite content to acquire a few islands there, even if they did not know exactly what they were going to do with them, as long as they could be had for a bargain price.

• The Arctic Ocean is a nonentity. It is true that the Arctic Ocean remained an obstacle to navigation until 1958, when the USS *Nautilus* sailed under the ice to the North Pole and beyond. However, that voyage was the catalyst for the only major change in strategic thought over the last forty years. It was the beginning of what might have become a direct confrontation between the superpowers in those frozen waters. The names of potential naval campaigns give the flavor: the Norwegian Sea campaign, the Battle of the Arctic.

Vice Admiral Labouérie is a member of the Académie de Marine, an Officer of the Légion d'Honneur, and commandant of the Ordre National du Mérite. In his nearly forty years of service in the French Navy, he has participated in the International Geophysical Year (1956–1958); served in the Pacific Ocean, the Mediterranean, the Atlantic, and extensively in the Indian Ocean; and has commanded the destroyers *La Galissonière*, *Bearnais*, and *Montcalm*, and also the First Corvette Division. Vice Admiral Labouérie attended the Ecole Supérieure de Guerre Navale (the French Naval War College) in the late 1960s, served on its faculty from 1979 to 1982, and was its Commandant from 1990 to 1992. In the year before his retirement in 1992 he was also Director of the Naval High Studies Center. He has published widely on geopolitical and historical subjects. His third book, *Stratégie: réflexions et variations* (ADDIM, Paris), appeared in April 1993. Vice Admiral Labouérie is today an advisor to the president of STRATCO (Paris), a society for strategic study and advice.

• The Indian Ocean, the last decolonized ocean, is reduced to a size and shape that reflect neither its real dimensions nor the fact that this ocean—mother of the human species, the ocean of slavery, poverty, hunger, and Islam—is the preferred area for the indirect strategies of all nations of the world, weak and strong alike.

• This map would have you believe that at least two-thirds of the world is land and only one-third water. Of the four oceans, the only one that counts is the Atlantic, and it is Anglo-American.

If one combines these notions with the north-south separation of the Mediterranean established over several centuries by the Islamic Arabs and then the Turks, we can note two important consequences. The first is the "Talleyrand syndrome": that is, mistaking what are merely European affairs for world affairs, and thus seeing world events only in a European context. In European minds this has tended to elevate any political policy that is not domestic to the level of world policy. This played right into the hand of England and subsequently benefitted the United States.

The second was the advent and the development of strategic theories that stressed a "longitudinal" explanation of local conflicts, giving priority to an enemy, always situated to the East, as the dominating power of the day. Three of these theories comprise the thought of three centuries. These are the theories of Sir Halford Mackinder, Karl Haushofer, and Raoul Castex (1878–1968). All are regional theories.

Mackinder is well known for his concept of the "Heartland," the owner of which becomes the master of the world unless balanced by sea power, itself split between two island nations: Great Britain (the paradigm of the Western naval power, the only kind that counted) and Japan, a symmetrical if not logical balance in the equation. One hundred years later, we can see that the famous Heartland is crumbling internally, and that Great Britain has almost completely disappeared.

Haushofer imagined four great poles of activity: the United States, Germany, Russia, and Japan. He cut the world into vertical zones centered on these four poles: the Americas, Euro-Africa, Russia-India, and a Pan-Asiatic zone. Starting in 1920, Japan tried to consolidate the last zone, while Haushofer's disciples were persuading Hitler that Germany could conquer the two interior zones for itself. In both cases the results were dramatic and abominable.

As for Castex's theory, the most interesting part of it was his idea of historical "troublemakers" who came out of the East until the reign of Charles V of Spain, when for a time they went instead from West to East. The most seductive theory of the three, even though people saw that the world was undergoing a major change, Castex's view was reinforced by the fear of China after the victory of Mao Tse-tung in 1949, which led to a rebirth of studies in Europe on the "Yellow Peril."

A Closed World

After having been vast, empty, and open in all directions for many centuries, after World War II the world can be seen turning inward and closing the door. In fact, during the 1950s the world seemed entirely closed: by then people had been everywhere on earth, seen everything, photographed and recorded everything, and so on. We numbered in the billions, we had only thirty percent of the earth in which to live, and there were no more places on our planet to be discovered.

This process of closing took place in four ways:

Physical. With the discovery in Borneo of perhaps the last tribe living as they had during the Stone Age, scientists finally had an understanding of the culture and the values of human society from forty thousand years B.C. to the present day. This cloture includes as well studies of the Amazon and its people, explorations of the barren Antarctic, and the transit of the North Pole from beneath the ice cap. The ensemble of these studies and exploits culminated in the Geophysical Year beginning in 1956, when for the first time in history the scientific world understood, in many disciplines at the same time, the physical association of man and his geography, in particular the relationship between man and the oceans.

Spatial. Following and complementing the physical closure of the world, this part of the process began with Sputnik in October 1957. Essentially from that moment, the world could be observed, listened to, photographed, and monitored at any moment. As a result of this technology, all sorts of techniques evolved and a powerful space industry was developed. This had an immediate effect on surveillance, on intelligence, and on the transmission of electromagnetic signals.

The news media. With the advent of the new technology, the rapid spread of news was no longer limited to regional and national items but became global. Nothing on Earth today can stay hidden for very long, and millions of illiterates are able to stay abreast of the news, true or imaginary, via radio. Television adds an even larger dimension to this phenomenon, thanks to worldwide coverage by satellites. While it is true that television educates and informs, it can also manipulate populations and bring down social and political regimes.

Juridic. At the end of the Second World War, the nations of the world put in place through the aegis of the United Nations two rules to be understood and respected by all organizations and every state: that no country's borders may be violated, and that every state's internal policies are the business of that state and are inviolable. Except within the Bolshevik part of the globe, these two rules were quickly accepted throughout the world without much reflection, because every country found in them an advantage—for colonies, to become independent; and for colonizing countries, to rid themselves of heavy responsibilities

by permitting the independence of their colonies. These rules were nonetheless contradictory—contradictory between themselves and also with another part of the United Nations Charter which affirms the right of peoples to govern themselves as they see fit. What is "a people"? What is "a nation"? What is a "cultural identity"? Where are the true boundaries? Unfortunately, no one anticipated those problems or expected the difficulties of self-administration (where are there politicians able to govern?) these nations faced once they became independent.

It is true that one could consider that until 2 August 1990, the day that Iraq invaded Kuwait, the two rules played a pacifying role. However, the world did not see, or did not want to see, that behind this apparent tranquility two phenomena were working which would stretch the world to the breaking point—that a new era was beginning. These phenomena were demographic pressure and the dynamic character of decolonization. I use the word "dynamic" because decolonization does not end with the signing of papers establishing a country's independence. As we see in Asia and Africa today, that is only the first step. After a century or more as some other country's colony, a new nation takes a long time to become really independent culturally, politically, and economically. Jurists and politicians would like to establish in this world a new order, one that would be easy to observe and for which criteria of action could be set. Unfortunately, the world defies order, and global human geography rejects any attempt to limit the flexibility it needs to live and to progress by its own definitions. This factor can be seen everywhere in the aftermath of global decolonization.

Decolonization

Europe's peoples and governments did not understand, in fact, that if it took between one and four hundred years to colonize a country, the reverse process would be no less dramatic and would require generations to complete. Beyond this consideration, there are four other important points that concern the general decolonization of the world. Coincidently, examples of all four processes can be found on the shores of the Indian Ocean.

• *Political decolonization.* In Bandung, Java, this began in 1955, when newly independent countries (Japan among them!) grouped together to gain political influence in the international scene. They could do so more effectively together, especially in the UN, than if every country tried to do it alone. Thereafter, these countries' influence would be felt in international affairs.

• *Economic decolonization.* The Organization of Petroleum Exporting Countries, or OPEC, created on 14 September 1960 in Baghdad following the Mardi Treaty of 16 April 1959, is the best-known illustration of the power that natural resources give to certain countries.

• *Cultural decolonization.* This phenomenon involved the rejection of materialism (regardless of origin), the renunciation of utilitarianism, and the denunciation of Western culture, often considered degrading in the former colonies. The international debut of this phase was marked by the ascent to power of Khomeini in Iran on 1 February 1979.

• *Juridic decolonization.* This aspect of decolonialization is distinguished by the rejection of the limitations imposed upon new nations by the artificial boundaries they inherited at independence. These peoples also rebelled against treaties that were concluded in their name but upon which they were never consulted. This factor has the potential to be the most dangerous feature of the decolonization process if the liberated peoples do not understand or fail to respect their borders and treaties. This situation is spread throughout the world, but the first serious incident dates only from 2 August 1990, when one country tried to obtain by war that which was forbidden by the rules of the UN. The rules are, in fact, European or American, and not every country is ready to follow them willingly.

The result of these four aspects of decolonization is that international politics have become more difficult, more confused, and ultimately less stable. International organizations will have an arduous task both in modifying their representation from the newly independent nations—it seems unreasonable that a country such as Fiji, with fewer than a millon people, should have the same voice in the UN as India, with nearly a billion—and in ensuring that international law is reviewed and revised as necessary to take decolonization into account. All nations must be consulted, and their cultures acknowledged, so that new laws can be adopted that will be respected by everyone, for one is unlikely to obey a law contrary to one's culture. Moreover, these organizations will have to put measures in place to enforce these laws, not delegating this authority to a regional or world power. This reorganization will require several generations.

At the same time, the world will be watching the evolution of these new "nation-states" under the pressure of demographics and migratory currents. One can only hope that these nations will become states that respect the rights of their citizens.

Demographic Pressure and a Return to the Oceans

Demographic pressure is tightly connected with the world's population. To this point, the world has been satisfied merely to note the increasing global population in a mechanical, calculating fashion, without considering all the potential results. In the near future, world population will grow from five to eight billion people and in the long term is likely to reach twelve billion, if not more. Beyond the dramatic and disquieting development of gigantic cities, one can observe other phenomena directly linked to demographic pressure.

One is the present condition of Africa, a continent that will contain over one billion inhabitants by the turn of the century, but that the world has reduced to the status of a minor actor. Neither Japan nor the United States will invest there, believing that Europe must take charge of its former colonies. The future of Africa is not clear; the leaders of the African countries watched the fall of the Berlin Wall with concern, knowing that without help, either from West or the East, they will have little hope of crawling into the twentieth century. Where the U.S.-led UN humanitarian intervention into Somalia will lead is still a mystery.

Another is a global movement of population toward the oceans. Sixty-five percent of the world's population lives less than 180 miles from the coast, and eight-seven percent live within three hundred miles. While this concentration is due in part to the generally temperate climates near the sea, it results primarily from the capacity for growth and communications with inland areas that one finds in the ports of the world. The migratory currents spawned by demographic pressure are heading for these areas.

Also, because of the effectiveness and efficiency of maritime trade, the merchant shipping of the world has undergone rapid growth in the last forty years. The number of merchant vessels increased during this period by five hundred percent, while the associated trade grew by a factor of ten. In 1990 these ships carried four billion tons of cargo, and demand continues to raise this figure yearly. The 1945 bipolar maritime world of Europe and the United States became tripolar with the inclusion of Japan, and it will soon become multipolar, because Third World nations already control twelve to fifteen percent of the world's maritime trade. The Third World share will increase rapidly unless restrained by rules stricter than those now enforced concerning the qualifications of its ships' crews.

A considerable effort is underway to study the short and long-term uses of new maritime resources in three areas: industry, agriculture, and energy. For the moment, interest in maritime industrial resources is concerned primarily with offshore research in petroleum products. However, little by little the world will begin to search in the maritime exclusive economic zones for all products needed on land. Perhaps in twenty or thirty years the metallic nodules found on the seabeds of the deepest oceans will be harvested. Research is costly, however, and only a few countries have the means to support this preparatory phase.

As for aquiculture, the oceans contain eighty percent of all living things in the world. Twice as many edible plants grow in the ocean than are produced on land. These facts have inspired the development of aquiculture, and at the present time plants and fish are being raised to augment farming and ranching in feeding the world's population. Agro-alimentation is tightly linked to aquiculture because some of the plants produced are not edible by man but are fed to cattle. Aquiculture must not be limited to its current stage of development, that

of the production of fish (mullet, salmon, *et al.*), but must be extended further into a large, modern industry responsive to commercial demands. It is difficult to say at this moment where this research will lead, but it is conceivable that fish hunting will be largely replaced by fish farming.

In fifty years, there will not be sufficient amounts of petroleum products to produce the world's energy. This gives the world fifty years to make a well reasoned decision on a replacement for oil. The oceans have the potential to be immense power stations, producing energy for the world. Georges Claude, a French scientist (1870 –1960), did extensive research into generation of energy based on differences in water temperature. The oceans adapt easily to these requirements, water from the depths being much colder than surface water. All that is necessary is to construct an apparatus to make this application feasible. (France does have an experiment of this sort going on in Tahiti, but its power output is still very expensive.) Tides and their associated currents are another source of energy production. The generator located on the Rance River in France is a good example. Finally, and especially, if ever thermonuclear fusion is harnessed, the oceans of the world contain enough deuterium for many centuries of nearly unlimited power.

All of this has been accompanied by the emergence of new international maritime law, endorsed by France, which will undoubtedly create tension and turmoil. Organized around the definition of exclusive economic zones as extending to two hundred nautical miles and by a common legacy beyond this distance, the law is attractive to the lesser-developed countries of the world, but the new rules have less appeal for those nations currently able to exploit the oceans. This is illustrated by the fact that not one of the major maritime or industrial powers (even France!) have ratified the 1985 convention of Montego Bay, the origin of this international legislation. The institution of the Haute Autorité des Fonds Marins (High Authority for the Seabottom) is, as a result, pushed well into the future, and its eventual authority is not clearly established.

The Stratoworld

The slow movement toward the oceans, with all of its associated consequences, becomes even more interesting when one looks at, instead of the euro-centered chart already discussed, a map of the world projected from the North Pole. Such a map, designed in 1942 by Richard E. Harrison, first appeared in 1944 under the evocative title of "One War, One World." Not copied in Europe until the 1960s, this chart clearly establishes that the world is composed of six islands: North America, South America, Africa, Eurasia, Australia, and Antarctica (although the projection would have one forget the latter). The four great oceans contain these islands and also the three pivotal areas of the world: the oldest of these is the Arabic world (bordered by Egypt, Turkey, and Iran), an area which

has agitated the world for over seventy centuries; the other two are Southeast Asia and Central America.

There are certain points one can draw from this map. First of all, of the four oceans, only two have proper names; "Pacific" and "Indian" are only adjectives.

The Pacific Ocean. This immense ocean covers half of the world. While one can measure it in physical terms such as miles and time zones, there are other, less objective, scales. The cultural, spiritual, economic, and social distances between the nations on its shores are no less important than the physical ones, even if less well delineated. The Pacific has, however, played an important role in the world's history for less than two hundred years.

The Atlantic. A European ocean for over five hundred years, the Atlantic is an ocean of adventure and of discovery. In its northern half, this ocean is the heart of Western philosophy, democracy, and of the wealth of the world. It is the father of the maritime nations, succeeding the Mediterranean Sea, which retains her title as mother of the maritime cities.

The Indian Ocean. This ocean is radically different than the first two. It is an ocean of slaves, of Islam, of fundamentalists, of hunger, and of violence. Man has navigated on these waters for over three thousand years, and all the great nations of the world have primordial interests in this area. It was in Mesopotamia and on the banks of the Indus and Nile rivers that the first empires and civilizations were founded.

The Arctic. An unsurmountable obstacle on the surface, only in the last fifty years has the space above its waters been conquered by airplanes and have submarines passed below the polar ice cap. During the bipolar confrontation between the United States and the Soviet Union, this ocean became the geopolitical center of the Conference on Security and Cooperation in Europe (CSCE) as well as the central battleground of the "Cold War."

To quantify geopolitics and geostrategy in the last forty years as merely "bipolar," however, is not accurate, for the world has been multipolar in many areas. For example there are four poles of global power:

- *The United States*: the most powerful nation economically, industrially, in space, in nuclear weapons, and in naval aviation, among other areas.
- *Western Europe*: the most powerful commercial confederation, comprising four of the six most industrialized nations.
- *Japan*: the most powerful country in terms of finance, the second most powerful in industry, and perhaps soon the dominant technological country in certain areas.
- *Russia*: the main component of the former Soviet Union, the latest colonial power, and even in its present condition the second most powerful nation in nuclear and space weapons.

But there are also six poles of demographic pressure and natural resources, and in particular, sources of energy. They are South America, North Africa,

Sub-Saharan Africa, India, Southeast Asia, and China. (The Persian or Arabian Gulf area is properly a "hinge.") Unfortunately, these poles are dominated by violence in all its forms, whether it be individual, familial, national, ideological, or associated with religion. Other poles of development are increasing, especially in Asia, notably the "four dragons" (South Korea, Taiwan, Hong Kong, and Singapore) and China's maritime areas.

Four "grey" zones or poles also exist, the sources of drugs in the world. They are Colombia and her surroundings; Lebanon; the area between northern Pakistan, Afghanistan, and certain Islamic republics formerly in the Soviet Union; and the "Golden Triangle" of Southeast Asia. These zones have a combined revenue of $700 billion that they must launder and reinvest in the rich nations of the world. Quite often this money is used to acquire arms and weapons. They are a source of corruption throughout the world of a magnitude that has yet to be measured.

In fact, the world that we tried to describe above in terms of a bipolar confrontation between the United States and the Soviet Union is only the latest manifestation of an idea that views the history of the world in a rather simplistic way: as the opposition between a maritime power and a land power. Moreover, this confrontation was merely the result of an entirely different process, the progressive resettling of a world population that is ever growing but has little room for expansion. The worldwide nomadic movement is to be seen in the form of migratory currents that exist in fact not only toward the oceans but throughout the world—the grass is always greener on the other side of this global fence. Thus, there are migrations to Nigeria as well as to Europe, to Saudi Arabia as well as to Malaysia. . . .

The Middle East, with its Palestinians, Israelis, Kurds, East Asians, and Egyptians, *et al.*, is a remarkable demonstration of these nomadic migrations. One should not be surprised to see violence erupt when these migratory currents run headlong into states that are rich but spacious and that respect human rights. The more that the demographic pressure increases, the more people will be on the move throughout the world.

In this world, limited as it is geographically to the available land areas, there are only two domains of real strategic mobility left, those of Space and the Oceans. Just as one lives in the "eco-world(s)" of the economic historian Fernand Braudel (1902–1985), today one lives also in a *strato-world* encompassing the world geographically, in space, and on the oceans.[1] In this stratoworld, as in all other worlds, one is either an actor or a spectator. A nation must both possess the political desire to be an actor and produce the material and human assets to succeed. There is no longer such a thing as a local or a regional policy. The

1. The stratoworld comprises the countries of the planet as a whole, conceived as being more or less motionless, and three fields of strategic maneuver: space, the oceans, and the information media. The link between the eco-world and stratoworld is international business.

events in Iraq and Kuwait have illustrated, as only one recent case, that policies must be global or they will have little effect at all. This global reasoning has application beyond national politics. It is equally true for any activity, whether it be economic, commercial, industrial, cultural, or military. The policies of Japan are an obvious example of this reality. It would be a little surprising if the political leaders were the only ones not to understand this global orientation, since all the other actors, from the commercial, industrial, and service sectors, are already thinking in world terms. For over forty years the world has benefitted from a security policy that has been truly global in nature—that of the United States—and it would not be pointless to remember the real dimensions of this policy.

An example. The American national strategy was remarkable for its concept of the oceans and its consistency over time.

Until the cruise of the *Nautilus* in 1958, as we have seen, the confrontation between the West and the Soviet Union had a longitudinal orientation, thanks to the seemingly impregnable Arctic Ocean and to the relative positions of the players at the start of the Cold War. The Berlin crises, the Korean War, and the wars in Indochina were examples of this longitudinal orientation, as were the various organizations that were formed in response to the Soviet or Western menace, respectively: Nato, Seato, Cento, Anzus, and the Warsaw Treaty Organization. It is interesting to note that of all the treaty organizations established, only Nato, weakened by its geographic restrictions, and the Rio Treaty, never threatened by the Soviets, remain after forty years.

In fact, everything changed with the advent of nuclear propulsion. The moment that the crew of the USS *Nautilus* navigated the Arctic Ocean, the old strategies had little remaining application. As an example, naval aviation became more and more important to the Americans as the potential battleground moved to the north, much to the dismay of the army general commanding the Nato forces in Europe; England and France sensed this change of strategy as early as 1956 in the evolution of differing policies concerning nuclear weapons in Western Europe. The American improvements as well in submarine technology, in acoustic performance in the very-low-frequency spectrum, in all types of intelligence gathering, in surveillance, in radio transmission, in electronic warfare, and in the use of space—not forgetting the capability to fire missiles through holes in the polar ice cap—kept the Soviet Union continually off balance and forced it to keep pace.

The Soviet Union, fortunately, did not have the means to follow all these advances. The collapse of the USSR was fundamentally a matter of philosophy, but it was accelerated by the Soviets' inability to follow the American technological challenges. "Star Wars," or the Strategic Defense Initiative, for example, planted doubts in the minds of the Soviet leaders and made it much more difficult for

them to hold on to Eastern Europe. The USSR tried to compensate for its weakness by developing strong blue-water commercial, fishing, fighting, and scientific fleets and also by participating in the origination of two grand axes: Moscow–New Delhi and Peking-Islamabad.[2] The final result was the fall of the "Iron Curtain" and the implosion of Marxism. President Reagan anticipated these events by coming to Berlin in June 1987 and predicting the end of totalitarian rule in Europe.

At the same time, the Americans were establishing a base at Diego Garcia in the Indian Ocean. Supporting a policy of action that was not dependent on the current views of foreign governments, this base gave the United States the possibility of enveloping the Eurasian world that its satellites were watching with increasing precision. This base would also be important to the American effort in the recent conflict with Iraq.

Perhaps even more decisive in this effort against Iraq was the ability of the United States to transport its troops by way of a maritime logistical force protected by space reconnaissance and if necessary by naval aviation. Though everyone knows that nearly all the 500,000 troops went by air, few remember that nearly all their food, fuel, and ammunition went by sea. This action demonstrated convincingly that a significant projection of force beyond the territorial limits of one's country is possible only if one has a strong navy. One of the revelations of the Gulf War was that the United States' dream of transporting a million well-armed and well-supplied men to Europe in one or two months was impossible. But the revelation has come only after the dream has lost its meaning.

Europe and France. What is to become of Europe in general, and of France in particular? Their weakness was obvious during the events of 1990–1991 in Kuwait and more recently in the Balkans. What does the future hold for them? Are they capable of being actors on the world stage, or will they be merely local and regional pawns in the great human dramas of the future? According to the script of today the Americans are the stars, but who will direct the scenes of tomorrow, when the peoples from the "South"—the Hindus, the Chinese, and the blacks from a federation rising from South Africa—arrive on the scene? (And what role will the Japanese play? Japan, of course, belongs neither to Nato nor the CSCE, and it is not a part of the "Third" world. Japan is elsewhere. Japan may have many difficulties in the next thirty years identifying her place in the world.)

Are France and Europe capable of a vision that goes beyond their Mediterranean

2. For the moment one does not hear much about these axes, but we soon will. In the year 2000, these axes will cut through four major powers having a total population of over four billion. Such numbers will yield an influence bigger than their economies or armies. Their cultures and civilizations are very different from ours, and it is difficult to see precisely how these facts will affect the world. But they will.

borders? Can they hope to understand the Arab world that is at their doorstep, or will they be simply commercial nations that never require their politicians to resolve the problem the Arabs present, that of integrating a multitude of people of very different cultural and social foundations? If France succeeds in internalizing the Muslim faith in a secular environment, conservative Islamic countries may sense themselves to be in real danger.

Europe, the twelve countries that are constructing the Europe of today, has all the assets, human and material, to form a historic union. But does a collective Europe really exist? Or is it simply an economic and commercial fantasy? In any case, Europe will find its identity only in responding to the six great challenges that will be presented to this prospective union in the next eight to ten years. These trials will be:

- *The Western security blanket.* Nato is the foundation of the real wealth on both sides of the Atlantic. Its purpose will continue, but changes will have to be made to its organization. Europe cannot expect the United States to continue paying twice as much for the defense of 350 million rich Europeans as they are willing to pay themselves.
- *The return of the Russians.* Today the future of the former Soviet Union is not clear. However, it would be a colossal mistake to assume that the Russians will not reappear, eventually, as the European force they have been for over ten centuries. One has only to read Solzhenitsyn's views to see the truth in this statement. He uses the same words as Peter the Great: "Take all equipment and modern organizational work methods . . . from the Occident, but the Occident is rotten, without moral references. So we must build our own civilization based on the eternal Russia."
- *Japanese investments.* Japan invests not only inside but also outside the European Economic Community. It is ready to plunder its best customers on every occasion, selling by fair means or foul, but in any event refusing to buy.
- *Eastern Europe.* What will be the future of Eastern Europe? Over the years, these countries have seen independence alternate with domination by various empires. As a result, except for Poland, they have never developed national identities but have been content simply to quarrel with one another and each within itself. Of the Eastern European countries, Poland and Rumania are of strategic importance. So is Turkey, astride the boundary between East and West, partaking of both but not quite belonging to either.
- *The Arab "South."* What will become of these nations? It is true that they are little understood in France, yet even France's political leaders prefer to talk about their Franco-Arabic demographics instead of trying to find solutions to the problem of immigration. In France the numbers and expansion of this section are much less worrisome than the press and a certain extremist political party would have one believe.

• *World hunger.* In the world today one sees not only widespread physical hunger but a cultural, political, and spiritual hunger as well. As Pope John Paul II and Mohamed Arkoun have said on numerous occasions, the bottom line is that Europe will have to define its spiritual identity and continually resist the tendency to describe its position in the world in relation to the West—that is, to the United States (which to the rest of the world *is* the West).[3] Europe has a materialistic and mercantile identity that affirms its ties to the West, but there is another side of Europe, arising from its history and culture, that many expect to blossom in the coming years. There is no need for any of us to copy each other stupidly.

These questions may seem far removed from the oceans and sea control, but in fact they are closely associated. Five of the six challenges have a major maritime component.[4] This component may take the form of commerce, industry, or culture. Isolationism created by a refusal to develop a global vision and by an unwillingness to consider and solve these six questions will lead Europe down the road to failure.

For the people of France, who manage a predominantly terrestrial heritage, to develop a world vision will require a veritable revolution of ideas and a change of mentality. While France has understood the importance of space and has tried to encourage her partners in Europe to participate in the exploitation of this medium, she is incapable, at least at present, of appreciating the importance of the oceans—beyond as a means of hiding her ballistic missile submarines.

This limited view of the oceans by Europe in general and by France in particular is totally unacceptable. It reflects the myopic European habit of confusing naval power, which includes only a navy's strategic assets, and maritime power, which integrates all sorts of activity, from fishing to satellite reconnaissance. Europe and France will have to ponder these questions and build a common vision of the oceans and their importance if they are to be credible and effective actors on tomorrow's world stage. One speaks of an agricultural Europe, of nuclear energy, of space, and even of commercial fishing, yet one does not hear of Europe's twenty-five million square kilometers of exclusive economic zones in the sea, collectively the largest in the world. This is curious, for it is this capacity that will provide one of the essential elements for the future of Europe.

The property of no one, yet belonging to all, the oceans remain the foundation of strategic mobility, human and material—complemented in

3. Mohamed Arkoun, of the University of Paris, teaches around the world. A French citizen, a Muslim, and a native of Algeria, he is a specialist in Arabic cultures.

4. The sixth is the challenge from Eastern Europe, though even there the opening of a channel from the Rhine to the Black Sea provides a naval aspect.

this regard by space, even if the latter is limited because of its inability to support life, especially human life. The world will find in these two media, space and the oceans, the possibility to learn about, to predict, to measure, and to defuse earthly tensions and internal forces before they explode in violence and destruction. This fury that has accompanied the nations and peoples in their history can no longer be allowed to erupt. The oceans and space will be the means by which power will be repositioned and transported to counterbalance economic and cultural forces. In the worst case, this power will be in the form of military forces required to contain uncontrollable violence, or necessary to provide order following ecological or natural disasters—which become more and more frequent every year.

Means of conquest for many centuries, the oceans have in just the last forty years become, for some, the last line of defense. The oceans must become in the future the source of wealth for the ensemble of humanity. This will require that new global policies be developed and applied that, to this point, only the United States, Japan, and to a large extent the Soviet Union have ever practiced; but the last of these, now under its old name of Russia, is probably out of this field for fifty years. Yet several countries have now started this process: Brazil, Spain, Singapore, and, in spite of its weaknesses, even India. It is urgent that the European Economic Community start down this road as well. France must adapt her vision, not simply to maintain her place in society but in order to become herself the catalyst for European growth. The oceans bordering France call to her, and if this cry is not heard, France will not be the master of her destiny in the stratoworld in which she is immersed. The same is true of Britain.

Still, with the creation in Brussels of a naval forum with four commissions, Europe may begin its return to a good and complete strategy for the future. It will only be after such new policies are developed that the European Community will be able to define a common security policy that is not merely a pale remaking of Nato. It will then be possible for France to address the goals she wishes to achieve instead of conducting endless technical discussions on means while never considering the ends. This process will not be easy and will require farsighted people having a clear understanding of what the future holds and the courage to face the problems that this process is certain to create. The future demands no less an effort.

Ψ

"A Story That Has No End"

James A. Field, Jr.

Palmer, Michael A. *On Course to Desert Storm: The United States Navy and the Persian Gulf.* Washington: Naval Historical Center, 1992. 199pp. (No price given)

Palmer, Michael A. *Guardians of the Gulf: A History of America's Expanding Role in the Persian Gulf, 1833–1992.* New York: The Free Press, 1992. 328pp. $24.95

FOR THE FIRST CENTURY and more of American national life, the Persian Gulf region, far away, protected by unfavorable winds and offering little commercial promise, was of small interest to the United States. Only in 1833 was the first commercial treaty with the area consummated, and this, a by-product of a mission to the Far East, was with the Sultan of Muscat outside the Persian Gulf. Twenty years later, efforts were made at a treaty with Persia; the first failed owing to Persian desires for political and naval support against the British. A second sanitized effort, ratified in 1857, seemed of so little importance that no American warship visited the Gulf until 1879 and no minister was sent until 1883. Far from forwarding the development of Gulf maritime commerce, the principal American activity in Persia was a growing Presbyterian missionary effort to the Nestorians, supported by way of Constantinople and the Black Sea.

The twentieth century was to be another matter. The industrial revolution of the nineteenth century had been based on coal, laid down, as it seemed, by a benevolent Protestant deity primarily in Great Britain, the United States, and Germany. But in the latter part of the century a new energy source appeared in the form of petroleum, with large deposits in the United States and Russia, and in 1908 a significant discovery was made in Persia. In the age of the dreadnought, the advantages of the new fuel were manifest, but there was no oil in England. In 1912 the Royal Navy, impelled by Sir John Fisher and Winston Churchill, committed its future to oil. In 1914, with the purchase by the British government of a controlling share in the Anglo-Persian Oil Company, the Persian Gulf acquired a wholly new strategic importance.

Dr. Field was a faculty member in the Strategy and Policy Department of the Naval War College from 1954 to 1955 and from 1975 to 1976. He is currently a professor emeritus of Swarthmore College, Swarthmore, Pennsylvania.

Although Persian oil was of limited significance in the First World War, the obviously increasing importance of the commodity led to interwar competition between the Allies for concessions in the successor states of the Ottoman Empire. Originally resisted by the Europeans, American oil companies emerged in the 1930s with concessions in Bahrein, Kuwait, and Saudi Arabia, sites of the important new discoveries; in time American companies would become the principal producers of the Gulf region. But the first American military presence in the Gulf came not from oil but from Second World War high strategy, with the establishment of the Persian Gulf Service Command, primarily concerned with pushing Lend-Lease supplies into the Soviet Union over the Trans-Iranian Railway.

With the end of the war the U.S. troops came out of the Persian Gulf, and the U.S. Navy left the Mediterranean, but the hoped-for period of relaxation did not eventuate. Rapid population growth, the increasing importance of the expanding Middle Eastern oil production, the change of the Soviet Union from ally to adversary, the establishment of Israel, the fade-out of European control from Algeria through Iraq and its replacement by governments prone to coups and assassinations, all worked for instability. Nor was the situation improved by the predilection of the advanced powers, not least the United States, for selling modern weaponry to anyone who had the cash. Shortly the U.S. Navy would return to the Mediterranean (originally under the title "Sixth Task Fleet"), and in 1949 a small Middle East Force was created.

For outsiders the most fundamental of all these problems was that of petroleum. After the First World War, Lord Curzon had claimed that the Allies had "floated to victory upon a wave of oil." This was perhaps a slight exaggeration, but certainly the statement would hold in regard to the Second World War, in which oil not only powered everything but emphasized the importance in world affairs of the geography of petroleum.

For long the two great sources of this increasingly vital commodity had been the United States and Russia: there is not a lot of oil in Western Europe, and none in Japan. For the Allies both world wars had largely been fueled by the United States. But the policy of pumping America dry could not continue forever, especially given the expanded requirements for reconstruction and modernization that followed 1945. The great discoveries and expanding production of the Persian Gulf region seemed providential, but the gift did not come free. Not only were Iran and the Arab states of that region unstable, but since the oil belonged to those who owned the territory and its pumping was done by outsiders, there were possibilities of cultural conflict. Where was there a force for order? Traditionally, of course, the British had policed the region, but in 1968, with their loss of India and Egypt, they began to pull out of the area east of Suez.

So, in a fashion reminiscent of the situation a generation earlier, when the British withdrew their support for Greece and Turkey (which gave rise to the Truman Doctrine), came the inheritance of large and distant strategic responsibilities. As in the days of the early Republic, the Persian Gulf was about as far away from the continental United States as one could get. Despite the acknowledged importance of oil, there was a good deal of reluctance in Washington to commit itself to so distant an arena. But one farewell present left by the British was the base rights at Diego Garcia in the middle of the Indian Ocean. This atoll was far enough from anywhere, in all conscience, but it was better than nothing, and after a slow start in 1967, development was speeded up following the Yom Kippur War and the Arab oil embargo. In 1983 a unified Central Command (CentCom) was established in Florida, responsible for the area from the Arabian Peninsula through Afghanistan and Pakistan.

Although CentCom and its predecessors focused on the defense of Iran and Gulf oil against the Soviets, matters had become increasingly complex. Expansion of the Soviet naval presence in the Indian Ocean had culminated in the great *Okean* exercise of 1975. In 1979 the Soviets invaded Afghanistan, the Shah of Iran fell from power, and American embassy personnel were held hostage. In January 1980 President Carter announced that attempts by any outside force to gain control of the Gulf region would be resisted by the United States. In the autumn the possibility of unfriendly control by an in-Gulf force arose as Iran and Iraq went to war.

The presence of American naval forces over these years was not without risk. In 1967 the Israelis shot up and severely damaged the USS *Liberty*. In 1986 Libyan terrorism in Europe led to American air strikes on Tripoli and Benghazi. In 1987 the USS *Stark* was heavily damaged by an Iraqi Exocet attack and the United States intervened for the first time, on the side of Kuwait, by agreeing to re-flag Kuwaiti tankers under American colors as protection against Iranian attack. In April 1988 the USS *Samuel B. Roberts* was heavily damaged by an Iranian mine, and in reprisal the U.S. Navy destroyed two Iranian oil platforms, a frigate, and some small craft. On 3 July an American cruiser regrettably shot down an Iranian airbus. On 18 July Iran accepted a United Nations (UN) resolution calling for a cease-fire.

Up to this point both books are pretty much like two peas in a pod. But as *On Course* was approaching publication, Saddam Hussein raised the ante. Hastily inserting ten pages on the Gulf War into his preface, Mr. Palmer, with impressive speed, then produced another hundred pages to form the second half of *Guardians of the Gulf*. On the basis of coverage alone, then, this is the volume of choice. Both books are solidly researched and clearly written. Both have large and useful bibliographies. *On Course* has photographs, *Guardians* does not. Since the effort started out as a naval history, *Guardians* is perhaps inevitably a little short on Air Force and Army material when the war comes: the B-52s, for

example, rate only a single sentence. The treatment of ground action diverges somewhat from that of General Norman Schwarzkopf. But considering the complexities of writing operational history and the speed with which the effort was accomplished, it is a very creditable job.

With the end of the Iran-Iraq War in 1988, the outsiders had relaxed. The United States and the European powers on the scene reduced their naval forces, but there was no relaxation in Baghdad. In the spring of 1990 Saddam Hussein mounted a rhetorical offensive against the United States and his Arab "brothers," concentrating his troops on the Kuwaiti border. On 2 August he invaded. Foreign condemnation, UN resolutions, and Arab efforts at peacemaking got nowhere. So what was the future of Saudi Arabian oil? Within a week of the invasion George Bush had drawn his "line in the sand," Secretary of Defense Richard Cheney and General Schwartzkopf flew to Jidda, King Fahd requested assistance, and the first American air and ground forces had been started to Arabia.

There followed, as all know, five months of frenzied buildup, coalition building, and fruitless diplomacy—while Saddam neither went for the Saudi oil fields nor reversed course for home—then a thirty-eight-day air campaign, and finally one hundred hours of ground action. Then the troops were started homeward.

With such a famous victory one might have thought that the Persian Gulf would be stabilized for a while, but life is not so predictable. Two years later George Bush, the architect of the coalition, had been retired to private life by his grateful constituents while Saddam Hussein still reigned in Baghdad, making mischief as best he could. It looks like a story that has no end.

Ψ

Even if forces are unavailable, orders can be issued. . . .

James A. Field, Jr.
History of United States Naval Operations: Korea, 1962

Naval officers prefer to make history rather than to write it—because of which preference they probably do a better job of the former.

Admiral Ernest J. King, 1942

IN MY VIEW. . .

The Joint Chiefs: "Admiral King Would Shudder"

Sir,

I could not agree more with Mr. Anthony Harrigan's letter "The Myth of Service Integration," which appeared in your Spring 1993 edition. The Goldwater-Nichols legislation and the whole idea of "Jointness" must be looked at again.

Goldwater-Nichols makes the chairman of the Joint Chiefs of Staff (JCS) the single dominant leader of all our military services. This is a tricky concept because no military man can know enough about ground, sea and air operations to run all our forces effectively.

It is dangerous to effective decision-making, when it comes to military recommendations, when any president or secretary of defense receives only one opinion. To avoid situations like the Bay of Pigs, what any president needs is alternative viewpoints coming from all the chiefs.

One problem with Vietnam was that President Johnson dealt primarily with one military man, Earle G. Wheeler, then chairman of the JCS. What we did with Goldwater-Nichols is to make the mistake of Vietnam—freezing out the chiefs as a body—"the law of the land."

In his thoughtful June 1984 *New York Times* article, former JCS chairman Lyman Lemnitzer wrote, "The best way to give civilian leaders balanced military advice is by using the talents and broad experience of the military Chiefs of all the services. Each knows his own service; each is an expert in his field. Our present organization provides the checks and balances that moderate extreme views."

In his 1946 testimony before the Senate Committee on Naval Affairs, the brilliant leader of the United States Navy during World War II, Fleet Admiral Ernest J. King, said, "The strength of the JCS lies in the combined knowledge possessed by the individual members and in the checks and balances that tend to prevent domination by only one person." King went on further to say, "The proponents, in my view, have confused the application of the principles of centralization versus decentralization. I state again my belief that the most effective use of our fighting forces can be attained by the intelligent integration of various agencies for the common defense. I do not concur that we must have an overall centralization to accomplish essential integration."

This is precisely what John Lehman refers to as the bloated bureaucracy in Washington. Consider King's small staff in Washington during World War II versus what exists now in the Department of Defense.

Because of Goldwater-Nichols, for the first time in our history, one military officer, the JCS chairman, can control events. He alone is the principal adviser to the president, the secretary of defense and the National Security Council (NSC). He alone attends NSC meetings. And the commanders-in-chief report to Washington through the chairman, who also controls the budget.

In my book *Civilian Control versus Military Rule*, which analyzes the Goldwater-Nichols Act, I made seven recommendations:

One: Have the chairman designated as the military chief of staff to the secretary of defense in addition to his role as JCS chairman.

As chief of staff to the secretary, the JCS chairman would now be in a perfect position to directly support the secretary, particularly on issues involving joint military operations. He becomes a source of ideas over and above both the chiefs and the service secretaries. The chairman's and the secretary's focus must always be the same. This system would ensure civilian control, and improve overall integration and effectiveness by making the points of responsibility crystal clear.

Two: Put the individual service chiefs back in the military chain of command as was the case during World War II. Can you imagine what would have happened in the second World War if Admiral King had been an adviser and not head of the Navy? All of our problems with the Joint Chiefs of Staff started when we took the chiefs out of the chain of command.

The war-fighting capability of the United States lies in the individual services. It does not lie in the Joint Staff, which under Goldwater-Nichols reports exclusively to the JCS chairman.

Everything will be more effective if it is clearly understood that political policy formation is the exclusive responsibility of our civilian leaders, while they must also be involved in approving and supervising military strategy and even implementation, to varying degrees, depending on the situation.

The chiefs, because of their position relative to the president and the secretary of defense, would, as Admiral King and General Marshall did during World War

II, be the key players in translating political policy into military implementation for the ten combatant commanders around the world. Getting the ten area commanders totally involved in budgets and the translation of policy into implementation is illogical and dangerous, as we found out with MacArthur in Korea and even in Desert Storm, where authority was sometimes confused between General Powell and General Schwarzkopf.

Three: Have the service chiefs and their individual staffs become the military staff of the secretary of defense. On the civilian side, I would have the individual service secretaries and their staffs become the civilian staff of the secretary.

This is the most efficient and effective way to manage the Department of Defense. Why? Because the secretary of defense would have both the military and civilian parts of the military establishment reporting directly to him with the chairman also assisting the secretary. This change would increase overall effectiveness while reducing duplication of staffs between the secretary, the chairman, the chiefs and the service secretaries.

Four: Pass a law forcing the president to meet regularly with all the Joint Chiefs of Staff.

Five: I recommend that congressional leaders attend NSC meetings that specifically involve decisions concerning the possible use of American military forces. This arrangement would involve Congress early in the process and hopefully get rid of the illogical War Powers Act.

Six: When a military subject is being discussed, have all the chiefs meet with the NSC, not just the chairman and the vice chairman.

Seven: Have the vice chairman report directly to the JCS chairman as his assistant. The vice chairman absolutely should not be the number-two man in the military and surely should not outrank the service chiefs. This consistent downgrading of the chiefs is not the solution—it's time to rethink what we have done.

Robert Previdi
Manhasset, N.Y.

Editor's note:

Mr. Previdi is the author of *Civilian Control versus Military Rule*, Hippocrene Books (New York, 1988).

Robert Massie's *Dreadnought*

Sir,

Commander James Goldrick's review of Robert Massie's book *Dreadnought* (*Naval War College Review*, Winter 1993) highlights shortcomings both real and perceived that discredit the book out of proportion to its failings. In a book of

1,000 pages, errors of fact and usage are not only likely but almost inevitable. The examples the commander listed are unfortunate, of course, but not significantly damning and could be easily repaired in future editions. Indicating that these minor inconsistencies warrant ignoring this worthwhile book would cheat students of our profession of valuable insights into one element of the pre-war situation and a valuable allegory to the Soviet/American arms race just ending in our own time.

More to the heart of Goldrick's misgivings are his comments about the scope and content of the book. *Dreadnought* is about the naval arms race between Germany and Great Britain prior to World War I. Massie proved to my satisfaction that the naval build-up was a significant factor in the deterioration of the relationship between England and Germany and in part made the alliance with France *possible* even if not inevitable. He never indicated that the Great War was the inescapable result and, in fact, made exactly the same point that Goldrick did, that the war was not inevitable until Germany invaded Belgium. Finding fault with the book because it is not an exhaustive treatment of the political environment in Europe prior to the war is meaningless.

Goldrick also takes very pointed exception to source materials, both those Massie used and those he did not. Massie's work is heavily dependent upon the letters and papers of Admiral Jackie Fisher and others who played significant roles in the events chronicled. Goldrick finds fault with the objectivity of these players as well as the books Massie used as source materials, choosing instead more recent volumes such as Jon Sumida's *In Defense of Naval Supremacy*. These works would doubtlessly have added to the value of the book as a scholarly work, but finding fault with the use of primary source materials of the principals involved is specious. Returning to the theme of the book, the references used may have been more to the point of the political decisionmaking that led Europe to the charnel house in 1914, and that after all was Massie's intent.

Curtis A. Munson
Major, U.S. Marine Corps

The reviewer replies:

I read Major Munson's comments with interest. His analysis of Massie's thesis in *Dreadnought* and mine have clearly reached different conclusions. That Massie did—in the end—allow some space to discounting the importance of the naval arms race in the outbreak of the First World War is true. My problem is that this was in the way of a short "add-on" to a lengthy narrative which did little but emphasise the importance of the naval question, to the exclusion of much else.

Good history is about balance—and that only comes from a determined effort to discover and analyze every significant source. Munson defends Massie's selection of primary sources. Well enough, but let me turn his allegory of the Soviet/American arms race into an analogy. If a historian were to write a history of the U.S. Navy's attempts to counter the Soviets by relying (for his primary naval material) almost wholly upon Admiral Hyman Rickover's correspondence and Admiral Elmo Zumwalt's memoir *On Watch*, would the result be a fair representation of reality? Equally important, in view of Major Munson's determination to draw insights, would it be sound guidance for others facing like strategic problems? On their own, both admirals have things of great importance to say. But a historian who transmits the views of contemporary actors within his thesis must accompany that transmission with criticism and analysis made from a basis of deep understanding of his subject. I do not see this in *Dreadnought*.

James Goldrick
Commander, Royal Australian Navy
HMAS *Watson*

Carrier Aviation and the Historical Record

Sir,

I am uncomfortable with the tenor and tone of Cdr. Thomas W. Trotter's article "The Future of Carrier Aviation" in the Winter 1993 *Naval War College Review*. I must state at the outset that I hold far different views on the issue of carrier forward deployments than Cdr. Trotter. I do believe them important for U.S. foreign policy purposes and for the possibility of rapid response to a crisis situation. With this in mind, I must take exception to two points: his dismissal of carrier importance in averting crises; and, his commentary on the Royal Navy in the nineteenth century.

Cdr. Trotter questions "the hackneyed expression, 'When a crisis occurs the President always asks, "Where are the carriers?"'" (pp. 33–34). Cdr. Trotter, in his rebuttal of this point, asserts that "more often than not, the presence of either one or two carriers has neither averted, nor significantly aggravated, a potential crisis." This comment suffers from a simple problem—the difficulty, if not impossibility, of proving or disproving it.

In studying the issue of forward deployments, the most difficult question is of efficacy—just how useful is it, anyway, to have forces forward? Simply asserting that carriers are not important in crisis situations, as Cdr. Trotter has, does not make the comment true. For every case of the inadequacy of the carrier (CV) response as a political tool (such as Cdr. Trotter's comments on the carriers in the vicinity of Iran in 1979–1980), I can point to a case where the CV might have been a crucial element (such as in February 1977 when Idi Amin held

several hundred Americans hostage, or in the 1967 Six Day War when a highly visible USN carrier movement helped get Syria to agree to a ceasefire). (For a list of 207 U.S. naval crisis responses, 140 involving carriers, see CNA Research Memorandum 90-246, *The Use of Naval Forces in the Post-War Era: U.S. Navy and U.S. Marine Corps Crisis Response Activity, 1946–1990*, by this writer, February 1991.) In addition, Cdr. Trotter's comments on the carriers off Iran ignore a very real element of their presence—if, at any point, President Carter had decided to use force against the Iranians, carrier aviation could have responded at very short notice.

In addition to not really knowing the true value of carriers in crisis situations, we do not know how many crises U.S. military forward deployments prevented by their simple presence. We simply cannot prove a negative, nor can we replay history. What might have happened without the U.S. carrier presence near Saudi Arabia in mid-August 1990? Would the absence of USN air cover have led Saddam Hussein to decide to invade Saudi Arabia before adequate forces arrived on scene? We are unlikely to ever know the answers to these questions, but we do know that two forward-deployed aircraft carriers provided the first significant U.S. air presence during Desert Shield.

I also must question the comments about the Royal Navy in the nineteenth century. For example, it is simply not true that "the British maintained a fleet that was vastly superior in design to any of its adversaries" (p. 40). For example, the French Navy introduced both steam (*Napoleon* in 1847) and ironclads (*Gloire*, 1859) before the British. The Royal Navy in the 1880s was the last navy of a major power to abandon muzzle-loading guns. (For a brief discussion of this, see William H. McNeill, *The Pursuit of Power*, Chicago, 1982, pp. 263–5.) The British often let others innovate and then used Britain's vast shipbuilding industry to out-produce a threat such as those the French infrequently caused. In other words, the British policy was reactive—"they saw no reason to plunge headlong into adopting untested weapons . . . without compelling reasons for doing so. Ordinarily, the compelling reasons were furnished by foreign warships." (John F. Beeler, "Defense Spending and Technological Change," *Swords and Plowshares*, Fall-Winter 1991, p. 4.) The British sometimes even attempted to discourage rather than foster technological developments (such as torpedoes) and thus sometimes found themselves on the trailing, rather than leading, edge of naval technology. World War I exposed the effects of the century-long decay in the Royal Navy when, ship for ship and man for man, the German Navy was a far superior force. (For a good discussion of this point, see the section on Jellicoe and Jutland in Cornelli Barnett, *The Swordbearers*, New York, 1964.)

The comment on the same page that "the British maintained a strong defense industrial base in order to increase their naval power if necessary, capably, and rapidly" also seems to skew the historical record. This implies a conscious governmental direction of the nation's industrial power to conform with

potential defense requirements and to be ready for mobilization when required. Paul Kennedy, in *Rise and Fall of the Great Powers* (the cited source for the comments), states something different: "Britain's growing industrial muscle was not organized in the post-1815 decades to give the state swift access to military hardware and manpower. [p. 152] Like that of the United States in, say, the early 1920s, therefore, the size of the British economy in the world was not reflected in the country's fighting power; nor could its laissez-faire institutional structures, with a minuscule bureaucracy increasingly divorced from trade and industry, have been able to mobilize British resources for an all-out war without a great upheaval" (p. 153).

Over the past several years, the world has seen amazing changes. In our attempt to ease comprehension of these changes and their implications, we seek historical analogies to provide some guidance. While often a fruitful path, it is a dangerous one as well since history can mislead as well as guide. Those who seek to use history to illuminate the present or future owe their audience the obligation to accurately reflect that past. While I could discuss this issue much further, I believe this article did not accurately reflect the historical record in support of its arguments.

Adam B. Siegel
Center for Naval Analyses

Douhet, Air Power, and Jointness

Sir,

The reactions to my article, "Giulio Douhet Vindicated—Desert Storm 1991," from Lt. Colonels Hammes, Sabata and Spies and Commander Howard were classic. They have summarily dismissed yet another in a long line of air power advocates who, they believe, overstate the facts in an inherently invalid position. And now the latest, the *charge du jour*: why can't airmen be joint and worry less about their own service and more about fighting as a team? That is what makes this whole argument ironic, in my view: until "they" understand (and accept) how airmen look at warfighting, "they" are the ones who are barriers to jointness.

No one argues that the ground and the sea are different environments, different mediums. The conduct of war in each is also different—control of sea lines of communication is not the same thing as securing and holding a section of ground. Consequently, and not so surprisingly, practitioners of the ground medium think differently than those on the sea. It's more than doctrine, it's more than training, it's more than weaponry, it's more than field manuals or regulations—and it's not service parochialism. It's fundamental, it's part of the culture

of the service and it's part of how an Army officer or Navy officer or Marine officer views the world.

But the sky does not seem to be viewed as separate—other than by airmen. Airmen do see it as a different medium. It has three dimensions instead of two, the limiting factors are different, the possibilities different. Air Force officers, not surprisingly, think about warfare in different ways than their brothers and sisters in the other services. This is not evil, nor is it anti-joint, it simply is.

Let us say we have an enemy with the classic elements: a fielded army, appropriate logistics support, an infrastructure of roads, bridges, etc., an industry base, a population, C^3, and leadership to run the show—a range of tactical to operational to strategic objectives, although which is which is not always clear ("fuzzy," as Air Force Chief of Staff General McPeak has said).

How do the "joint" planners approach this enemy? The ground practitioner sees a flat plane, one which must be broken into sections and secured, and held by a soldier with a weapon. They will advance through the fielded army, take ground, have air support assist with logistics, second echelons, infrastructure, etc., and with sufficient soldiers holding key positions, the war is eventually concluded. I admit to serious overgeneralizing; however, the soldier holding ground is virtually a sacred belief in the ground mentality. The soldier-holding-ground concept, however, drives a lot of planning and requirements. It is why we had over 400,000 soldiers in the desert in 1991. It also drives the conduct of the operation—it tends to make the Army officer think in terms of tactics and operational-level objectives. Again, there is nothing wrong here, it's how the ground practitioner thinks about the problem.

The airman does not see the problem in the same way. The immediate objective is not necessarily the fielded army. The Air Force officer tends to think tactically, operationally and strategically at the same time. Not because he is smarter (or less so), but because the medium allows, actually demands, him to do so. This outlook leads to different assumptions about the conflict and different planning factors. None of which have anything to do with service parochialism.

The problem with the "air power can win wars, no it can't" argument is that, in my opinion, it's interpreted as asking the ground practitioners to set aside their soldier-on-the-ground concept. To consider that a soldier is not fundamental to war termination strikes at the ground practitioner's way of life. That's why there has been so much fuss about the use of the term "air campaign," which has to be one of the silliest controversies in service rivalry history.

Can the Air Force win a war alone? Probably not. A nuclear detonation can adjust a number of attitudes, which may result in achieving political objectives, but air power is not omnipotent. It can be decisive, but even that label still receives resistance from ground and naval experts. Can the Army win a war alone? Probably not; well, maybe; but does it really matter?

The point is, Douhet was right. Air power is a separate entity. Air practitioners view the battlefield differently, so they plan differently. Their view of the end game may be dramatically different than that of the ground planner. Yes, most conflicts require a soldier holding ground, even though there may be rare circumstances where the conflict won't. However, there are any number of ways to get that soldier to that position and this is where the service-parochial views do all of us a disservice. Jointness will occur when we all understand, accept, and even value the differences in outlooks and can agree to do what is best.

The problem is, my opinion again, ground officers and Navy surface officers don't believe in air power, at least not past a certain point. The officers reviewing my essay are examples. That's why you have Douhet, Mitchell, Kenney, LeMay, Momyer, Warden and hundreds more writing about air power and its tremendous range of possibilities. Even a non-flying Air Force lieutenant colonel entered the debate.

Perhaps it will always come down to this: those who see the earth as covered with land and water, and those who see it as covered with the sky and space. Everyone may be right, but there must be some advantage to seeing all perspectives.

John F. Jones
Lieutenant Colonel, U.S. Air Force

"Japan and Germany, 1941–1943"

Sir,

Readers who want to round out Captain Rahn's valuable study of German-Japanese relations in 1941–43 (*Naval War College Review*, Summer 1993) are referred to the writer's *Past in Review, 1941–1991* (University Press of America, 1992), chapter 2 of which brings a new primary source to bear on Japanese foreign policy and its widely unknown major course correction because of the battle of Smolensk in the summer of 1941.

As for the demarcation line of 70 degrees east (Rahn, p. 52), its significance was both political and strategic. Politically, it put India on the Japanese side of the line. Strategically, the line runs north to Omsk, which was the farthest objective selected in a contingency plan drawn up by the Japanese Army general staff (*Past in Review*, p. 37). Chapter 2 of this work is not superseded by Carl Boyd's *Hitler's Japanese Confidant, General Oshima Hiroshi and MAGIC Intelligence, 1941–1945* (University Press of Kansas, 1993), which touches on the ouster of Foreign Minister Matsuoka in July 1941 only very lightly (p. 27).

For these fascinating multi-service and multilateral factors, the most fundamental strategic concept is not coalition warfare but culmination and the culmination point. As these linked Clausewitzian concepts are not included in

the *International Military and Defense Encyclopedia* (Brassey-US, 1993), the writer may be allowed to refer to this article on "The Short-War Antinomy Resolved: or, from Homer to Clausewitz," *Defense Analysis*, vol. 8, no. 2, pp. 165–171 and the sources cited there.

Dr. John E. Tashjean
President, Conflict Morphology, Inc.
Arlington, VA 22210

Editor's note:

See this issue's "Recent Books"department for a notice on Dr. Tashjean's *Past in Review*.

Ψ

Call for Papers

Siena College is sponsoring its ninth annual international, multidisciplinary conference on the 50th anniversary of the World War II, to be held 2–3 June 1994. The focus for 1994 will be 1944—though papers dealing with broad issues of earlier years will be welcomed. Topics welcomed include, but are not limited to: Fascism and Naziism; Resistance and Collaboration; the Air War; the Italian Campaign (Anzio, Casino, etc.); the North Atlantic and the Naval War in the Pacific; "Island Hopping"; the Russian Front; Normandy and the European Theater thereafter; the Warsaw Rising; the Holocaust; Literature; Art; Film; Diplomatic, Political, and Military History and Biography; Popular Culture; Minority Affairs; Women's Studies; Asian, African, Latin American and Near Eastern topics. Religion, Pacifism, Conscription, events on the Home Front and Post-War Planning as well as Draft Resistance and Dissent will also be of significant interest. All these and other topics of relevance are welcome. Replies and inquiries to Professor Thomas O. Kelly II, Department of History, Siena College, 515 Loudon Rd., Loudonville, New York 12211-1462.

Deadline for submissions: December 1, 1993.

SET AND DRIFT

— I —

U.N. Maritime Operations

"Realities, Problems, and Possibilities"

Admiral of the Fleet Sir Julian Oswald, G.C.B.

THIS IS AN IMPORTANT MOMENT to be discussing the topic of United States naval options for participation in United Nations military operations. It is an era when the original ideas of the U.N., and the Security Council, are beginning to be realized in a new way. The collapse of the former Soviet Union as a superpower has done three things: firstly, it has catapulted the United States of America into a position of unchallenged superiority. It has led to the "lonely president" syndrome. Secondly, of course, the United Nations operations have perhaps been freed up from the former blocking veto of the other superpower. Russia appears to be being fairly evenhanded at present in the former Yugoslavia, but the worry must remain of her siding with the Serbs. If the Spratley dispute in the South China Sea blows up, China could prove difficult. And thirdly, the demise of the former Soviet Union has directly or indirectly opened up a pandora's box of regional tensions. There is an awful lot of peacekeeping, but not a lot of peace around at the moment. The United Nations had been living, up until 1990, in a period of predominantly frozen interstate confrontation. We're now facing a different era of intrastate conflict

Admiral Sir Julian Oswald served for forty-six years in the Royal Navy. He was First Sea Lord and Chief of Naval Staff (Chief of Naval Operations–equivalent) from 1989 to 1993.

Adapted from an address delivered on 31 March 1993 to participants of a conference at the Naval War College on "Options for U.S. Participation in United Nations–Sanctioned Military Operations."

leading, for example in the Balkans, to possible interstate conflict and the danger of hostilities.

There is an expanding role for the United Nations, and it's there for us all to see. Multinational operations are not, of course, easy, and perhaps Beirut was an example which signalled this. But U.N. operations are moving inexorably into new multinational and major operational levels. Many of us in the West have wide experience in multinational operations that can, I believe, be put to good use in support of the international community. It is interesting that my own navy has used force some forty or fifty times since the Second World War, including four major campaigns, while the former Soviet Navy had never, as far as I'm aware, fired a shot in anger since 1945 except on one occasion against one of their own ships. Now I hope that you will not gain the impression that I'm proud that my navy is a sort of international rottweiler,* but I am indicating that we do have a certain amount of experience.

Where then do we go from here? Let us look briefly at realities, problems, and possibilities. And let's take the realities first. As a military man, I have to accept certain things. One, not all the aims of every operation will be achievable. Nor can all the Secretary-General's wishes be met. For example, force composition. I don't think that we're going to go as far as he would wish. Secondly, we must accept that few, if any, countries will commit themselves in advance to open-ended multinational commitments. Third, we have to face the reality of the existence of the North-South divide and the political tensions and demands to which it gives rise. The Indian representative at the United Nations illustrated this in his reservations expressed about the control of the Somalia operation, in effect requiring us to stress the need for continued U.N. command and its recognition. The difficulty is that many countries, and here I'm not referring to India, are trying to make their own points politically, whilst we are trying to get about the business of peacekeeping. And they are doing it even to an extent and a degree that causes interference in the conduct of operations. I believe it's the military's duty carefully to explain this to their politicians. But of course the more militarily developed nations must take account of the sensitivities and constraints under which the U.N. operates. They have to acknowledge that fundamental legality for U.N. operations depends on the consensus within the General Assembly and the Security Council. And also I think we must remember the self-interest of that ever-smaller proportion of the world represented by the Northern Hemisphere's developed populations for peace and security in the world as a whole.

The experience of the Persian Gulf is something which no military man will wish to forget. It is, however, an experience which to me gives rise to mixed

* A breed of dog having in the United Kingdom the same reputation for combativeness as the pit bull in the U.S.

feelings. Desert Storm was, of course, militarily a success, but regrettably it also showed that some nations are, to say the least, reluctant to front up in a timely way; some support forces were kept back by their countries and didn't provide the necessary support which they were sent there to give.

The next reality which military people have to recognize is that although the constraints of national sovereignty may, to a certain extent, be eroded, the basic sovereignty problem is likely to remain for the service lives of most of us. The degree of intervention possible in the internal affairs of countries may change, but I suspect that it'll always be a question raised, and the difficulty of obtaining clearance to intervene in sovereign states' internal affairs will not go away.

I would also like to say a word about embargo operations, because such operations particularly affect maritime forces. We see them at the moment in the Adriatic and also in the Gulf and the Red Sea. I think that we must accept that the majority of U.N. issues are land-oriented and have been the source for the U.N. of some of its particular perils and difficulties. We must accept that ships and aircraft cannot stop rape ashore in Bosnia or Croatia, but embargo operations and the power from the sea could nevertheless be critical. The other point that occurs to me is that the strategic principles are easier to think through in our less politically constrained maritime context.

The next reality that I would like to put to you is that in some essential areas it is only the United States that has sufficient capability, for example, strategic lift, C^3I,* and surveillance. And I hope that this will be recognized in the current force structure debate in this country, because it is not only in support of your own interests, but in that of the world as a whole, that these particular capabilities are so important. Often, if the U.N. will is to be enforced, in practice it will have to be the United States which leads.

We all know that the U.N. lacks military expertise; particularly, of course, this has been because of the Cold War confrontation and the veto. We are also agreed on the need for rigorous analysis of conditions and objectives before forces are deployed. There is the problem of the incapacity of the United Nations at the moment to grip the military staffing problem, and its obvious and understandable preoccupation with political factors. It is, nevertheless, absolutely vital that the mandate for the military is completely clear, and I don't think that I can overstress that point. There's also the interesting question of the United Nations commander's authority over subordinates of a different nation. I suggest that the feasibility of the U.N. commander in the field having the same authority as he would in national operations is something we should explore. And I suspect that the Nato model might be quite useful in this context.

In theory I support the idea of preventive diplomacy to preempt the crisis, because it's cheaper by far to act first than to pick up the pieces afterwards when

* Command, Control, Communications, and Intelligence.

thing have gone wrong. But most of our armed forces in most of our countries, in general, and our navies in particular, seem to be already fully engaged undertaking their respective commitments without any more being added.

I would like to mention the areas to which I think we will have to attend. The first is rules of engagement. It certainly isn't true that U.N. ROE are only appropriate for a man with a rifle. But the system for implementing ROE is archaic, while it needs to be fast, robust, and flexible. Also, it's true that U.N. ROE are not designed for use at sea, where there's often been a disparity in ROE among different nations' ships undertaking the same operation. And of course we also have the situation where some ships tend to arrive with unduly inhibiting ROE. In my view, the most difficult area of ROE as a whole is the tricky question of hostile intent. I had the honor of serving in the Striking Fleet with Admiral Mustin,* and his approach to hostile intent—and I hope that I don't do him a disservice by mentioning this—was that no commanding officer was required to wait for incoming mail! I've always thought that that was pretty good guidance. I think we need, in our training and exercising, to practice and improve our performance. The importance of ROE is that lives are on the line, and they will be put at risk if we don't get it right. We have said that one of the problem areas is that C^3I is weak at present in U.N. operations. Commanders of missions must be brought into the loop early, in the planning stages, and any commander in the field or at sea must have good military information. Without this he would be impotent. The trouble here is that intelligence has become a dirty word in some nations' languages. Yet it is these same people who must realize that without such military information the success of the operation may be put in doubt and the safety of troops put at risk. This problem is complex, but I'm sure we're intelligent enough to find a way around it.

A U.N. General Staff is possibly an attractive idea, and I'm delighted that the U.N. is now establishing a twenty-four-hour operations center. It just doesn't do, when a commander has a real problem in the field, to find that he's talking to an answering machine which invites him to call back at nine o'clock on Monday morning. Establishing this twenty-four-hour center will be a significant step in ensuring that military advice is available when wanted. It's important that this center works and is established fully and early for any operation.

Now, areas for growth. We should start work on likely areas for growth and contingency plans for possible U.N. operations of the future. But I'm sure it's important that the U.N. itself doesn't get bogged down writing new manuals and doctrine. There's a great deal already available, and in any case we need to remain flexible. I'm delighted that so many countries, including my own, are supporting the work that is to be done. Next, I think we need to develop our

* Vice Admiral Henry C. Mustin, USN, Retired, who was present as a conference participant and had been Commander Second Fleet and Commander Striking Fleet Atlantic from September 1984 until September 1986.

Chapter VII thinking,* if I may use that shorthand. We've already indicated our interest in this by supporting the work of Dr. Prins' group at Cambridge.‡ Next a word or two on Nato and the WEU.§ Of course the primacy of the United Nations has to be acknowledged, but the Charter allows for, and indeed it encourages, the use of regional organizations. They can fit in with U.N. command arrangements and take onboard non-Nato participants as well. Desert Storm illustrated this very clearly. But we need to draw on Nato's strengths rather than abandon them; make better use of existing structures and use these additionally for training. Nato's expertise is on offer. I frankly believe it's the best show in town, and it shouldn't be rejected. There's also room to develop cooperation further between Nato and, for example, the CSCE countries,# and I would call attention to the recently formed North Atlantic Cooperation Council. Nato procedures, which are very widespread and very well understood, are adaptable to a wider range of users. They're already well known to the Australians, and you can't get much further from the North Atlantic than that. We have adopted the procedure of "de-baptizing" Nato Headquarters and using it as joint headquarters rather than having ad hoc arrangements. We need to play down the problem of universality and play up the importance of effectiveness. We also need to develop exercising and interoperability whenever an opportunity offers.

There are very important possibilities for maritime forces in U.N. peacekeeping operations. They are, in many ways, ideal instruments—easier to deploy, no sovereignty involved, able to poise in international waters. We're already experienced in embargo operations, and I welcome the chance to identify areas where we have expertise and where we can better contribute in the future. But I would add just one word of caution. It might seem sensible to have forces dedicated for potential U.N. operations; you could, at least in theory, pre-equip them and suitably train them and so on. But I don't think that there's any place for standing U.N. army or naval or air squadrons. Surely none of our nations can afford to have such expensive units sitting around waiting to deploy. It's alright to have them cataloged as available, on an if-required basis, as was started in 1990 in response to a U.N. questionnaire. But these valuable men and units

* Chapter VII of the U.N. Charter draws together articles addressing action in response to threats to, and breaches of, the peace, and acts of aggression. The term "Chapter VII" has come to refer collectively to peace-enforcement actions employing military force.

‡ Dr. Gwin Prins is the Director of the Global Security Programme at the University of Cambridge, England. The program is future-oriented and is concerned with identifying threats to the survival of the human race and the existing biosphere. It enjoys international links with a wide range of both military and academic bodies.

§ The Western European Union, established in 1954, comprising Belgium, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom.

The Conference on Security and Cooperation in Europe, founded in 1972, having fifty-two member nations including states of Western, Central, and Eastern Europe, Central Asia, and also the United States and Canada.

must be free to undertake other operational tasks in the meantime. This will have the double benefit of keeping them trained and experienced. The best peacemakers are the troops trained for high-intensity conflict. We must remember that any conflict, even if it starts at the lowest end of the scale, as humanitarian aid, can go high-intensity if things go wrong. We should also remember that the really well-trained troops suitable for high-intensity conflict will provide a much better deterrent than those that are not. Second, I think it is a truism to say that every crisis is different and it requires different types of forces. I agree that some sort of logistics stockpiling could be helpful, but even if you preallocate, say, a regiment of tanks as a standing force just because they were required in the Kuwait crisis, then, probably, they won't be the things that you need the next time.

It's very important that the military side of U.N. operations be successful. The precedents are mixed: Korea, Congo, Iraq, Yugoslavia, the latter still of course not yet decided. But clearly the scope of the operations is expanding, and if the U.N. fails, nations will no longer defer to it and respect it in the way they do at the moment. An important factor in insuring this will be the strengthening of the U.N. military staff, especially in size and capability. I think we must recognize, as I've suggested, that the U.N. can't do it all; it must delegate, and regional organizations are there to be used—currently, especially but not exclusively, Nato.

I believe we need to further refine how we best provide political control of escalatory peacekeeping operations. But military effectiveness must not be blunted. We must address the complex and difficult problem of ROE procedures in U.N. operations, especially at the peacekeeping level. Then, I'd suggest that joint and combined operations can, indeed must, be successful. But experience has shown that these need very good planning, good C^3I, and appropriate training if success is to be achieved. And there's much work to do in these areas. Finally, I suggest we must be careful not to forget the need for good public relations. The public image of the U.N. and of U.N. operations is an effective tool in peacekeeping.

This brings me to conclude on the place of maritime forces in U.N. operations, be they preventive, embargo, peacekeeping, peacemaking, or whatever. The potential is clearly there already. We must now talk through the problems and plan and train for the wide range of likely operations. Crises are often unexpected and develop in unforeseen ways. C^3I is a key function. Our strategy, planning, and training must emphasize flexibility.

Ψ

— II —

Enforcing Sanctions

A Growth Industry

Adam B. Siegel

TWENTY-FOUR HOURS A DAY, day after day, U.S. Navy ships patrol the seas enforcing sanctions against Saddam Hussein's Iraq and against the remains of Yugoslavia. With each passing month, more Navy ships and personnel are added to the rolls of those who have spent their deployments interrogating merchant vessels to determine whether their cargoes comply with UN sanctions. International economic sanctions seem to be a growing element of efforts to contain or punish aggressive actions by pariah nations, and the Navy is likely to see many more of these patrols in coming years.

While the United States had only limited experience with such non-wartime interdiction operations prior to August 1990—and none under UN sanction—there have been many previous cases involving other navies from which to draw insights.[1] Three lessons seem central: first, that ships on patrol may need to use force to enforce sanctions; second, that these ships might need force to protect themselves; and third, that to enforce sanctions successfully, restrictions must apply to all means of entry into the affected nations.

The patrols presently enforcing sanctions against Iraq and Yugoslavia started with observation periods. From the Spanish Civil War to the Persian Gulf in 1990, other patrol operations have also followed this seemingly non-provocative approach.

In the spring of 1937, four European nations undertook an operation amidst the Spanish Civil War that is similar to today's eight-navy Adriatic patrol. These four states (Great Britain, France, Germany, and Italy) instituted a neutrality patrol to help enforce an embargo of arms shipments to either side. The Non-Intervention Committee (NIC), the group of European countries that had agreed on the embargo, had no emblem; thus, the ships flew the pennant of the

Adam Siegel is an analyst at the Center for Naval Analyses in Alexandria, Va., and a Ph.D. candidate in military history at the University of Illinois, Urbana-Champaign. He graduated with highest distinction from the Naval War College in 1990. The views expressed are the author's own.

North Sea Fisheries Commission.[2] The patrol forces had orders to report any merchant ship of an NIC nation that either entered the embargo zone without an NIC observer aboard or that refused to allow itself to be searched.

To be blunt, the neutrality patrol was a farce. Several months into the operation, an NIC report noted that "the naval patrol had been extensively evaded and . . . had not produced results justifying its costs."[3] It did not help matters in the least that two of the patrolling nations, Germany and Italy, were perhaps the worst violators of the non-intervention agreement as they funneled support to Franco.

We should not exaggerate the parallels between the Spanish Civil War and 1993. No one suggests today that any of the nations contributing ships to the patrols are also either contributing weapons to the violence in Yugoslavia or helping Saddam Hussein. Further, the dramatic differences in the world situation contribute to a far different environment—the world today is not caught up in a dramatic confrontation like that between fascism and communism in the 1930s. Despite these differences, important parallels do exist. In 1937, the patrolling ships could only report violators; they had no right to use force to stop questionable ships. Likewise, for months the Adriatic patrol could only report violators of the UN sanctions; only in mid-November 1991, amid general frustration over inability to end the conflict in Bosnia, did the UN vote to allow ships to use force to stop sanction violators. Past operations faced similar decision points. Off Mozambique in the 1960s and in the Middle East in August 1990, merchant vessels ignored patrol ships until the UN voted to authorize the use of force at sea to enforce the respective embargoes. In both cases, doing so led to an immediate improvement in the effectiveness of interdiction.

In the mid-1960s, the Royal Navy patrolled off the Mozambique coast to enforce UN sanctions against Rhodesia.[4] The initial Security Council resolution did not authorize violent means to enforce the sanctions; thus, for six months RN ships could do little but watch tankers enter port. In April 1966, after a particularly egregious case when a Greek tanker on charter to a South African company reached Beira, Mozambique, despite interception by HMS *Plymouth*, the United Kingdom requested that the Security Council authorize the use of force to prevent oil from reaching Rhodesia via Beira. The Council did so, and the oil flow into Beira ended. Royal Navy ships stopped twenty-eight ships over the next two years. The Beira Patrol continued into the 1970s as part of the UN sanctions against Rhodesia. Again, in August 1990, trade with Iraq continued by sea despite UN-imposed sanctions and interception by the U.S. and other navies because the UN had not granted authorization to use force to stop ships that violated the sanctions. On 25 August the UN Security Council granted this authorization, and the navies gathered in the theater soon cut off Iraq, for all practical purposes, from seaborne commerce.

The record seems clear. Embargo patrols are ineffective without the right to use force, if necessary, to stop ships.

Military units on patrol, however, need authorization to use force not only to cut off proscribed trade but also to protect themselves. Operating amidst someone else's war can prove dangerous. From its first days, the Spanish Civil War involved naval operations, and more than once foreign warships found themselves caught up in them. Little more than a month after that war began, an unidentified aircraft attacked the U.S. Navy destroyer *Kane*.[5] The *Kane* was not alone in receiving such attention. In May 1937 Republican aircraft bombed

"The record seems clear. Embargo patrols are ineffective without the right to use force, if necessary, to stop ships."

two neutrality patrol ships (one Italian and one German) in port at anchor and killed thirty-seven sailors.[6] Bombs were not the only threat. That same month, the Royal Navy destroyer *Hunter* struck a mine off Almeira while on NIC patrol.[7] Many other ships had close calls. The Spanish Civil War was not unique in such dangers: four U.S. Navy warships—the *Panay, Liberty, Stark,* and *Roberts*—have been sunk or damaged over the last fifty-five years while operating as neutrals in the middle of a war.[8]

From its inception, the ships on the present Adriatic patrols have faced such risks. For instance, the U.S. Navy cruiser *Biddle* had to warn off Yugoslavian aircraft at least four times in late July 1992. Of course, war threatens not only ships at sea; other naval units, such as patrol aircraft, can encounter serious threats.[9] In short, military units assigned to sanction enforcement do not operate in a benign environment. Just as the affected country will mount political and propagandistic opposition to sanctions, it will entertain the notion of military interference with efforts at sanction enforcement. In addition, in a conflict like that in the former Yugoslavia, combatants might not prove willing or able to identify a flag before shooting at it. Thus ships, like other military units involved in sanction patrols, should always stand ready to use force to defend themselves.

Examination of attempts at sanction enforcement clearly shows that naval patrols alone cannot cut off international commercial links (except for that rare case of an island nation without an airstrip) and so fully enforce sanctions. Neighboring nations must either comply with the sanctions or be subjected to them if restrictions are to have major effect. Reflecting this fact, in 1937 the NIC had land patrols along the Spanish borders with France and Portugal just as it had patrols at sea.[10] On the other hand, despite the success of the Beira Patrol, Portuguese and South African noncompliance with sanctions against Rhodesia doomed them to relative ineffectiveness.[11] Since 1990, Jordanian seaborne commerce has suffered from interdiction and inspection due to that nation's ultimate unwillingness (or inability) to enforce sanctions strictly against

Iraq. As of March 1993, sanctions against Yugoslavia had created difficulties for the average Serbian but had not seriously hindered continued aggression because several other Balkan nations had enforced sanctions lackadaisically at best. Without the cooperation of neighboring nations, enforced or otherwise, effectiveness will remain limited.

The world has found that making sanctions stick is not an easy business; in fact, it is uncertain how effective such economic measures can ever be in imposing policy changes upon resisting regimes.[12] Nevertheless, sanctions are often resorted to as an initial step in responding to some occurrence, such as the Iraqi invasion of Kuwait or Serbian aggression in Bosnia, that is internationally perceived to be a problem. This response mechanism is a reality in international society. Further, just as we can expect economic sanctions to be applied to offenders against international standards, we can expect sanction-busters to seek ways to profit from the situation. Military operations to interdict these profiteers will follow. Thus, the U.S. Navy cannot expect the Adriatic patrols to be the last operation meant to help enforce international economic sanctions.[13]

History suggests three simple thoughts on enforcement. To make sanctions effective, get neighboring nations involved. To make sanction patrols effective, give the ships the right to use force if merchant ships try to break the embargo. And to keep patrolling ships safe, give them the right and have them ready to shoot to defend themselves—because operating in the middle of somebody else's war is a risky business.

Notes

1. U.S. naval forces have conducted interdiction operations—both unilaterally and multilaterally—as part of wartime operations. During the Korean War, for example, eight navies operated with the USN to enforce a blockade of North Korea. See, for example, Malcolm Cagle and Frank A. Manson, *The Sea War in Korea* (Annapolis, Md.: 1957) and J.R. Pellan, Office of the Chief of Naval Operations, *Efficiency of the UN Sea Blockade of the Korean Peninsula*, Operations Evaluation Group no. 447, (LO)697-51, 8 May 1951 (availahle through the Center for Naval Analyses). During the Vietnam War, the Navy was the lead force in "Market Time" operations designed to cut off the flow of arms into South Vietnam. In peacetime, Navy forces have occasionally conducted interdiction operations, typically to cut off some form of arms flow. The Cuban missile crisis "quarantine" is the most prominent example.

2. *The Times* (London), 2 March 1937.

3. *Documents on German Foreign Policy, 1918–1945*, Series D, v. III, editor's note, pp. 436–37.

4. On the Beira Patrol, see Adam B. Siegel, "Naval Forces in Support of International Sanctions: The Beira Patrol," *Naval War College Review*, Autumn 1992, pp. 102–104; F.E.C. Gregory, "The Beira Patrol," *RUSI*, December 1969, pp. 75–77; and James Cable, *Gunboat Diplomacy, 1919–1979*, 2nd ed. (New York: St. Martin's Press, 1981), pp. 123–29.

5. The *Kane* was in the Mediterranean as part of the U.S. Navy effort to evacuate Americans from the Civil War. The attack occurred on 30 August 1936. The *Kane*'s log recorded the incident in part as follows: "At 1610 [4:10 P.M.] unidentified, tri-motored, low black winged monoplane approached ship from stern and dropped 2 bombs which exploded 1000 yards astern. Went to general quarters, and maneuvered on various courses at various speeds to avoid bombs. At 1625 plane returned and dropped 1 bomb, distance of miss 150 yards. At 1626 opened fire on plane with antiaircraft gun, fired 2 rounds. At 1631 plane circled back toward ship, resumed fire on plane with anti-aircraft gun. At 1632 plane dropped 3 bombs which exploded 200 yards abeam to starboard. At 1634 ceased firing, . . . no casualties and apparently no casualties inflicted on plane. At 1645 plane retreated in north easterly direction and disappeared from sight." (Entry for 30 August 1936, Log

Book U.S.S. *Kane*, Jan. 1, 36-Dec. 31, 36, LLL-16, US Department of the Navy, Log Books, U.S. Naval Vessels, Record Group 24, National Archives, Washington, D.C.)

6. Soviet-made and manned SB-2 bombers carried out both attacks: on 26 May 1937, they hit the Italian cruiser *Baleares* in Palma (six killed, three wounded); on the 31st, the German pocket battleship *Deutschsland* at Ibiza (thirty-one killed and seventy-five wounded). For the best discussion of these attacks, see Willard C. Frank, "Misperception and Incidents at Sea: The *Deutschland* and *Leipzig* Crises, 1937," *Naval War College Review*, Spring 1990, pp. 31–46.

7. For a discussion of the mining and the efforts to save the *Hunter*, see Kenneth Edwards, *The Grey Diplomatists* (London: Rich & Cowan, Ltd., 1938), pp. 275–79.

8. See, for example: Joseph F. Bouchard, "Accidents and Crises: *Panay*, *Liberty*, and *Stark*," *Naval War College Review*, Autumn 1988, pp. 87–102.

9. For example, machine-gun fire threatened the four U.S. Marine Corps helicopters conducting search and rescue missions after missiles shot down an Italian relief plane en route to Sarajevo on 3 September 1992. In the initial weeks of those flights, three French airlift aircraft returned from Sarajevo airport with bullet holes in them, and mortar rounds narrowly missed a U.S. Air Force C-130 cargo plane.

10. The land patrols also could not use force. Their effectiveness depended principally on the French and Portuguese attitudes toward sanctions. See J. Bowyer Bell, "The Non-Intervention Committee & the Spanish Civil War," unpublished Ph.D. dissertation, Duke University, Durham, N.C.: 1958, pp. 152–56.

11. See, for example, Johan Galtung, "On the Effects of International Economic Sanctions, with Examples from the Case of Rhodesia," *World Politics*, April 1967, pp. 378–416.

12. See, for example, Gary C. Hufbauer, Jeffrey J. Schott, and Kimberly A. Elliott, *Economic Sanctions Reconsidered: History and Current Policy*, 2nd ed. (Washington, D.C.: Institute for International Economics, 1990).

13. As this issue goes to press, the world community is seriously discussing the impositions of similar sanctions against Haiti, specifically to cut off oil imports.

Ψ

You can only be compassionate on the battlefield if you are operating from a position of strength.

General Walter E. Boomer, USMC
Newport, R.I., 17 June 1993

I shall do nothing in malice. What I deal with is too vast for malicious dealing.

Abraham Lincoln
28 July 1862

BOOK REVIEWS

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

"A Brilliant Blunder"

Cook, Charles. *The Battle of Cape Esperance: Encounter at Guadalcanal.* Annapolis, Md.: Naval Institute Press, 1992. 156pp. $24.95

THIS COMPETENT LITTLE BOOK is a reprint that the Naval Institute Press brought out last year to honor the fiftieth anniversary of one of the most intriguing battles of the Solomons Campaign. This is a rich work because it was written by one who, as a young officer in the USS *Helena*, took part in the battle.

Operations in the Solomons in 1942–43 are probably the most instructive history a naval officer can study today, for they were the archetype of "joint littoral warfare," which is so central to naval planning today. The surface battles were fought in waters surrounded by islands, and the survival of the small ships that fought in them was of less value than the mission to sustain the forces ashore. As others have, Cook describes for us how the Japanese were compelled to reinforce their troops on Guadalcanal at night and the Americans to do the same thing during daytime, because our aircraft from Henderson Field dominated the Solomon Island chain in daylight hours, while at night their warships ruled. It was in the dark that the Japanese goblins did their mischief: we called them the "Tokyo Express" when they roared in to wreak havoc on land and sea. Cook has a neat phrase for the way the reinforcements had to be brought to Guadalcanal: "The methods used by both sides were those of blockade-runners."

Starting with Cape Esperance, our American ghost-busters tried to derail the Tokyo Express, but the Japanese were the experts and we were the amateurs in night littoral warfare, and it took us a while to adapt to this new form of naval combat. I wonder how soon we will see similar covert deliveries of vital cargoes, and also inshore combat sweeps with "minor" surface forces exploiting low-observable technology, with heavy losses on both sides to the modern missiles that

will play the brutal, abrupt, decisive role played fifty years ago by torpedoes. I cannot but believe this is ancient history that we will suffer again.

The best books on naval tactics have been written by naval officers. The participants are the ones who can put you in the battle, living what they saw and felt: determination amidst confusion; a clutch of fear, but principally a full shot of adrenalin; and (especially during the first blood-letting for nearly all Americans) a sort of innocence, born of ignorance. Cook is vivid with his word-pictures. You can almost smell the jungle a few miles to port and starboard, see the cloud cover that blackened the seas, and feel the torrential rain that messed up both radar and visual acuity. Cook puts you in the cockpit of the scout plane that burst into flame right off the *Salt Lake City*'s catapult and the rubber raft of the aircrew as, long after the fighting was over, they struggled to survive. He shows what a night battle is like: a few ear-splitting minutes of fire, a momentary crash when shells or a torpedo explode into the hull, and then hours of the hardest work imaginable while trying to keep a battered hull afloat.

To reconstruct the action, Cook fairly takes the battle reports and investigation as fact. His postmortem corresponds with the consensus: the battle was for the U.S. Navy a missed opportunity to obliterate an enemy. It was a greater embarrassment for the Japanese, who were totally surprised and unprepared—a rare occasion indeed. Cook will lead you through the often startling events that raced in front of the minds of Rear Admiral Norman Scott and his nine commanding officers. He does not stint to tell you of ships seen to blow up, their propellers twirling in the air, where on reconstruction no ship could have been, or of a ship that never seems to have existed, despite more than one on the bridge of the flagship *San Francisco* who saw her pass close aboard from starboard to port.

The battle of Cape Esperance was the first surface engagement after the American debacle of Savo Island, which Scott had viewed from an unengaged vantage point. At Cape Esperance the cruiser *Helena* detected the Japanese at fourteen miles. But due to a few devilish misunderstandings, the Japanese were at less than three miles when she opened fire; as he waited anxiously, an ensign in the *Helena* asked, "Do we plan to board them ?!" And when the *Helena* finally opened fire it was a "mistake"—well, a mistake in Scott's mind at least, as he stood on his bridge trying to make sense of a situation he was supposed to command.

I must leave the complex of circumstances that led to a near-boarding situation for the instructive study of the book. The battle is pure bounty in revealing to us what not to do. I say this having the same sympathy with which Cook puts us in the battle—for Scott, for Captain Hoover of the *Helena*, and the rest of the ship captains, all competent tacticians thrust into circumstances for which they were untrained and unprepared. Furthermore, *it would happen again*, until the end of 1942, when we put behind us the leisurely experience of prewar tactical

wargaming at the Naval War College. In 1943, the likes of Stanton "Tip" Merrill, Frederick Moosbrugger, and Arleigh Burke saw how the new environment called for new tactics that would marry our radar advantage over the enemy with torpedo salvoes, and then stole time to train up for night fighting at six-hundred-yard intervals and thirty knots through the water.

The story of how it came to pass that the entire American column, including Scott's flagship, would open fire as a stunning surprise for the officer in tactical command is so delicious that it is worth recounting. And the story is still timely because in some perverse fashion it will happen again, even with—perhaps because of—all the paraphernalia of modern communications. It is a lesson not to be lost on any officer, junior and senior, in the fleet today. In late 1942, the power of control by voice radio (TBS) was grasped, but some procedural bugs were big enough to bite back. One in general was the lack of voice discipline. In particular, there was an ambiguity over the letter *R*, phonetically pronounced "roger." The word "roger" indicated receipt of a signal, but in the *General Signal Book* the letter *R* also meant "commence firing." As the Japanese rushed toward Scott's force, most of his ships picked them up and locked on with fire control radar. Scott, meanwhile, had ample contact reports but was fearful that the contacts were two or three of his own destroyers and held his fire, even as the Japanese thundered to within six thousand yards. By then Hoover in the *Helena* knew that something was amiss in the flagship. On TBS he sent "Interrogatory roger" along with a specific request for acknowledgement—for a "roger." He was requesting permission to open fire. Scott's staff "rogered," meaning "We got it." However, in less than sixty seconds Hoover repeated "Interrogatory roger," skipping the request for acknowledgement. The flag automatically "rogered" again.

I like to think that Hoover knew exactly what he was doing and took advantage of the ambiguity. As Cook describes it: "At once the night erupted in explosions! Scott looked aft in astonishment. Bright flashes were leaping from the starboard side of the column. . . . Then suddenly a blinding light smote Scott's eyes and a deafening concussion slapped his face and left his ears ringing wildly. *San Francisco* had opened fire! For a moment someone else seemed to be in command of Task Group 64.2."

Happily for the Americans, Rear Admiral Goto, the Japanese tactical commander, was even more astonished than Scott, and paid with his life. His ships, in short columns abreast, pivoted and fled, throwing a few torpedoes and shells over the shoulder. American torpedoes, which offered the best chance for doing damage, though we didn't know it yet—in fact did no damage. What might have been revenge for the Battle of Savo Island was instead a modest victory and a tactical mess.

We learned many lessons, but their effect was muted because we thought we had done more damage to the enemy than we had. One side-benefit of our

falsely optimistic assessment of damage to the Japanese was this: it restored the U.S. Navy's morale that had been deeply depressed by Savo Island.

Captain Hoover won the Navy Cross, but the citation made no mention that he had opened fire without authorization. It was a brilliant blunder.

Wayne Hughes
Captain, U.S. Navy, Ret.
Monterey, California

Warner, Denis; Warner, Peggy; with Seno, Sadao. *Disaster in the Pacific: New Light on the Battle of Savo Island.* Annapolis, Md.: Naval Institute Press, 1992. 298pp. $26.95

In the early hours of 9 August 1942, a Japanese cruiser-destroyer group attacked and defeated a numerically superior force of American and Australian units that had provided cover for the Allied landings in the Solomon Islands. The Japanese success was a deep shock to the Allied navies, who had underestimated both the Imperial Japanese Navy's (IJN) proficiency at night fighting and its willingness to take risks to achieve tactical surprise. Misjudgments over threat assessments, a lack of group tactical training (particularly in night fighting), and the weariness amongst personnel resulting from many days spent closed-up in action stations had made the Allied ships vulnerable. In the course of the battle, four heavy cruisers were sunk and other units were damaged by the Japanese with little loss to themselves.

Several areas of controversy still remain in the wake of the action off Savo Island, and Denis and Peggy Warner have attempted to produce a comprehensive treatment of that action and settle the points in dispute. Their narrative focuses particularly on the warning given to the naval forces by the Royal Australian Air Force (RAAF) Hudson reconnaissance bomber scouting aircraft, who have been accused of failing to pass to the proper commands, and with the appropriate priority, the sighting reports of the Japanese forces they had made the previous day.

The Warners have devoted considerable space to the activities of the Hudsons. Their narratives of this element and of the battle proper indicate lengthy research of the battle reports and a clear intent to let the witnesses to the action speak clear. Their laudable inclusion of the Japanese element, with the help of Commander Sadao Seno, is further evidence of their attempt to provide a complete record.

Disaster in the Pacific, however, suffers from structural problems that seem to be the result of inadequate

editorial supervision and the lack of a sufficiently profound understanding of naval warfare. The introduction attempts to treat the core of the battle *in medias res*, which establishes the pattern of an episodic approach that is sometimes disjointed and often repetitious. Furthermore, the wholesale recital of firsthand accounts of the battle only increases the impression of discontinuity, and the jumble of terminology and timings makes the narrative difficult to follow.

It is far from easy to marry the accounts of men from four navies (if one includes the British personnel present) into a coherent whole when discussing the progress of a desperately confused battle—but more could have been done. The Japanese component, in particular, would have benefited greatly from revision to help cast the narrative and the reported conversations into terms less artificial (and superficial) to a Western eye. In both this area and in that of maps, there are signs of undue haste on the part of the publishers. Old Japanese and Australian charts have been reproduced instead of newly drawn syntheses of the judgments reached by the Warners.

The Warners' attempt to provide the "last word" on the battle is unsuccessful for reasons that call into question their rationale for reassessments of the operational and tactical aspects of the Second World War at sea. Their understanding of and sympathy with the problems of the high command, and their equal interest in the sailor at the gun, are not duplicated in the operational aspects. Much, for example, is made of the Royal Australian Navy's (RAN) distrust of the professionalism of RAAF aircraft and the value of their reports, but there is little discussion of the difficulties that existed when trying to identify ships at sea from the air. Nor is there much discussion about the lack of formal training in maritime work for the RAAF, or about the very chequered record of all reconnaissance aircraft (of whatever service) in the harsh environment of war from 1939 onward. Similarly, the authors' inclusion of the signals intelligence element does not give sufficient space to the problems of using information derived from sources of this nature. The Allies were certainly able to build up a fairly complete picture of Japanese warship dispositions, but examination of the daily summaries (this reviewer has read those in the Layton collection at the Naval War College) shows that it remained incomplete. Signal intelligence was better at indicating trends than details, and it could only be a small element in assessing the likelihood of surface intervention in the Guadalcanal operation.

Errors such as the underestimation of Japanese night-fighting techniques are criticised in hindsight without any indication of possible plausible reasons.

Too, other criticisms are made without sufficient consideration of the alternatives. The Allied dispositions are decried because of how they divided the available strength. Concentration of force is indeed the key

to night fighting, but the extent to which that force can be concentrated is a function of the visibility and of the ability of the units concerned to communicate effectively. The difficulties of command at night increase exponentially as the number of ships increases.

Much is said about the failure of radar, but the authors offer little space to its contemporary deficiencies or to the possible variants in radar fits. *Canberra* had recently been fitted with Type 271 radar—but of what mark? Did she have automatic aerial rotation, or was this done by hand? Had *Canberra* been fitted with a Plan Position Indicator (PPI) display? Had any USN ships? What types of radar did the Americans carry? The authors do mention that *Canberra* made a detection at sixty thousand yards, but the context is unclear. Was this the detection of the Japanese force itself or had it been a "best case" detection of known Allied units earlier in the day? The questions run on.

This is not to say that *Disaster in the Pacific* neglects to make some good points. The lack of "battle mindedness," of which Rear Admiral Richard Kelly Turner, USN, later complained, was the real, final cause of the Allied failure and is especially well illustrated by the mass of survivors' testimony and the progress of events they retail. The point is that to attempt a "new look" at the Second World War at sea, if it is to produce anything of value, requires considerable technical and tactical expertise as well as the exhaustive research efforts made by the authors. The weight of material on the 1939-45 naval war awaiting treatment is considerable, both inside and outside official archives. However, it can only be offered as useful evidence when it has been examined in context.

In a historiographic sense, context is created by the deep understanding that can only result from a long and profound acquaintance with the mechanics of the subject under examination. If the value of *Disaster in the Pacific* as a new publication is judged by the extent that it enhances our understanding of the events at Savo, it fails the test.

JAMES GOLDRICK
Commander, Royal Australian Navy
RAN Surface Warfare School
HMAS *Watson*

Feifer, George. Tennozan: *The Battle of Okinawa and the Atomic Bomb.* New York: Ticknor & Fields, 1992. 622pp. $29.95

George Feifer tells us that *tennozan* means a single battle on which a ruler stakes his fate. This book then is misnamed. The battle for Okinawa, from April to June 1945, did not decide the outcome of World War II, nor the fate of either Japan or the United States. It was a horrendous mass killing, but both the battle and the American victory there were inevitable. Okinawa was one more giant step in the stepping-stone strategy that required American Marines and soldiers to assault and seize a seemingly endless string of Pacific islands, which

the Japanese army had fortified and defended to the death. This strategy was to lead to the invasion of the Japanese home islands, which would be, predictably, the most horrendous blood-letting of them all.

If the fierce battle on Okinawa, 350 miles from the home islands, cannot be called decisive, then perhaps the naval battle off its shores against 1,900 suicidal Japanese kamikazes can, for it crushed Japan's air power. The battle of Okinawa was the most massive of the Pacific war (548,000 Americans took part) with the greatest number of casualties (75,000 Americans alone).

This book's strength is in its descriptions of the daily life and attitudes, the fears and atrocities, of the soldiers on both sides during the eighty-two days of the battle. Probably nowhere else in the literature of warfare are there so many descriptions of defecation under combat conditions and the fear of soldiers losing their testicles.

The book also portrays the tragic fate of the tens of thousands of Okinawan civilians who were caught between those two monstrous military forces. The author is quite excited about his discovery that war is hell.

For the professional reader, the battle and the book treat in varying degrees of depth and clarity three major military issues.

First, the Japanese leaders' decision not to defend Okinawa on the beaches as they had done on Iwo Jima and Tarawa, but inland and in depth. Lieutenant General Mitsuru Ushijima, commander of the Thirty-Second Army, had no hope of driving the invaders back into the sea. His mission was to dig in, hold out, give the kamikazes time to destroy the fleet offshore (they sank 36 ships and damaged 368 more), and disrupt the invasion of Japan. He executed his mission superbly.

Second, the American decision to bull straight ahead down the width of the island (and not bypass the Shuri Line defenses with the kind of flanking landing that MacArthur would try so successfully in Korea at Inchon). As there was on Saipan, this was an Army versus Marine Corps disagreement. Marine Commandant General Alexander A. Vandegrift and Marine Major General Roy S. Geiger, commander of the III Amphibious Corps on Okinawa, tried to convince Army Lieutenant General Simon B. Buckner, Jr., commander of the U.S. Tenth Army, to land the 2d Marine Division behind the enemy. However, Buckner had Anzio in his mind and slogged ahead, playing Ushijima's costly game. He executed his mission appallingly.

Third, the necessity and morality of the decision to drop the atomic bombs on Hiroshima and Nagasaki. Feifer takes the minority view that the bombs saved more lives than they destroyed because they persuaded the Japanese to surrender without an American invasion. Most American veterans of the Pacific war would agree. The bombs certainly made the deaths and casualties on Okinawa pointless.

Although the author often writes as though he had marbles in his mouth and piles on the horrors of combat until one's eyes glaze over, this is a powerful book that offers post–World War II generations a clue about what combat in that war was like. This work has been criticized for focusing its attention and anecdotes on the 6th Marine Division alone, but even limited to that part of the battle it is more than long enough.

For anyone who wants to smell and sense the battle of the "grunts," this is an important book that raises difficult questions about why U.S. commanders kept throwing American lives at the already isolated and beaten Japanese.

J. ROBERT MOSKIN
Author of *The U.S. Marine Corps Story*

Fuchida, Mitsuo and Okumiya, Masatake. *Midway: The Battle that Doomed Japan, The Japanese Navy's Story*. Annapolis, Md.: Naval Institute Press, 1992. 307pp. $29.95

Lord, Walter. *Incredible Victory*. New York: Harper Collins, 1993. 331pp. $12

Fifty years after the event, the Battle of Midway remains undiminished in its importance to the outcome of the Second World War, and its influence on the course of the Pacific War. Much has been written since these two books were first published, yet they too remained undiminished as classic works on the battle, its import, and its participants.

For the first six months of the Pacific War the Imperial Japanese Navy cut a swath through all opposition, easily rolling up victory after victory. The first setback to the Japanese advance occurred at the Battle of the Coral Sea in early May 1942, when the first carrier versus carrier battle was fought and the American forces succeeded in turning back the intended Japanese assault on Port Moresby. Japan's premier naval strategist, Admiral Yamamoto, was convinced that Japan's only hope for success against the industrial might of the United States in a protracted war rested in luring the American Fleet into a decisive battle of annihilation prior to the effective mobilization of American industry.

Yamamoto selected aptly named Midway Island as the critical strategic base in whose defense the American Pacific Fleet must sortie and engage in battle; however, the United States Navy had broken the Japanese naval codes and was privy to almost all of Yamamoto's operational plans. In the early days of June 1942, two fleets converged on the tiny atoll in mid-Pacific. The Japanese were completely confident in the quality of their machines and their warriors. They had rolled unchecked through all Allied opposition in the Pacific and Indian Oceans since the outbreak of the war, and they vastly outnumbered their adversary. The Americans nonetheless scraped together every ship and airplane available and sortied to lie in ambush northeast of Midway.

Each of these superb works describes the battle from widely different points of view. *Midway* is a serious and unstinting analysis of the Japanese planning for, and operations during, the battle by two professional career officers of the Imperial Japanese Navy. *Incredible Victory* is a spellbinding narrative crafted from the human impressions of the participants on both sides. Read in concert, each book enhances the other.

Walter Lord mastered in his earlier works on the sinking of the *Titanic* and the attack on Pearl Harbor the technique of weaving together the simultaneous tales of numerous eyewitnesses into a coherent and informative narrative. He is unequalled in his talent for developing a story through eyewitness accounts; as he makes history come alive and gives his reader the sights, sounds, and smells of history unfolding, along with wonder, fear, determination, comprehension, and confusion of the participants.

Both books are tales of courage, and participants on both sides noted with grudging awe the relentlessness and intensity with which enemy aircrews pressed their attacks.

Lord interviewed over four hundred veterans of the battle from both sides, setting their actions against the background of unfolding events so that he could tell history in very human terms. *Incredible Victory* remains the best popular history of this epic battle, and its collection of personal vignettes provides its great attraction to both the general reader and the serious naval historian.

Fuchida and Okumiya both participated in the battle. Fuchida was the senior flight commander for the First Air Fleet but was sidelined at Midway with appendicitis. Okumiyo served in the light carrier *Ryujo* in the Aleutians phase of the operation. Both are particularly well qualified to research and write on the battle; each had an almost unique access to Japanese navy records of the war and its aftermath.

The authors scrupulously examine the Japanese planning and execution of the Midway attack. The key flaws are identified as: a lack of centralized command and control; failure to concentrate forces; failure to conduct an effective reconnaissance of the battle space; and a lack of flexibility in the planning and conduct of operations. They also note that the leadership of the Imperial Japanese Navy had still not recognized the transition of capital ship status from the battleship to the aircraft carrier, and that overconfidence and arrogance following the remarkable series of successes since Pearl Harbor permeated all levels of the navy. The Japanese greatly underestimated the cunning, ingenuity, and courage of their American adversary.

These two classics remain must-read books for any reader interested in this epic naval battle. As Thomas B. Buell notes in his introduction to this edition, *Midway* is "still the best book generally available to Western readers on the Japanese view of the battle."

JOHN J. DOYLE
Commander, U.S. Navy
Naval War College

Vaeth, J. Gordon. *Blimps and U-Boats: U.S. Navy Airships in the Battle of the Atlantic.* Annapolis, Md.: Naval Institute Press, 1992. 205pp. $34.95

Blimps—those great charming gas bags in the sky—are said to have been named from the sound made when someone flicked a finger against the side of one: *blimp*! Even if only apocryphal, the anecdote suits the subject.

Before the Second World War the U.S. Navy had some experience with both blimps and their larger cousins the airships, but little enthusiasm was generated. Blimps suffered in the shadow of the airships such as the *Macon*, *Akron*, and *Shenandoah*. However, because blimps had no internal frame and therefore could better endure ugly weather than the rigid airships, they ultimately proved to be far less disaster-prone.

When the U-boat campaign Operation *Paukenschlag* (Drumbeat) opened along the Atlantic coast in early 1942, only one squadron of blimps, stationed at Lakehurst, New Jersey, was available for antisubmarine patrol and convoy escort. It was initially equipped with machine guns and depth charges, but its armament gradually improved as the war progressed, to include radar, magnetic anomaly detection, and sonobuoys.

By the end of 1943, the blimps were patrolling out of bases from Maine to Brazil, and in 1944 blimp squadrons flew across the Atlantic (making the first ever transatlantic flight by blimps) to North Africa and southern Europe. By the end of the war, eleven antisubmarine blimp squadrons were operating in the western Atlantic and in the Mediterranean.

Although blimps dropped depth charges on many promising contacts, there is no firm evidence to suggest that blimps alone sank any German submarines (sunken submarines are rarely able to point a finger at their predators). However, the author does cite direct evidence that the presence of a blimp over a convoy often discouraged submarine attacks. One blimp, the *K-74*, was lost in a running gun battle with the *U-134*.

In addition to classic antisubmarine warfare, blimps performed many varied and valuable services by capitalizing on their endurance and ability almost to hover. Before the advent of the helicopter, blimps were splendid rescue platforms that located and saved many torpedoed seamen and downed aircrew in the Atlantic theater. In Europe blimps proved useful as mine-spotting platforms.

J. Gordon Vaeth was an air intelligence officer with blimps during the war. He has provided a comprehensive history of the development and use of blimps during the zenith of their service in the Navy. He offers a wealth of specific operational detail, along with some splendid anecdotes.

Perhaps due to a lack of platform sponsorship in the Navy's warfare community structure, blimps have not found a place in the modern Navy. While they can perform a number of aeronautically interesting things, there is no single one that they

do uniquely, no mission or role that cannot also be performed by an existing platform—such as patrol aircraft, that can cover more area faster, or helicopters, that can hover better.

Whatever the reason, the departure of blimps from the naval scene is regrettable, for a blimp is a delightful thing. Flying on the principles of Archimedes rather than Bernoulli, they are graceful creatures that never fail to draw the eye, delight the imagination, and stir the heart.

FRANK C. MAHNCKE
Norfolk, Virginia

George, James L. *The U.S. Navy in the 1990s: Alternatives for Action.* Annapolis, Md.: Naval Institute Press, 1992. 246pp. $18.95

"You've got to air creative ideas, no matter how controversial. You've got to innovate. You've got to see old and new problems with a fresh view, and a steady eye on the process of learning the lessons of the past, be it recent or further back, for the fleet that will sail into the future." This provocative quote is from the address of the former Secretary of the Navy, J. Lawrence Garrett III, to the 1990 Sea Power Forum. James L. George does exactly what Garrett called for—he airs creative ideas, no matter how controversial.

James George is an internationally known analyst of naval affairs and arms control, a former member of both the legislative and executive branches of government in the field of national security affairs, and a widely respected author. He has a *cachet* that many in the profession can never hope to obtain—respectability and a platform from which to espouse ideas that would be considered heretical from a lesser source.

George disparages the current and projected Navy building program as "less of the same," and he waves a red flag at the current Navy leadership. He refers to the current period as a new "interwar period," one which lacks the leadership that led in the past to Navy brilliance. Using the past as an analytical guide, the author demonstrates that although from many perspectives the three previous interwar periods (between World Wars I and II, World War II and the Korean War, and from the Vietnam War to the Reagan buildup) were perceived as disastrous for the Navy, they were actually times of progress and imagination in which the seeds of naval success in the next war were sown by imaginative mavericks who challenged traditional naval parochialism.

Acting precisely as did the mavericks he cites, George uses two central themes to illustrate the crossroads at which the Navy is poised. First, he discusses the lack of coherent and realistic mission analysis (a strategist's term known to military planners as force planning), which he insists is the basis for everything else. George shows that in the radically altered international environment in which the Navy must operate, the strategic patterns of the past simply do

not fit. Writing before publication of the new maritime concept ". . . From the Sea," which focuses on littoral warfare, George suggests that no new ground has been broken with the proposals for restructuring the Navy. He postulates, with insightful analysis, an entire nuclear deterrent force at sea, the Navy as the primary U.S. force in Nato with SacLant emerging as the senior U.S. officer in the alliance, and the U.S. Navy as the primary force to deal with trouble in the Third World. It is clear that he views the Navy as the only logical force of choice in many situations.

The second alternative to the current and programmed naval force structure is lengthy and detailed, and it is the meat of the book. Much of his argument is controversial, but all of it is thoughtful, well reasoned, clear, and concise. The author discusses mission analysis as a crucial first step, but eventually the issue becomes the forces: type, quantity, and building plans—including research and development, new deployment concepts, the role of the reserves, and reconstitution should the interwar period end. In each area George offers alternatives to prevalent naval thought, some of which have already been adopted, some certainly under consideration, and others that are guaranteed to raise the hackles of some segment of the Navy.

Now that he has raised the communal blood pressure, George slices a vein of Navy blue with his rapid-fire conclusion that lists the perils of the "less of the same" course: decreasing numbers, erosion of the industrial-reconstitution base, a focus on yesterday's mission requirements, a squeeze on future programs, the tendency to try to make a silk purse out of a sow's ear (attempting to push the wrong program for the wrong mission), increased deployment requirements, morale problems, Goldwater-Nichols, parochialism, shooting the messenger, congressional interference, arms control, and personnel problems.

The U.S. Navy in the 1990s is a *tour de force*, written by a man who has spent much of his life thinking about the Navy and its role in national security. No matter what one thinks of his proposals, James George cannot be ignored. This book will make waves. It should be required reading for everyone in Washington.

WILLIAM F. HICKMAN
Captain, U.S. Navy
Northwood, England

Brown, David K. *Future British Surface Fleet: Options for Medium Sized Navies*. London: Conway Maritime Press and Annapolis, Md.: Naval Institute Press, 1991. 190pp. $34.95

The title of this work is rather misleading, until the book is read. Thereafter, one would find it difficult to compose ten more suitable words as a precis of its contents. David Brown's slim book, which runs well under two hundred pages, satisfies not one but three schools of interest. Firstly, for those expecting grand strategy, the book both devotes a chapter to the

subject and draws on this discipline frequently. Secondly, for those wishing to draw on succinct engineering statements, or learn of the technology of warship construction and armament, nearly half of the contents will assuage their thirst for knowledge. Lastly, for those whose source of enjoyment is crystal-ball gazing, there is much on which to speculate.

The diversity of this short and well illustrated work is both its strength and its weakness. The specialist in either strategy, technology, or long-term planning will rue the lack of detail. However, the naval enthusiast, with a wider brief, will applaud the author for both satisfying his curiosity and educating him about all the disciplines that go into the art of building and operating a modern warship. But do not expect a bland "party line" exposition. Far from it. Be prepared to disagree with any number of the author's theories, and in the fast-changing world in which we live, who is to say he is wrong?

David Brown has all the right qualifications to offer as an authority in his field. He spent his whole career in the design of warships and in associated research, retiring in 1988 as the Deputy Chief Naval Architect. He brings his wide experience to his public in both a digestible and informative style—never blinding the reader with technology, yet never insulting the intelligence of those with some knowledge of the subject.

However, the book is not without its faults. Largely conceived in 1988, it was first published in Great Britain in 1991, so much of the strategic thought centers on the Soviet Union as the major threat. Although the author recognises that times have changed, the frequent references to the West's old adversary, and how tomorrow's navy should be designed to counter it, are somewhat annoying. His words are, no doubt, music to the ears of those who say that antisubmarine warfare and the convoy system are not dead, and he draws on the thoughts of Admiral of the Fleet Vladimir Chernavin (until recently commander-in-chief of the Russian, and before that the Soviet, navy) to support his premise that little has changed.

One of David Brown's main themes is the need to maximise the number of organic aircraft at sea. Whether he really believes in a strategic necessity for this capability is not clear, but he succeeds in satisfying another strong naval lobby, although his projections suffer from undue adherence to this strategy. There is also a tendency in his writing to extol the virtues of one philosophy or design, only to contradict later his own arguments. Again, this is both a strength and a weakness. A wide range of propositions are made and left open-ended, leaving one to make up one's own mind.

The book does arrive at a number of conclusions, all drawn under the umbrella of the problems of the "conflicts between resources and commitments and between quality and quantity." Brown has written a valuable work, and, on

his own admission, has "stirred the pot with vigour." The reader can be forgiven for feeling rather punch-drunk when finished reading the book. Controversy, innovative thought, and not a little bias drip from every page. Tomorrow's Royal Navy would benefit enormously if this book were made required reading for the operational requirements fraternity and for those who hold the purse strings. For the remainder of us, one needs look no further to be educated, exasperated, and stimulated. All for much less than the cost of a theatre ticket.

ANDREW FORSYTH
Commander, Royal Navy
Naval War College

Tower, John G.; Brown, James; and Cheek, William K., eds. *Verification: The Key to Arms Control in the 1990s.* McLean, Va.: Brassey's (US), 1992. 243pp. $32

Blechman, Barry M., et al. *Naval Arms Control: A Strategic Assessment.* New York: St. Martin's, 1991. 268pp. $45

These two books complement each other. Unfortunately, both were written before the extent of the collapse of the Soviet Union was appreciated. Therefore, each book has a distinctly "Cold War" flavor. One could almost draw the inference that the subject of arms control needs the dominating presence of the Soviet Union to be of interest. However, a moment's reflection puts that idea to rest. This review, then, concentrates on the aspects of both books that offer an illumination of the arms control environment in a multipolar world marked by regional interest to the United States and by intractable disputes among the indigenous populations.

The authors of each book are distinguished in the arms control field. James Brown is the principal editor of *Verification*, which contains a number of essays by individuals at universities and national security "think tanks." Barry Blechman is the senior author of *Naval Arms Control*, in which each of the four authors contributed major sections. This reviewer found the two articles written by Cathleen S. Fisher, "Controlling High-Risk U.S. and Soviet Naval Operations" and "Limiting Nuclear Weapons at Sea," to be particularly valuable, as was William J. Durch's compilation of U.S.-Soviet maritime incidents in his article, "Things That Go Bump in the Bight: Assessing Maritime Incidents, 1972–1989." *Naval Arms Control* does not address regional security explicitly, and it only indirectly notes that other countries had at-sea nuclear capabilities that presumably had to be figured into the calculus of arms limitations. In the lead article, "Geopolitics, U.S. Interests, and Naval Arms Control," Barry Blechman has detailed the asymmetric roles of the U.S. Navy and that of the former Soviet Union. Without the Soviet Union there is only the (disquieting) existence of a residual naval nuclear arsenal in parts of that region, and potential naval nuclear

arsenals in Germany, Japan, and mainland China. However, the implications of these regional naval powers are largely ignored.

The principal value of this book is in the explanations it offers for the attempts at naval arms control just prior to the breakup of the Soviet Union.

Verification contains more material on the post–Cold War world and a complete set of contributed papers that are arranged as follows: "Politics of Verification," "A Multilateral Perspective," "Issues of Compliance," and "The Chemical and Biological Conundrum."

A section of the paper by Mark M. Lowenthal, "The Politics of Verification: What's New, What's Not," calls attention to the potential of the verification issue to be politically disruptive for reasons wholly extraneous to arms control itself. Maria R. Alongi in her essay "Verification and Congress: What Role for Politics?" cites ideological polarization as well as the fragile nature of the trust underlying arrangements that are subject to willful or accidental violation.

The viewpoints held regarding verification are concisely summarized by Charles A. Appleby and John C. Baker in their informative article, "Verification and Mobile Missiles: Deterrence, Detection, or Assurance?" Although it is directly concerned with aspects of the nuclear threat, it seems that its observations are pertinent and applicable to the chemical and biological threats, or even the rapidly proliferating mine warfare threat.

In case anyone is so naive as to think that on-site inspection for nuclear weapons activity (or anything else) is easy, George L. Rueckert's article, "Managing On-Site Inspections: Initial Experience and Future Challenges," will dispel the notion. Are his comments pertinent to the problem of inspection for chemical and biological weapons production? Possibly from a structural standpoint the U.S.-Soviet nuclear weapons inspection protocols provide a model, but there the similarity ends. Policing chemical or biological arsenals will be more intrusive and more easily prevented, as Charles C. Flowerree points out in his article, "Verification of Chemical and Biological Weapons: Lessons Learned," which is located in the last section of the book.

On page 220, Joseph O. Burke outlines what he refers to as the final task for security specialists. He calls for the development of a deterrence theory that matches the political environment, multiple conflicts, and historical background of the Middle East. This challenge appears in his paper, "The Impact of the Proliferation of Ballistic Missiles."

If the contents of the books reviewed here are an example of the state of knowledge on deterrence and arms control in these regional environments, then public and private institutions should address the challenge on an urgent basis. There is no dearth of opportunity for such work. The Balkans, the Indian subcontinent,

Indochina, northeast Asia, and Central Africa offer existing laboratories.

In conclusion, this reviewer wishes to ask editors and authors of this subject for relief from the barrage of acronyms and initials that seem to be worse in this field of study than in the purely military fields. In each book some of the articles, or parts thereof, are nearly unintelligible, difficult to read and comprehend because of the excess "alphabet soup."

Neither book is inexpensive. Neither speaks directly to the national security problems of the future, but both are quite informative about the arms control environment in the epoch that is just ending.

The professional who is interested in arms control and verification might want to note the titles and the names of the editors and authors. Some of them may well become involved in meeting the challenge uttered by Joseph G. Burke.

ALBERT M. BOTTOMS
Charlottesville, Virginia

Kaufman, Robert Gordon. *Arms Control during the Pre-Nuclear Era: The United States and Naval Limitation between the Two World Wars.* New York: Columbia Univ. Press, 1990. 269pp. (No price given)

This excellent book gives us what we have needed: a clear analysis of the great effort and ultimate failure to control naval arms in the 1920s and 1930s. Each time, statesmen viewed ships not as weapons for combat but as instruments of power to be bargained away. Ships were to be sunk at the table. Kaufman, who was a recent Secretary of the Navy Research Fellow at the Naval War College and is presently a professor at the University of Vermont, guides us through the meaning and paradoxes of this process.

The American view was that barring an arms race, no war was likely. That view was translated into various forms of naval arms limitation through policy judgments, strategic doctrines, and budgetary decisions, as well as formal agreements themselves.

The process was interactive. The treaties encouraged antinaval sentiment that placed additional limits on innovations in doctrine and technology and reinforced the reluctance by Congress toward a naval buildup, even to treaty limits. It is a wonder, as Thomas Hone has shown in a number of pioneering articles, that the U.S. Navy integrated as much as it did of aviation and new design. Within limits, which Kaufman shows to be broadly political, the professionals in charge of the "Treaty Navy"—their own efforts under tight constraints—did pretty well in preparedness, although for what they were never told.

The first lesson of making and breaking treaties is their contingent nature and the enduring primacy of politics. Arms control comes from self-restraint, not the other way around. Arms control failed when the will to maintain it disappeared.

Kaufman shows how arms control, either by formal limits or self-imposed reduction in spending, adversely influenced U.S. foreign policy when statesmen let a gap open between ends and means. The commitment in 1922 to the Open Door was vitiated by the naval treaties that made it impossible to enforce the policy.

Success depended on the self-restraint of the key Asian states, on moderates remaining in power in Tokyo, and on China remaining politically stable. When the moderates were replaced and China descended into chaos, the naval settlement collapsed.

High hopes were not enough. Nor were the agreements, which were mere instruments. What was required for arms limitation in the 1920s and 1930s was a supporting international environment, based on domestic approval. That, not words on parchment or even verification procedures, was on what the treaties depended on, and by 1936 it was gone. Ships sunk at the table had to be rebuilt, so an arms race began again.

GEORGE BAER
Naval War College

Blow, Michael. *A Ship to Remember: The* Maine *and the Spanish-American War.* New York: William Morrow, 1992. 496pp. $28

Michael Blow offers a general history of the war with Spain in 1898, emphasizing the history of the battleship *Maine.* His grandfather served in the ill-fated man-of-war. He relies on a selection of well known published sources and authorities. The result is a general history that provides a stimulating narrative of interest primarily to those with little prior knowledge of the subject. Curiously, the author largely ignores interpretations that have come to the fore in recent years, which revise the story considerably. The international context of the war and its diplomacy, recently explored definitively in John Offner's *An Unwanted War: The Diplomacy of the United States & Spain over Cuba, 1895–1898* (1992), received little attention. Nothing of importance is added to the story of the *Maine.* The author considers the Hanson-Price study, which was commissioned by Admiral Hyman Rickover and concluded that an accidental explosion of internal origin sank the vessel, as "conjectural and inconclusive." He seems inclined toward the old view that a mine may have been exploded under the keel, although he does not specify the culprit. He approvingly quotes Theodore Roosevelt's observation that the perpetrators might never be identified.

Popular histories are indispensable, but only if they present their subjects attractively and reflect the best scholarship available. Blow writes well, but he fails to reflect the extensive recent literature, which suggests a much different descriptive and causal analysis than is to be found in *A Ship to Remember.* A better popular account

is G.J.A. O'Toole's *The Spanish War: An American Epic* (1984).

DAVID F. TRASK
Washington, D.C.

Honan, William H., ed. *Fire When Ready, Gridley! Great Naval Stories from Manila Bay to Vietnam.* New York: St. Martin's, 1993. 364pp. $27.95

The chief cultural correspondent of *The New York Times*, William Honan writes frequently about the navy and naval affairs. In his latest book, he has used his keen eye for a well written story to select the very best descriptions of naval battles. In this nicely printed and well designed volume, Honan has assembled twenty-six stories. All of them are designed to illustrate the unique quality of heroism that one finds in battles at sea—qualities that appear in the arduous conditions beyond the frame of ordinary experience.

Honan's choice is superb. Some of the chapters are well known, including Sir Roger Keyes's reminiscences of the attack on Zeebrugge in 1918, Samuel Eliot Morison's dramatic account of the attack on Pearl Harbor, C.S. Forester's vivid description of the sinking of the battleship *Bismarck*, Winston Churchill's speech explaining why the Royal Navy sank the French fleet at Oran in 1940, and Admiral Sandy Woodward's recently published account of the sinking of *Sheffield*. Others are forgotten descriptions, but written by well known authors such as Hector Bywater and Rudyard Kipling.

The collection includes some first-hand accounts that are important documents for historians. Among them are Semenoff's account of Tsushima and Georg van Hase's description of the sinking of HMS *Queen Mary*. American naval history is documented by Marine Corps aviator Tom Moore in his account of dive-bombing a Japanese carrier at the battle of the Coral Sea, and by Marilyn Elkin's account of the search for her husband who was missing in action in Vietnam.

As one would expect, newspaper journalists are not forgotten. Joseph Stickney's account of Manila Bay, Hanson Baldwin's portrayal of Leyte Gulf, and Stanley Johnson's *Chicago Tribune* article that recounts the battle of the Coral Sea represent the very best in naval journalism. Equal to them are Honan's own historical account of the Japanese attack on Port Arthur in the Russo-Japanese War and his 1970 first-hand report for *The New York Times* on U.S.-Soviet naval operations in the Mediterranean.

Honan's collection is a tribute to the Navy. Each contribution, in its own way, adds to our understanding of naval battle. Taken together, they lead us to reflect and to ask deeper questions about human character, the nature of battle, the role of naval power, and the usefulness of naval history. Such philosophizing lies beyond the scope of the book, as Honan is quick to point out: "This book is not about

soft-handed policymakers and politicians; it deals with men of action and gritty courage. . . ."

Those of us who labor daily in the mire of defense jargon can find relief here; good writing and clear understanding go together. Honan gives us a selection of the best in descriptive naval writing. We can learn much from it.

JOHN B. HATTENDORF
Naval War College

Sheehy, Edward J. *The U.S. Navy, the Mediterranean, and the Cold War, 1945–1947* (Contributions in Military Studies, No. 126). Westport, Conn.: Greenwood Press, 1992. 191pp. $45

Edward J. Sheehy has provided a history of American naval operations in the Mediterranean from the end of the war in the European theater in 1945 until the eve of the establishment of the Sixth Task Fleet in 1948. Sheehy, an assistant professor of history at La Salle University, in Philadelphia, has produced a detailed study that is well written and well researched. The sixty-five pages of notes and sources constitute 33 percent of the entire book.

Sheehy begins his study with a brief but useful review of what has been a long American connection with the Mediterranean, beginning with the corsairs of North Africa's Barbary coast in the late eighteenth and early nineteenth centuries. Throughout American history, the United States has normally deployed naval forces in the Mediterranean, by my reckoning for about 150 of the last 200 years. Nevertheless, American policymakers did not plan to retain a naval presence in the Mediterranean after the end of the Second World War. Britain's Royal Navy would suffice to police the Middle Sea in an era of peace orchestrated by a still-functioning Grand Alliance. Unfortunately, as the war ended the alliance collapsed, and the hoped-for harmony gave way to confrontation, especially in the Mediterranean and the Middle East.

Sheehy's study well illustrates the difficult and confused transition in American foreign and naval policies that occurred as a result. Well into 1946, the U.S. Navy continued to demobilize, withdraw its forces from the Mediterranean, and close down its overseas shore bases. Only belatedly, as the Soviets pressured Iran and Turkey and generally threatened the peace of Europe, did the United States begin to strengthen its naval operating forces in the Mediterranean, often without a corresponding amplification of instructions regarding just how on-scene commanders were supposed to use such additional forces. Uncertainty on the part of American naval commanders in Europe led not only to confusion and the end of several promising careers but also to potential danger, given a delicate diplomatic situation in which the United States hoped to deter a possible Communist advance without provoking the very war that all hoped to avoid.

While Sheehy's account is excellent on the comings and goings of American men-of-war, such detail comes at the expense of in-depth discussions of national and, most important, naval strategy. The author provides little information on the U.S. Navy's strategic planning during these years. Nor does Sheehy tie events in the Mediterranean to that developing strategy. The Mediterranean was, after all, the premier theater in the U.S. Navy's strategy for a war with the Soviet Union, and the outlines of that strategy were apparent, as Sheehy indicates, by early 1947.

Nor does the author make any attempt to quantify the enormous amount of data he obviously collected during his research. For example, there is little information on the rate and scale of the increase of American naval forces deployed to the Mediterranean. Of the innumerable ports that U.S. Navy warships visited, which of them received the most attention? Did the patterns of visitation change to reflect developing policy? And what types of operations and exercises (other than port visits) was the U.S. Navy conducting or not conducting as its warfighting strategy changed?

Despite these weaknesses, Sheehy has produced an important work. His detailed treatment of port visits, while far less glamorous than examinations of policy and strategy, needed to be done. But perhaps most important, Sheehy, by documenting the confusion that reigned in the Mediterranean, has further undermined the oft-proffered revisionist view of a United States hell-bent on confrontation with the Soviet Union. For the gradual and confused evolution of the policy of containment is evident in the pages of Sheehy's work.

MICHAEL PALMER
East Carolina University

Taylor, Alan R. *The Superpowers and the Middle East.* New York: Syracuse Univ. Press, 1991. 198pp. $34.95

In the aftermath of the Cold War and the Gulf War, this work might appear outdated. Such is not the case. In his fifth book on the politics of the region, American University professor Alan R. Taylor presents a concise, readable, and provocative survey of superpower competition and its continuing legacy for the politics of today's Middle East.

The author's major premise is that the superpowers' Cold War preoccupation with gaining global advantage shaped their dealings with regional clients to the detriment of all concerned. He begins his exploration of this point with a survey of the historical legacies of colonialism. While the U.S. was never an imperial power in the Middle East and the Soviets renounced the venality (but not the fruits) of czarist imperialism, the superpowers inherited the problems created by their predecessors. Western colonialism, says Taylor, was driven by a belief that the ineptitude and decay of Eastern civilization opened the door to rightful

exploitation by states with superior economies, political institutions, and cultures. Thus, Western powers imposed their own values and institutions on their colonies, keeping the indigenous peoples in inferior positions. In contrast, czarist imperialism was driven primarily by security issues. Seeking secure borders and an outlet to the sea, the Russian empire simply expanded into contiguous areas. Indigenous peoples were merely absorbed as citizens of the empire. These opposing approaches to colonial expansion influenced both superpower policies and local reactions to those policies.

This overview leads to an analysis of the Soviet-American confrontation in the region. The fundamental theme of this rivalry has been the Soviets' fixation with building a powerful security belt on their southwest periphery, with an equally adamant refusal by the United States to allow it. The development of Western alliance systems and the Soviets' attempts to undermine them are examined, with particular emphasis on the successes and failures on both sides.

Taylor's primary focus is an assessment of the goals and methods of U.S. and Soviet policies as they evolved since 1945. Turning first to the U.S., Taylor notes that American policy goals were to contain the Soviet Union and preserve access to the region's facilities and resources. Two related, but not always compatible, means were used to achieve these goals: promoting peace and stability, and recruiting regional surrogates to aid in containing the Soviets.

In assessing American policy, Taylor identifies three contradictions that undermined its effectiveness. First, the discrepancy between an intended evenhanded approach to the Arab-Israeli conflict and the actual pro-Israel tilt. Second, the conflict between global and regional approaches to American policy in the Middle East. Our power-politics approach, best typified by the diplomacy of Henry Kissinger, may have checked Soviet expansion, but at a cost. In focusing on the Soviet Union, the U.S. failed to grasp the significance of expanding grass-roots activism in the region. The third contradiction was the incompatibility between the peace process and a security system based on surrogates. Given a choice between an Arab-Israeli peace settlement or harmony with our Israeli surrogate, Taylor contends that we have consistently chosen the latter, with no small cost to American interests in the region.

Less attention is given to the Soviets. Taylor details the revolution of Soviet policy from Stalin's heavy-handed and largely counterproductive efforts through the growth of military assistance under Khruschev, the anti-imperialist and confrontational Brezhnev era, up to Gorbachev's virtual partnership with the U.S. in the Gulf War. Despite some successes, the essence of the Soviet experience was one of disappointment. Never able to control their Arab allies, the Soviets were often kept off balance by constant

political changes in the Arab world. Taylor identifies Afghanistan as the ultimate Soviet disaster, one that best exemplifies for both powers the dangers of ignoring regional dynamics when pursuing a global approach to policy.

Arguably Taylor's most important and controversial contribution is his survey of the evolution of American policy through successive post-war administrations. He contends that most presidents desired an even-handed approach to the Arab-Israeli conflict, but that policy was generally pro-Israel to the point of undermining American interests. The powerful Israeli lobby, a predilection of policy advisors to be pro-Israel, and a closer American cultural affinity with Israel than with Arab peoples are given as reasons for this state of affairs. Taylor cites many examples to defend his assertions, to include a straightforward assessment of the USS *Liberty* affair, which will win him few friends in the American-Israel Public Affairs Committee.

Based on secondary sources, this book is more a survey than an in-depth analysis. It is logical, well documented, and straightforward, providing a quick read for both policy experts and the general reader. An excellent assessment that should be of interest to regional planners, the work is well worth the time to read. I would use the library, though. At nearly $35.00 a copy, the book is simply overpriced.

THOMAS SEAL
Lieutenant Colonel, U.S. Marine Corps
Stafford, Virginia

Downes, Cathy. *Special Trust and Confidence: The Making of an Officer.* London: Frank Cass, 1991. 268pp. $37.50

This is a detailed and penetrating critique of the British institutions responsible for selecting officer candidates and preparing them for commissions in the Armed Forces.

Cathy Downes is a perceptive, and (in general) a sympathetic, observer of the British military scene, but her studies have left her openly critical of the directions taken by service education and training since World War II. At a time when the ambiguities of low-intensity operations and the complexities of modern technology are making ever greater demands on the intellectual capacities of the junior officer, Downes finds the Personal Directorates of the Ministry of Defense responding only to manpower shortages, competition in the recruiting market, development in the national education system, and of course, budgetary pressures. In short, she finds no coherent policy on the education and training of officers, only a series of *ad hoc* responses to the pressures of the moment.

In this climate, the Service academies have been reduced to a narrowly utilitarian role in which the cultivation of critical and analytical skills has been replaced by something akin to a "low-budget shopper's expedition." Downes views this process as aided and abetted by powerful sections of the British military establishment who believe that the best grounding for the junior

officer is to be had "at sea" or "in the regiment." The author believes that academic facilities have in some instances fought a losing battle against the tide of military philistinism, and in others, adopted a policy of passive conformity.

Those who have been close to the British recruiting and training machine will recognize that much of what Downes says has a ring of truth to it. However, it is perhaps unfortunate that the author has not carried her investigation far enough to examine how the young officer fares in his first active unit, or evaluated later career opportunities for educational and professional development. Many will argue that there has been little evidence on the streets of Belfast, in the waters of San Carlos, or in the deserts of Iraq, of the reemergence of those military stereotypes beloved of British Broadcasting caricature that would appear as the logical products of the system as the author sees it. This may be the best opportunity in nearly a century for a fundamental review of the education and training process. Unfortunately, the Treasury mandarins are going to demand more evidence than this before they ease up on the purse strings.

Because of its specialist nature, this study is unlikely to appeal to a wide audience in the United States. Personnel and training experts who might be tempted to read it will find few answers to their own problems. Those who do persevere, however, will gain a fascinating insight into British social, political, and educational mores. They will marvel at the tribal rituals of regimental recruitment, at the positive epidemic of different training schemes, at the declining but still substantial role of the public (private) schools, and at Service hierarchies that remain at best ambivalent on the subject of university education. Most Americans will stand quietly before a bust of George Washington and murmur a prayer of thanksgiving.

GRAHAM RHYS-JONES
Dorchester
Dorset, England

Rust, Eric C., trans. *The Odyssey of a U-Boat Commander: Recollections of Erich Topp*. New York: Praeger, 1992. 242pp. $49.95

Erich Topp is not an ordinary author, nor, evidently, was he an ordinary U-boat skipper during World War II. Neither is his "odyssey" truly an odyssey in the ordinary understanding of the word. Anyone expecting to read the autobiography of a first-class U-boat commander credited with sinking some thirty-seven ships in seventeen war patrols, is going to be disappointed. If, on the other hand, readers have a desire to analyse the deep-seated feelings and self-evaluation of the German war effort, as seen by a thoughtful German who joined the Nazi Party and swore an oath of everlasting loyalty to Adolph Hitler because it was the thing to do, this book will meet their need, for they will come away with an understanding of what made Germany tick.

Topp was skipper of the *U-522*, the submarine that, more than a month before Pearl Harbor, sank the USS *Reuben James*, a World War I–type "four-piper" then engaged in escorting a British merchant convoy across the Atlantic. There is no description of the attack; Topp merely states that he sank her, that she was escorting a British convoy, and that he thought she was British—an understandable error when it is remembered that only a year earlier the United States had transferred fifty identical destroyers to the Royal Navy.

Topp describes his command of *U-522* in little detail. After only a few pages, he violates chronology by describing his feelings at the deaths of two of his friends, one in 1941 and the other in 1984. From here he goes on to discuss at some length the extraordinary state of mind and morale that enabled the German submariners to continue to go on patrol in the face of 75 percent losses. Quickly it becomes clear that Topp's purpose is to analyse the relationship of patriotic German fighting men to the Nazism that drove them.

The most penetrating comments one will find in this book relate to the Nazi regime and its effect upon honest people like Topp himself who, initially proud of Germany's resurgence under Hitler after World War I, gradually became horrified as they learned of the excesses their leader was committing in their name. He portrays clearly a dilemma every thinking American military man should have asked himself—and many did. "What should (or could) I do if our political leaders became known as pathologic criminals? What do I do upon hearing of the atrocities committed in my name?" We, as Americans, were fortunate that for us this question remained a theoretical one. For Topp and his peers it was real, with overtones of mortal danger.

We now know that a great number of Germans, themselves innocent of wrongdoing, were aware that something terrible was going on; and we now realize that mere awareness exposed such persons, and their families, to unspeakable danger. Small wonder they closed their minds to the obvious!

However, what about the leaders? What about Admiral Karl Dönitz, the U-boat leader and first commander in chief of Hitler's navy? Although Topp states his admiration for the submarine admiral, more than once, he also says that there is no question in his mind that Dönitz was fully aware and had indeed been carefully briefed as to the actual details of the atrocious "final solution" imposed upon the "Jewish question." This is to be contrasted with Dönitz's own loud claims to innocence.

In 1959, I reviewed Dönitz's autobiography, *Ten Years and Twenty Days*, for *The New York Times*. In the course of my review I referred to the idea that while we might be willing to accept at face value Dönitz's defense that he had not been aware of the atrocities, his ten years in Spandau Prison gain scant sympathy

measured against the outrages Germany committed against millions of innocent people.

The next year the USS *Triton*, which under my command had just made a submerged circumnavigation of the earth, visited West Germany. At the suggestion of the U.S. naval attache, I called upon Admiral Dönitz. My reception was extraordinary. Dönitz walked up to me and snarled, "I understand you think I should have been executed!" He produced a copiously underlined copy of my review, along with a letter from Dr. Samuel Eliot Morison, the official historian of the U.S. Navy in World War II. Morison had written: "I accept your explanation that you knew nothing about the atrocities, but here is someone who does not agree." It was he who had sent Dönitz my review and evidently he who had underlined pertinent passages. I was taken by surprise, and stammered something to the effect that that was not an accurate statement of my meaning. Subsequent study, not only of the manuscript of my review but also of the slightly edited printed version, substantiates that I did not accuse Dönitz outright, but it could be interpreted to say that I had my doubts.

Since I did not then and there walk out of Dönitz's house, I do not look back on the incident with any pride; the tense situation was finally brought to order by Mrs. Dönitz, who brought a tray with wine and said to her husband, "Karl, stop that! Captain Beach is here on a friendly social call." Now, reading Topp, one sees the following passage. "Grand Admiral Dönitz's apologists hold that he was an unpolitical officer, but I am not convinced, and here my criticism sets in. His unconditional commitment to Hitler, his decrees and speeches that reflect National Socialist Ideology and utterances of its chief spokesman—all this induces me to reject this assessment. . . . So much we know today from the talks he gave; so much we can deduce from his presence at meetings where . . . Himmler openly described his strategy of liquidation against Poles, Russians, and Jews. . . . I conclude . . . that Dönitz knew more than he ever admitted."

This was exactly what I had written! While Dönitz may not have had anything to do with the "final solution," he undoubtedly knew about it. His defense was false then and is false still. He, and others like him, get no good feeling from me.

Erich Topp's "odyssey" is of the mind, not of the material. The book is neither an autobiography nor an essay on having unknowingly been part of evil. It contains a little of both, but the most significant thing is its picture of the ultimate triumph of the soul over the extraordinary circumstances and tumultuous events in which the author found himself.

EDWARD L. BEACH
Captain, U.S. Navy, Ret.
Washington, D.C.

Venzon, Anne Cipriano, ed. *General Smedley Darlington Butler: The Letters of a Leatherneck, 1898–1931.* New York: Praeger, 1992. 312pp. $55

Major General Smedley Darlington Butler needs no introduction to naval historians. Answering the call to the colors in the Spanish-American War, he served in forest green until his loud mouth and penchant for the hyperbole drove him into retirement in 1931. In that time, Butler amassed more days of overseas campaigning than the majority of his contemporaries, and he certainly earned more than his share of tropical sweat stains and powder burns on his uniforms in the process. But along the way, during which he earned two Medals of Honor, General Butler became disenfranchised from his beloved Leathernecks when the Marine Corps discarded colonial infantry duties as its *raison d'être* and moved to embrace a mission of amphibious assault in support of the fleet.

Complete collections of the correspondence of prominent Marines of this era are almost nonexistent. Few officers bothered to save letters until they became famous. In other instances, manuscript collections that should have been fairly whole bear evidence of tampering, as family members removed materials that appeared to tarnish an officer's professional image. Butler's letters home, often written by candlelight after a grueling forced march through the jungles, offer perhaps the only complete firsthand account of an officer's professional life during these halcyon times. The letters are maintained by General Butler's son, Tom, in the family home in Newton, Pennsylvania, and access to them has been permitted to serious students of naval history. Through a process of selection, editing, and annotation, Venzon presents the irrepressible Butler in the general's own words. Like Hans Schmidt in his contentious biography of Butler, *Maverick Marine: General Smedley D. Butler and the Contradictions of American Military History* (Univ. Press of Kentucky, 1987), the editor of this volume has attempted to portray General Butler as the pinnacle of military professionalism and the harbinger of a new style of leadership for the Marine Corps of the interwar era.

On the selection of letters in this finely crafted volume, students of naval history could hardly reach any conclusion other than that of either Venzon or Schmidt. Yet, the inclusion of additional correspondence which reveals a darker side of Butler might dissuade such an observation. Correspondence from Butler or about him found in the manuscript collections of his contemporaries or superiors suggests a fawning careerist, a habitual and pathetic complainer, and an officer quickly bored by the usual round of duties, who was too eager to opt for a new assignment. To attempt to come to grips with the mercurial Butler through this edition of his papers requires that the reader have a substantial knowledge about the Marine Corps, especially given the

brevity of the footnotes and the paucity of the explanatory passages accompanying the letters. Even though such additional and revealing correspondence may not have found a space in this volume, an editor, a stream-of-consciousness historian, has a professional obligation to draw the reader's attention to such materials—however disparaging they might be.

An underlying current of contention, often painful, that existed throughout Butler's career is touched upon in this volume. Between 1883 and 1897, all of the Corps' new second lieutenants came from among the graduates of the U.S. Naval Academy. However, from 1898 until the World War One era, successive commandants of the Marine Corps took their new officers, like Butler, directly from civil life. As the early Annapolitans came to dominate the Marine Corps, Butler and his peers grew increasingly critical, as a result of the apparent bias shown to their better-educated contemporaries with regard to promotions and assignments. Butler complained bitterly to his father, who sat on the powerful House Naval Affairs Committee, but to little avail until 1920, when Secretary of the Navy Josephus Daniels sacked the sitting commandant and replaced him with John A. Lejeune. In a letter to Franklin D. Roosevelt (not included or cited in this volume), the wily Daniels revealed that he intended for Butler to succeed Lejeune; but three successive Republican administrations put the scheme asunder.

The editor includes correspondence relative to Butler's failed attempt to gain the Corps' highest post in 1930. By then, Butler had simply angered too many important officials within the Department of the Navy and the Hoover administration. In an appointment that outraged both Butler and his supporters, the mild-mannered and undistinguished Ben H. Fuller received the nod—apparently because he had a diploma from the Naval Academy. However, Butler never knew that Secretary of the Navy Charles Francis Adams and President Herbert Hoover had selected as second choice Logan Feland, who, like Butler, had been commissioned directly from civil life.

Readers of Marine Corps history will find Venzon's volume useful and interesting, but I suggest that they buttress their reading with more balanced histories of the era to help understand the role that the Corps' *enfant terrible* played. Allan R. Millett's *Semper Fidelis: The History of the U.S. Marine Corps* (Macmillan, 1980) and Jack Shulimson's dissertation, "The Marine Corps' Search for a Mission, 1880–1898" (Univ. of Maryland, 1992 and Univ. Press of Kansas, October, 1993), are indispensable.

MERRILL L. BARTLETT
Lieutenant Colonel
U.S. Marine Corps, Ret.

Sorley, Lewis. *Thunderbolt: General Creighton Abrams and the Army of His Times.* New York: Simon and Schuster, 1992. 429pp. $25

Creighton Abrams was one of a kind. Achieving his fame as a tank battalion commander in the 4th Armored Division in the European Theater in World War II, he subsequently became a household word in the mid-century American Army. His career spanned the years from just before that war on through the Korean and Vietnam wars. He was a strong-willed man and a daring leader in combat, yet he was a man of humility who disliked ostentation.

Lewis Sorley has given us a splendid biography of Abrams. He follows him from his boyhood in rural western Massachusetts, to the West Point of the early 1930s (where he was not exactly a model cadet), into the prewar Army. Commissioned in the cavalry, Abrams was by 1943 a twenty-nine-year-old lieutenant colonel commanding the 37th Tank Battalion, with which he subsequently came to fame in Europe.

In successive chapters the author details Abrams's Cold War assignments, which led to his first star and a Pentagon assignment in 1956 as deputy to the Army Reserve Components Chief. It was on this assignment that the reviewer, as a major in the Army Chief of Staff's office, first became acquainted with Abrams. He struck me as an officer who kept his own counsel and stuck to essentials. On the many occasions that I observed him making presentations to the Chief of Staff or Secretary of the Army, he was always well prepared, poised, logical, pragmatic, and, in his own way, a consummate actor. In his personal memoirs, which cover a later period, General William Westmoreland tells of Abrams's tendency to lose his temper at conferences—shouting and pounding the table. I never observed this behavior, but my surmise is that it was on most occasions a dialectical stratagem used to either nail down or win a point.

The most important part of Sorley's book is Abrams's Vietnam experience. Sorely begins with a most interesting chapter on the period of the Vietnam buildup, during which Abrams served as Vice Chief of Staff. The key event in this episode was Lyndon B. Johnson's decision not to call up the reserves in July 1965. This, combined with the continuing crisis in civil-military relations brought about by McNamara's management mode, makes Abrams's experiences during this period relevant to what happened later, and at the same time offers valuable insight into the logistical (writ large) dimensions of the war.

During Abrams's subsequent service in Vietnam, he served as Westmoreland's deputy for about one year (which included Tet 1968), then succeeded Westmoreland as COMUSMACV from 1968 to 1972. It is in this section of the book that the author develops an antihero in the person of William Westmoreland. To wit, Sorley quotes Abrams saying shortly before his death, "Nobody will ever know the goddam mess Westmoreland left me in Vietnam."

Abrams's main task as COMUS was to extricate the American expeditionary force at the same time that the burden of the war was shifting to the South Vietnamese. In his first year or so, he moved his forces away from an enemy-oriented strategy toward one that focused on the security of the friendly population and the neutralization of the Viet Cong infrastructure. He probably did as well as any commander could have, implementing a policy that was (despite all the rhetoric involved) to cut and run by 1972. In fact, there was no other policy possible, given the lack of support at this stage, for this tragic and unnecessary war, that had, in any case been lost on the American home front at Tet 1968.

One of the important aspects of Abrams's service in Vietnam, as the author develops it, was his generally good relations with the press, in contrast with Westmoreland's stormy experience. As Sorely sees it, "the answer was simple. He wasn't trying to sell anything, claimed nothing, predicted nothing, and treated the press with respect and candor." This relationship is a significant aspect of this or any modern war and will be covered authoritatively in William Hammond's second volume of his Vietnam classic *The Military and the Media* (Army Center of History), long delayed but, one hopes, forthcoming soon.

The major fault of *Thunderbolt* lies in the author's negative depiction of Westmoreland without any counterbalancing material. Westmoreland followed the policy guidance he received as he interpreted it. His command in Vietnam was largely before Tet 1968, after which everyone saw things differently. We are all children of our own times, and when Abrams commanded, the policy and situation were totally different. Therefore, it is difficult to compare the two commanders, and to do so is unfair unless one provides the context as it existed in Westmoreland's tenure as COMUSMACV. Westmoreland, by the way, deserves a new biography himself, one that is both objective in outlook and analytical in style.

There is much more in this book than can be covered in the course of a review. For example, Abrams's actions with the Air Force, Navy, and Marines, and his thoughts about them in the Vietnam setting, are both interesting and provocative. The Green Beret murder case is discussed from Abrams's perspective. My own view is different. I think this was an occasion in which Abrams was guided by strong emotions, and his actions were both self-defeating and counterproductive on the national scene.

The author also adds insight into the three major military actions during Abrams's tenure (i.e., the Cambodian Incursion of 1970, Lam Son 719 of February 1971, which like all failures seems to be of ambiguous parentage, and the Easter Offensive of 1972).

The book is enlivened by a host of colorful characters: Kissinger, Haig, Melvin Laird, and Bruce Palmer, to name a few.

In aggregate, the book's treatment of the principal subject is noncritical, with only occasional allusion to his limitations. This is not an unusual fault of a contemporaneous historian. All in all, *Thunderbolt* is an outstanding piece of work. It is well researched, nicely written, and likely to remain the definitive work on this major leader of the American Century.

DOUGLAS KINNARD
Richmond, Virginia

Bland, Larry I. and Stevens, Sharon Ritenour, eds. *The Papers of George Catlett Marshall Volume 3: The Right Man for the Job, December 7, 1941–May 31, 1943.* Baltimore: The Johns Hopkins Press, 1991. 772pp. $45

Crosswell, D.K.R. *The Chief of Staff: The Military Career of General Walter Bedell Smith.* Conn.: Greenwood, 1991. 464pp. $55

Wyant, William K. *Sandy Patch: A Biography of Lt. Gen. Alexander M. Patch.* New York: Praeger, 1991. 249pp. $49.95

In retrospect, fifty years after the Japanese attack on Pearl Harbor, American success in World War II appears to have been a foregone conclusion. Once the nation mobilized its vast reserves of manpower and industrial might, victory seemed somewhat assured. The reality was actually much different, but seldom in this country's history has the United States been blessed with such an array of military talent as in the period of 1941–1945. Two recent biographies and the publication of George C. Marshall's public papers profoundly illustrate the complexities of joint operations and coalition warfare that ultimately led to decisive victory in World War II.

Perhaps no soldier contributed more to American success than Army Chief of Staff George C. Marshall. Heralded by Winston Churchill as the "organizer of victory," Marshall assumed his office on the day Hitler invaded Poland. In volume three of *The Papers of George Catlett Marshall*, editors Larry Bland and Sharon Ritenour Stevens focus on the first year and a half of the war. Published under the auspices of the George C. Marshall Foundation, the current volume does not seek to publish the records of the Office of the Chief of Staff but only those papers written by Marshall himself. The result is a compilation of 632 documents, 46 illustrations, and 8 maps that reveal the intricacies of joint and combined planning in a wartime environment.

The Marshall who emerges from these pages is an officer who is aware of the enormity of the task before him. As Marshall wrote to a comrade in 1943, "I am naturally deeply interested in you and your career, but I am much more interested, through necessity, in the development of the fighting spirit in our Army." Ever conscious that the pace of modern war had increased the burdens on leaders of all ranks, Marshall remained convinced that highly efficient and energetic leadership was essential to

success and that no compromise was possible.

His papers also reveal his active participation in the Combined Chiefs of Staff and his close association with Chiefs of Naval Operations Harold R. Stark and Ernest J. King. Unity of command was one of the more controversial topics that dominated Marshall's relationship with the Navy. Aware of the disastrous consequences of service bickering and dual command structures during World War I, Marshall directed his commanders in the Pacific to abide by presidential directives that assigned unity of command to the Navy in Hawaii while the Army maintained unity of command in Panama. In spite of some Army staff objections to assigning purely Army assets to naval control, Marshall felt that the decision would add immeasurably to American security, whatever the local embarrassments. Additionally, he regarded these decisions as merely stepping stones to larger decisions involving his relations with the Navy and European allies. This is not to say that relations with the Navy were always smooth, but differences between Marshall and King were legitimate differences between honest men with varying opinions on the best method of waging global war.

As indispensable as Marshall was to the national war effort, so was General Walter B. Smith to the success of the European theater of operations. So claims author D.K.R. Crosswell in *The Chief of Staff*. The functions of staff officers have been largely ignored by most military historians in favor of studies of more renowned combat commanders. Crosswell's latest work is an attempt to address this void in the historiography of American participation in World War II.

In examining Smith, whose career pattern, says Crosswell, is typical of the generation of officers who rose to command the armies and staffs of higher headquarters, Crosswell presents three essential objectives for his study: to examine critically the professionalization process within the officer corps in the interwar period, to analyze the evolution of the U.S. and Allied command and staff structures in World War II, and to survey the distillation and execution of Allied strategy in the Mediterranean and European theaters of war. The result is an interesting analysis of combined operations at the highest level.

Throughout the book, Smith emerges as a central figure in the formation of allied strategy and an adept manager of bureaucratic politics. According to the author, the success of the "Ike-Beetle" team lay in the near perfect blend of Eisenhower's human qualities and Smith's calculating, detached professionalism. Perhaps Crosswell exaggerates Smith's importance when the author claims that the German General Staff's failure to assess properly the Ike-Smith team was a contributing factor to their defeat in the Ardennes offensive. However, despite the outward appearance of Ike-Beetle solidarity, Smith became frustrated at his superior's unwillingness to exercise command and his

alleged refusal to undertake any action that might jeopardize his popularity. Summarizing Smith's final years, Crosswell portrays an embittered man who felt betrayed by Eisenhower for denying him five stars and the appointment as Chief of Staff of the Army. Yet the author balances this darker side of Smith's personality with a genuine appreciation of a brilliant staff officer whose greatest accomplishment was the welding together of an allied staff.

In the final analysis, it is better to remember the Ike-Beetle team that led a truly integrated combined effort to defeat Nazi Germany than to fall prey to the partisan military politics and petty jealousies that sometime characterize large allied headquarters. That criticism aside, *The Chief of Staff* is a valuable addition to the historiography of World War II and an important contribution to understanding combined operations.

In *Sandy Patch*, William Wyant presents a highly flattering portrait of his subject that concentrates primarily on Alexander Patch's command in Europe, but he fails to give proper attention to Patch's interwar years and his command on Guadalcanal. This is understandable, albeit regrettable, since Wyant served as the secretary of the general staff to Patch in the 7th Army.

What is clear from the biography is that Patch found the Allies less troublesome than the Department of the Navy. Assigned to the defense of New Caledonia and neighboring islands in the South Pacific in early 1942, Patch was vociferous in his criticism of the Navy for lacking a plan of logistics for the Guadalcanal campaign and not using his own Americal Division in the fighting. Patch's remarks eventually reached Secretary of the Navy Frank Knox, who vented his anger on "Hap" Arnold, the Chief of Army Air Forces.

To his dying days, Patch remained resentful at what he perceived as an unfair lack of publicity for the Army's role in the first major defeat suffered by the Japanese army. Returning to the United States after victory in Europe, Patch headed the "Patch Board," whose task it was to examine the organization of the War Department and to propose an organization appropriate for postwar adoption. While not within the purview of his study, Patch recommended that the Marine Corps be abolished. Although he had a great deal of admiration for the individual Marine, he felt that the Marine Corps was better suited for amphibious operations than sustained land combat. What he faulted was the hierarchy, whom he perceived to have failed to distinguish the difference.

The central theme that dominates all three books is the realization that victory could only be achieved through improved cooperation with the Navy and the Allies (principally Great Britain). Marshall, King, Arnold, Eisenhower, and countless others clearly understood the intricacies of waging joint operations and coalition warfare on a global scale. Ever partisan to their own service,

they subordinated any personal views to the overall task of defeating their enemies. Perhaps Marshall said it best when he wrote, in the aftermath of the Battle of Midway and the successful invasion of North Africa, extolling the merits of unity of command and the effectiveness of joint and combined operations. In his words, this new efficiency "should not be kept secret. It will be most depressing news to our enemies. It is the declaration of their doom." By 1945 the declaration spoke for itself.

COLE C. KINGSEED
Lieutenant Colonel, U.S. Army
West Point, New York

Hoopes, Townsend and Brinkley, Douglas. *Driven Patriot: The Life and Times of James Forrestal.* New York: Knopf, 1992. 587pp. $30

Dorwart, Jeffrey M. *Eberstadt and Forrestal: A National Security Partnership, 1909–1949.* College Station: Texas A&M Univ. Press, 1991. 237pp. $35

The beautifully crafted biography of James Forrestal by Townsend Hoopes and Douglas Brinkley recounts an American tragedy played out in the first half of the twentieth century. Throughout his life Forrestal displayed a Horatio Alger–like drive to succeed, which ultimately ended with his leap to death from an unattended window of the sixteenth floor of the tower of Bethesda Naval Hospital. He committed suicide after he had been dismissed from his post as Secretary of Defense by Harry Truman. Readers of the *Naval War College Review* will probably find most interesting the account of Forrestal's leadership of the Navy during World War II and the study of his struggle after the war to create a new national defense structure.

Beginning with his childhood, Hoopes and Brinkley go on to discuss his student years, when he worked with Ferdinand Eberstadt on the *Daily Princetonian.* His enthusiasm for boxing, his unhappy marriage, his naval service in World War I, and his years of success with the Wall Street brokerage of Dillon & Read were preliminary to the nine productive years of dedicated public service as Under Secretary of the Navy (1940–1944), Secretary of the Navy (1944–1947), and Secretary of Defense (1947–1949).

One senses that it was indeed the tireless Forrestal who engineered the building of the mightiest navy during the Second World War. This effort involved changes in the Navy's procurement practices as well as overruling naval conservatives to assure honorable treatment for blacks in the service, the upholding of civilian control over the Navy by curtailing the ambitions of such strong-willed officers as Fleet Admiral Ernest J. King, and the joining with marines during the assault on Iwo Jima.

Most compelling are the chapters on the years 1945-1949, when Forrestal's energies were finally exhausted by his struggle to build a viable national defense system in the

face of what he early recognized as the awesome threats of communism and the Soviet Union. George Kennan's famous "X" article in the July 1947 issue of *Foreign Affairs*, Hoopes and Brinkley suggest, may well reflect more accurately the grim fears of Forrestal than of Kennan. Forrestal finally suffered disaster when, unable to break free from government, he was driven by his anxieties and his work ethic to confront the critics who challenged his efforts to put together a workable foreign policy and defense structure. Partly out of loyalty to the Navy and partly influenced by his admiration of British practices, he worked for a rather loosely organized national security establishment that would include the new National Security Council, the Central Intelligence Agency, a National Security Resources Board, and autonomous departments of the Army, Navy, and Air Force under a Secretary of Defense whose powers were wholly inadequate.

Dissent in the services, personal vendettas by rivals and unscrupulous newsmen, budget restraints, mental exhaustion, and finally dismissal contributed to the destruction of one of the nation's most dedicated and able public servants. The authors have judiciously used interviews as well as Forrestal's diaries and papers.

In *Eberstadt and Forrestal*, Jeffery Dorwart seeks to demonstrate how Forrestal and his friend of four decades, Ferdinand Eberstadt, worked in near partnership for national security within the theoretical framework of "corporatism." The author defines corporatism as the "political-economic vision" of the operation of "interorganizational arrangements, and intermediary structures by an enlightened corporate elite cooperating to build a 'New American State.'" The methods were those that had proved successful in the private sector. According to Dorwart, members of this elite were defined by Eberstadt as "Good Man." They were men of character, wealth, and substance who were dedicated to making government work without expecting monetary rewards for themselves. Eberstadt compiled names on a "Good Man List," of whom about 75 percent were Wall Street lawyers and brokers, most of them graduates from Ivy League schools, and almost half from the Anglo-Saxon Protestant establishment. Many were the "dollar-a-year men" who served in Washington during World War II.

Forrestal and Eberstadt had been firm and supportive friends since their student days at Princeton. Their cooperation in the service of the nation began after Forrestal joined the government in 1940. Dorwart holds that the high point of their corporationist endeavors came in 1946, when Eberstadt responded to Forrestal's appeal for help and assembled a group from his "Good Man List." With the assistance of this group, he compiled the well known Eberstadt Report, which outlined a corporationist structure for a new national security establishment. This report was the basis for the Navy's

strategy to halt the drive by the Army and the Air Force for a unified department of defense, as well as for the National Security Act of 1947. Hoopes and Brinkley hint at an "old boy network," but their analysis is by no means as structured as Dorwart's discussion.

The different approaches of the authors leave ample room for further study on the nature of elite management of American foreign and defense policies during the Second World War and after.

WILLIAM R. BRAISTED
The University of Texas
at Austin

Ψ

Call for Papers

The Historical Miniatures Gaming Society will be conducting a Military History Forum on the 10th through the 12th of March 1994.

Papers dealing with any aspect of military or naval history in any period are acceptable for submission. Papers will be reviewed in a blind referee system for scholarship and value as a contribution to the study of military history. Authors of selected papers will be asked to present their works at the Cold War 1994 Military History Forum in March 1994. The Forum will be held at the Lancaster Host Resort in historic Lancaster, Pennsylvania. Selected works will be published in the 1994 *HMGS Military History Forum Proceedings.*

Papers should be ten to fifteen typed double-spaced pages and submitted in three copies along with a hundred-word abstract on a separate sheet. The author's name and address should appear only on the abstract. Complete citations and a bibliography must be included with each copy. Any maps or artwork must be completely identified.

Papers should be submitted no later than 1 November 1993 to the Editor, *HMGS Military History Forum Proceedings*, 4252 Woodland Dr., Augusta, Ga., 30907. For more information write to the same address.

Recent Books

Challiand, Gerard and Rageau, Jean-Pierre. *Strategic Atlas: A Comparative Geopolitics of the World's Powers.* 3rd ed. Trans. Tony Berrett. New York: Harper Collins, 1993. 327pp. $18

Have this atlas near to hand when reading or re-reading Guy Labouérie's essay in this issue of the *Naval War College Review*—the two have more in common than their original French language. Both, for instance, begin by looking at the world from an unaccustomed but fruitful vantage point, down from the North Pole. Challiand and Rageau's atlas (originally published in France in 1983) is not the kind in which one looks up the location of, say, Mullaittivu (Sri Lanka) or the Mullaghareirk Mountains (of Ireland); but one can find both North and South Ossetia, the distribution in the Middle East of eight different Muslim sects, and the extent of the Chinese diaspora in Southeast Asia. Its mapmakers take pains to show the world as perceived by regional powers and as organized and constrained by, especially, the oceans and other natural factors. Much of the data is selected for military and security relevance, and the book will make a useful reference for strategic planners, analysts, and war gamers. Chronologies, population and economic tabulations, introductory essay.

Sharpe, Richard, ed. *Jane's Fighting Ships 1992–1993.* Alexandria, Va.: Jane's Information Group, 1992. 848pp. $225

In assembling this year's (ninety-fifth) edition of this naval "bible," flagship of its publisher's prestigious collection of national-security references, Captain Sharpe faced a problem worse than that of modern cartographers—not only what to call the new and old nations, but which of them can be said to have navies. The most conspicuous of the resulting changes is that to look up Deltas and Krivaks one no longer flips to the *U*'s, just before "United States of America," but to the *R*'s, for "Russia and Associated States." (It was too early to "give" Ukraine and the Baltic States their own navies, and the Commonwealth of Independent States, nominal inheritor of the old Soviet fleet, did not look to the editor like having "the stamina to survive for the long haul.") "Yugoslavia" became "Yugoslavia and Croatia." By and large, the book remains familiar to long-time users, who will find this year: a full-color set of ensigns and flags of world navies; listings for the Japanese *Kongo* class of Aegis destroyers and for the Russian Udaloy II and *Neustrashimyi* (Krivak follow-on) classes; a handier section on U.S. naval air than in the past; over 1,200 new photos and drawings; and, for most navies, many fewer ships than there used to be. Also, the editor has wise words to say about the collision between the imperatives of our new world with some inconvenient but eternal verities. (Available on CD-Rom.)

Polmar, Norman. *The Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet.* 15th ed. Annapolis, Md.: Naval Institute, 1993. 639pp. $56.95

In years to come the 1993 edition of this well established—but now retitled—series begun by James C. Fahey in 1939 as a fifty-cent paperback will probably seem especially significant, as one in which both the U.S. Navy's gains of the Cold War years and the losses of its aftermath are evident. The fifteenth edition is likely to be a template for the next several, each successively reflecting fewer gains and more losses. One "gain" with respect to the book itself is the largest-ever number of photographs and drawings (over 950). There is, as always, a great deal of information on principal classes of warships (through *Arleigh Burke* Flight IIA), naval aviation, and weapon systems. In addition, and very usefully, there is also extensive data for less glamorous and less well known vessels—a new chapter devoted to sea-lift shipping, for instance, as well as Coast Guard, Army, Air Force, and Coast and Geodetic Survey vessels. Extensive organizational tables round out a reference that is both authoritative and handy.

Jordan, John. *Soviet Warships: 1945 to the Present.* London: Arms and Armour Press, 1992. 224pp. (No price given)

An obvious problem here is in the title: when was "the Present"? The preface is dated January 1992, but it speaks of the Soviet Union in the present tense; clearly, it was written before 31 December 1992—for all one can tell, even before the August coup attempt. Many of the powerful, modern warships described herein are now moored, silent and useless, slipping into premature decrepitude. This book is a "revised and expanded edition" of the well known original publication of 1983; was it too long delayed? Yes, for its own purposes: to be a resource for analysts, strategists, officers, and historians on (in the words of the dust jacket) "a major modern naval force." But it does have value, and not only because one might yet see this fleet at sea in force again. The book is a detailed, highly informative, and fascinating portrait of the principal surface combatants (frigates and larger) of the Soviet navy at its height; it has the same poignance as a 1914 portrait of the Romanovs. Its information is recent enough to encompass the Krivak III and *Neustrashimyi* frigates and the new carriers' newest names; in the Gorbachev era, the unclassified sources to which the work was limited had become much more dependable than previously. Finally, as the author observes, the work was perhaps the last of its type to have the advantage of the exposure offered by distant Soviet naval deployments, the "golden age" of Soviet warship photography.

Tashjean, John E. *Past in Review, 1941–1991.* Lanham, Md.: Univ. Press of America, 1992. 136pp. $19.75

"We have here," observes the author in his preface, "a travelogue of sorts." Or, perhaps, a "good-parts" memoir, or a geopolitical (geospiritual?) reminiscence.

The framework of this small book is John Tashjean's "travel" from childhood in Vienna and Peking, to college in Minnesota, to law school (briefly), to the Air Force, to a doctorate in political science, and then to a lifetime in academe and "think tanks" culminating (to date) in the presidency of Conflict Morphology, Inc. The story, however, is less important, even to the author, than the tangents—essays on people and subjects he touched upon in one way or another in his career. Recurring themes include Catholic thought (specifically that of St. Thomas Aquinas) and its ultimate collision in Tashjean's life with law school; Clausewitz; Mackinder's geopolitics; and the devolution of American political culture into "legalistic individualism." Two essays (one by Herbert Rosinski) reprinted here for the first time make this book of particular interest to service colleges: Tashjean found Rosinski's study (c. 1953) on Yosuke Matsuoka, Japan's foreign minister in 1940–41, in the Naval War College Historical Collection, and produced the highly original "American Generalship" in 1986 apparently for (and at least with the assistance of) the Army War College.

Bleakley, Jack. *The Eavesdroppers.* Canberra: Australian Government Publishing Service, 1991. 261pp. $12.95

During World War II in the Pacific, "signals intelligence provided the Allies with information of almost every Japanese move including the dates and locations of landings, troops to be used and details of the escorting forces," according to Air Marshall R.G. Funnell, chief of the Australian air staff, in his brief foreword to this book. As an instance, Air Marshall Funnell tells us that over a four-month period in mid-1943, signals intelligence "allowed the Allies to trace all movements of the Japanese Army Airforce from Japan and rear bases into the airfields of northern New Guinea. Full details of types, numbers and the airfields of destination were supplied. In a three-day period of raids by the U.S. Air Force, this large enemy force of nearly four-hundred planes was virtually annihilated without having been used." The author assesses that "central to this was the contribution" of Royal Australian Air Force radio operators "whose main duty was the collection, in forward operational areas, of the material required for analysis and reporting by the signals intelligence organization."

The secrecy necessary for success in this endeavor was kept for many years afterwards. But now the story can be, and has been, told. The teller, Mr. Bleakley, was one of the eavesdroppers of whom he writes.

Warner, Philip. *Secret Forces of World War II.* Virginia: Scarborough House, 1991. 272pp. $22.95

World War II generated an extraordinary number of odd and irregular small military units, all determined to influence the war. The reader can hardly keep them in order, which is not surprising, since neither could their commanders.

Nonetheless, these many secret units—"Popski's Private Army" will do nicely as the quintessential one—did have some value and an impact beyond generating plot kernels for postwar thriller writers. While Warner does not give us much perspective on the strategic value of these units, the tales he tells of them are rousing great fun.

Suchlicki, Jaime. *Cuba: From Columbus to Castro.* New York: Brassey's (US), 1990. 245pp. $16.95

Brassey's continues to offer students, as well as players in the strategic military arena, much help with basic books such as this. It is a valuable and sound account of Cuba's historic evolution and a quick introduction for those who are venturing into this area perhaps for the first time. It is difficult to find useful historic surveys written in a succinct and lively style. Yet it is bedeviled, as are many such handy volumes in this time of both slow and go-go change, by a clearly dated quality that mars its closing chapter and a half. Even so, there is a fascination and personal wonder for any reader in noting the author's 1990 observations and then measuring them against the realities of the major changes that have occurred in the world since their publication three years ago. However, for contemporary happenings and trends that affect Cuba's destiny, readers will have to turn to present-day journals of political and economic commentary or, given the speed with which events happen at this interesting juncture in Cuba's history, perhaps even to CNN.

Commager, Henry Steele. *The Story of the Second World War.* McLean, Va.: Brassey's (US), 1991. 345pp. $23.95

This book is a reprint of the 1945 edition of the renowned American historian's account of World War II. Henry Steele Commager has created a classic of war literature, now republished to commemorate the fiftieth anniversary of the war. Written at the end of the war, *The Story of the Second World War* does not claim to be the definitive history of World War II, nor is it particularly authoritative. Instead, Commager presents a running narrative of the war's events, woven tightly with a mesh of vignettes, anecdotes, and descriptions of the men and women who were there. Commager's style is fluid and clear, his sources are varied and not altogether objective. Remember, this book was written in 1945 and is certainly the product of victory euphoria. The personal episodes are poignant and riveting, sad and exhilarating, for Commager focuses on what he calls war as a "felt experience," highlighting the people in the events, not the events themselves.

Taylor, Telford. *The March of Conquest: German Victories in Western Europe, 1940.* Baltimore, Md.: The Nautical and Aviation Pub. Co. of America, 1991 (reprint). (No price given)

The author served as an army intelligence officer in World War II and as chief counsel for the prosecution at the Nuremberg war crimes trial. This readable

book was first published in 1958 and takes the reader through the organization of the Wehrmacht of 1940, the Polish occupation, the conquest of Denmark and Norway, and the assault on and defeat of Holland, Belgium, and France. Taylor deals with the principles and interplay of politics and strategy from the high command down to the division level, and he discusses the German leaders who, while so skillful at operational art, failed in grand strategy. The reader is provided with ample maps, officer assignment lists for the army from the commander in charge to division level, and similar lists for the Luftwaffe and *Waffen-SS*. There are also organizational charts of the Wehrmacht high command and the three respective services, and charts of command organization and order of battle for the operations described.

Smith, Myron J., Jr. *American Warplanes 1908–1988: A Bibliography*. Westport, Conn.: Meckler, 1991. 500pp. $65

Though originally produced by Meckler Publishing of London and Connecticut, this reference work has been purchased by the Greenwood imprint and has become number 3 in that house's (but originally Meckler's, it would seem) Bibliographies of Battles and Leaders series. The text is in typescript facsimile, though printed in hardback on acid-free paper. The author has not attempted to be all-encompassing but to achieve "literature control"—that is, apparently, "to permit users to quickly determine what kinds of materials are available on individual warplanes of interest and to help establish a basis for further research. . . ." The first of the three chapters provides data on, and assessments of, research resources: libraries, depositories, other bibliographies, book reviews, and standing sources such as annuals, encyclopedias, directories, and guides. Chapters II and III tabulate bibliographies for 525 fixed and rotary wing aircraft and "families" respectively, alphabetically by general type and by designator (e.g., AC-47 Shadow, B-2/R4-C Condor, and the H/EH/HH/SH/UH/VH/MH-60 Hawk). The Autogiro, both fish and fowl, is in Chapter III. Information received after the January 1989 cutoff is given in an appendix. Index.

Smith, Myron J., Jr., ed. *Pearl Harbor, 1941: A Bibliography*. New York: Greenwood, 1991. 224pp. $55

This volume, fourth in the Bibliographies of Battles and Leaders series, is a book-length annotated bibliography intended as a research tool for scholars, journalists, librarians, etc. It contains some 1,500 entries in eleven languages from a wide variety of subjects and disciplines that are either specifically or generally concerned with Pearl Harbor. A chronology is provided, along with accessible author and name indexes. Best of all is the guide to reference sources, depositories, and sites. Each bibliographic entry provides a brief assessment of the scope and value of the item. The volume is durably produced, but the text itself (less chapter headings, folios, and end matter) is typescript in facsimile.

Myron Smith is library director and a professor of library science and history at Tusculum College, Greenville, Tennessee.

Smith, Myron J., Jr., ed. *The Battles of Coral Sea and Midway, 1942: A Selected Bibliography*. New York: Greenwood, 1991. 184pp. $55

This volume, number 5 in Greenwood's Bibliographies of Battles and Leaders series, is a book-length "partially-annotated" bibliography intended as a research tool for scholars, journalists, librarians, etc. It lists some 1,300 items, in seven languages, derived from the mountainous literature on these battles. This volume cites, in most cases with brief descriptions and evaluations, works of general relevance (history, equipment, biography, combatants, and "special studies" on tactics and intelligence) and has separate listings for materials specifically related to each battle. It contains not only published works but also reports, theses, dissertations, and other unpublished studies and materials. Historical overviews and chronologies, author and name indexes, and—most helpfully of all—a guide to reference sources, depositories, and sites are provided. Myron Smith is library director and a professor of library science and history at Tusculum College, Greenville, Tennessee.

Rasor, Eugene L. *The Falklands/Malvinas Campaign: A Bibliography*. Westport, Conn.: Greenwood Press, 1991. 216pp. $45

This reference work is the sixth in the Greenwood Press Bibliographies of Battles and Leaders series and is a survey of the 1982 Falklands-Malvinas War. It lists and discusses "all published books, monographs, oral histories, official histories and other governmental publications, dissertations, etc." on the subject, excluding periodicals. The first, and longer, part of the book is a series of bibliographical and historiographical essays on sources dealing with different aspects of the war: basic geographical and historical factors, politics, diplomacy, forces involved, operations, media, culture, "lessons learned," and research. The second part is a listing of all 554 sources (English, Spanish, German, and French) mentioned in the first section (cross-referenced by number). Appendices include a chronology of events and a list of important individuals. Annotations attempt "to evaluate quality and identify important contributions." Mr. Rasor is a professor of history at Emory and Henry College and is the author of several works, including other titles in this series. Index.

Rasor, Eugene L. *The Battle of Jutland: A Bibliography*. Westport, Conn.: Greenwood Press, 1991. 192pp. $45

The seventh title in the Bibliographies of Battles and Leaders series (and one of several by Professor Rasor, of the Emory and Henry College history faculty), this reference work is a bibliographical and historiographical survey of the 1916 battle. An annotated listing of 528 sources (in several languages) occupies the

shorter, and second, of the two parts; the bulk of the book is a narrative that "describes, evaluates, assesses, qualifies, and integrates" all of the entries into a whole. Beginning with a historical summary of the engagement, the narrative portion of the work has chapters on sources concerning the battle's historical background, the combat itself in great detail, an assessment (strategic, statistical as to forces engaged, submarine and air dimensions, fleet dispositions), the "various accounts and the controversy," and useful depositories and other resources. There is a glossary of "important persons" and an index. The book is intended for "students of naval warfare at all levels."

Ψ

The Naval War College Review *is listed in* Ulrich's International Periodicals Directory, *microformed by University Microfilms International (UMI) of Ann Arbor, Michigan, and is indexed both in the* Air University Index to Military Periodicals *and, selectively, in the* American Foreign Policy Index. *A softcover bound 1948–1991 index of all* Review *feature articles is available from the editorial office; it is updated annually in the Winter issue. Selected book reviews are reproduced in* Flashpoint: Military Books Reviewed by Military Professionals. *An index of book reviews is in preparation.*

Changes of address: *In order not to miss the next, or Winter 1994, issue of the* Review, *notify us by 30 September.*

Winners of the Hugh G. Nott Prize for 1992

The President of the Naval War College has announced the winners of prizes for the finest articles (less those on historical subjects) appearing in the *Naval War College Review* in 1992:

First Prize ($500), Lieutenant Commander Jeffrey L. Canfield, USN, of the Office of Naval Intelligence Detachment Newport, R.I., for "The Independent Baltic States: Maritime Security Implications" (Autumn);

Second Prize ($300), Dr. Thomas-Durell Young of the U.S. Army War College Strategic Studies Institute, for "Preparing the Western Alliance for the Next Out-of-Area Campaign" (Summer); and,

Third Prize ($200), Major Richard D. Hooker, USA, and Captain Ricky L. Waddell, USA, of the U.S. Military Academy, for "The Future of Conventional Deterrence" (Summer).

This award is given in memory of the late Captain Hugh G. Nott, U.S. Navy, who made major contributions over a period of ten years to the professional life of the Naval War College.

Winners of the First Edward S. Miller History Prize

Through the generosity of the distinguished historian Edward S. Miller, the President of the Naval War College has awarded prizes to authors of the finest articles on historical subjects appearing in the *Naval War College Review* in 1992.

The winner ($700) is Professor Graham Rhys-Jones (formerly a Secretary of the Navy Fellow), of Dorset, U.K., for "The Loss of the *Bismarck*: Who Was to Blame?" (Winter).

The runner-up ($300) is Professor Michael T. Corgan of the Naval War College, for "Franklin D. Roosevelt and the American Occupation of Iceland" (Autumn).

Ψ

These awards are made with the support of the Naval War College Foundation, a private non-profit organization dedicated to improving the quality of the educational resources of the Naval War College in areas where government funds are not available.