NAVAL WAR COLLEGE REVIEW

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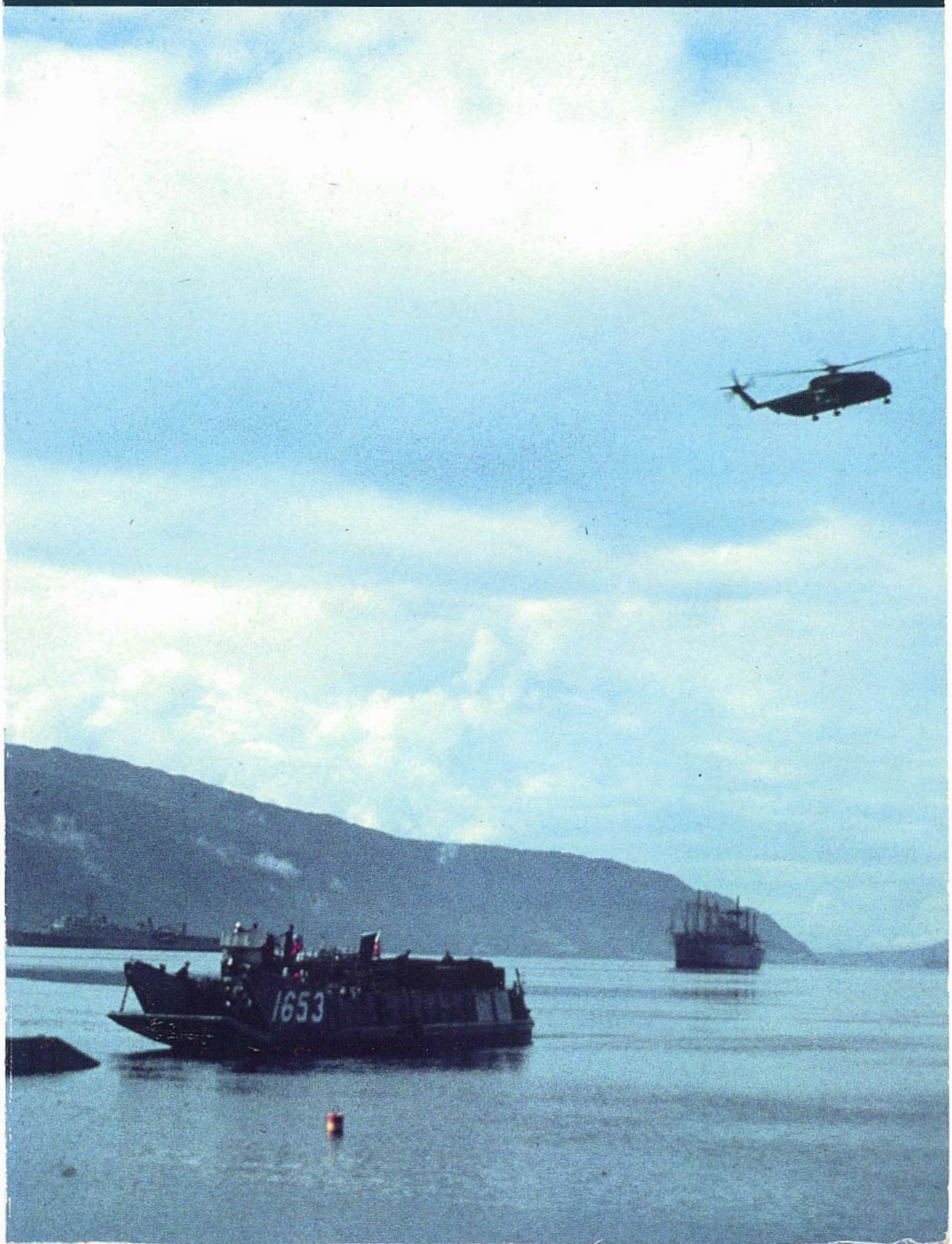

NAVAL WAR COLLEGE REVIEW

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CONTENTS

President's Notes 1

Violent Peace and the Management of Power: Dilemmas and Choices in U.S. Policy 4
Eugene V. Rostow

An Appropriate Use of Force 20
James H. Webb, Jr.

Civilian-Military Relations in the Context of National Security Policymaking 27
Marshall Brement

An Analysis of the Falkland/Malvinas Islands Campaign 33
Admiral Harry D. Train, II, U.S. Navy (Retired)

Sea Control in the Arctic: A Soviet Perspective 51
Commander Dennis M. Egan, U.S. Coast Guard
Major David W. Orr, U.S. Marine Corps Reserve

Being "Red": The Challenge of Taking the Soviet Side in War Games at the Naval War College 81
David Alan Rosenberg

Teaching about Arms Control 94
Colonel Fletcher M. Lamkin, Jr., U.S. Army
Lieutenant Colonel Stephen O. Fought, U.S. Air Force

Lord Nelson: Master of Command 105
Michael A. Palmer

Research in the Naval Historical Collection: Gifts and Acquisitions 117
Evelyn M. Cherpak

In My View 120

Professional Reading 125
A Harmonic in Some Diverse Writing on British Naval History 125
John B. Hattendorf
Book Reviews 133
Recent Books 165

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Cover: See the reverse of this page.

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 of this publication have been approved by the Navy Publications and Printing Policy Committee.

Our cover photo, taken by C.W. Griffin, PH2, deep in a fjord below Trondheim, Norway, during Nato's Teamwork 80, shows the heavily laden *LCU-1653* approaching a causeway. The ship beyond her is the USS *Hermitage* (LSD-34) and that just astern is the roll-on, roll-off ship USNS *Comet* (T-AKR-7). A Marine Corps CH-53 circles overhead. The naval war in the South Atlantic in 1982, discussed insightfully on pages 33-50 of this issue by Admiral Harry Train, reached its climax in just such an operation. An imaginative forecast of naval warfare in the Arctic, presented on pages 51-80 by two recent graduates of the Naval War College, describes events of a very different nature. Official photo, U.S. Navy.

President's Notes

Goals, Oversight and Change in Naval Education

During the past two years, as the Defense Attaché at the U.S. Embassy in Moscow, I have witnessed both fascinating political reform and acute controversy. Tales of those years will have to await future columns, however, because now, in Newport, I have been plunged into a controversy over educational reform. The issues raised by this current controversy are what I would like to share with you now in this, my first Naval War College Note.

No educational institution is ever quite the ivory tower that outsiders take it to be, and a war college least of all, since by its very nature it deals with the most brutal of all realities. War colleges especially have a host of overseeing masters to whom they must account: the service they represent, the Department of Defense, the academic auditors who accredit their programs, and above all, the law of the land. In this instauce the Goldwater-Nichols legislation has identified a problem among the services and requires that the war colleges help our services achieve an effective jointness. Inevitably, the controversy is not about whether we should dedicate our efforts to reaching this worthy goal, but about how best to reach it.

As we reorganize the curriculum to increase the amount of joint instruction it will offer, a process under way since well before the Goldwater-Nichols bill took effect, we are finding a broad area of disagreement. On the one hand, there is my view—shared by my faculty—of how to approach teaching jointness, and on the other, there is the approach that others are urging on us. They insist that the joint portion of the curriculum should be separate from its other segments, easily visible to the assessor's eye. Our experience has taught us, on the other hand, that the best

way to introduce new educational materials into an already coherent course of study is to integrate them into what already exists. We want to weave jointness into the overall fabric of the curriculum, teaching it throughout the year at every appropriate level, rather than sticking it on as a new and discrete appendage.

Jointness, we think, should not be taught separately because it is not a separate form of warfare. If we treated it as though it were distinct from its service-oriented components, we would build an artificial fence between it and the numerous service-specific issues on which it depends. For the past few years we have independently recognized the need to address joint issues and strengthen their presentation at the Naval War College. Accordingly, our operations course focuses primarily on joint warfighting, and each seminar has all-service representation, using wargaming as a device to integrate joint concepts. Joint force alternatives similarly dominate our force planning course. The sound integration of land, sea, and air power constitutes one of the five major themes examined in every one of the historical case studies that make up the strategy segment of our curriculum. Throughout the academic year, in every seminar in all three parts of our curriculum, we draw upon the specialized competence of our multiservice student body, which is truly joint—only 54 percent of our students are Navy officers.

I was proud to learn that our efforts had been recognized by the Pentagon's independent working group which evaluated the curricula of all five war colleges some months ago: the group found our curriculum rhe most joint of all. Ironically, now, because of the educational disagreement I have sketched, we at the Naval War College risk being perceived as unwilling to get on board the jointness bandwagon. Moreover, the Navy faces institutional constraints in establishing its intermediate and senior U.S. service college curricula that are apparently not faced by other services.

At the heart of this institutional problem lies an unavoidable reality. Because the Navy must deploy a large percentage of the total number of its officers with the fleet during peacetime, it can spare relatively few of them to attend both the intermediate and the senior programs during their careers. The only remedy for this persistent dilemma would be an increase in officer end-strength, which is an extremely unrealistic expectation for the foreseeable future. Taking a substantial time block in the command and staff course to teach a separate joint operational segment, as some are now urging should be done at all command and staff colleges, would require that all those hours be carved from some or all of the other three parts of the curriculum. This would be regrettable but perhaps feasible if all the intermediate officers returned here as seniors for a full course in what we believe is indispensable to an officer's education. Such is not the case. Few return for a second year of professional military education, so that they would lose permanently whatever we cut from the intermediate program. We have therefore

concluded that adding an additional segment on jointness to the core curriculum, rather than emphasizing jointness throughout all three segments, is not a viable option for the Naval War College. It would harm rather than enhance the quality and breadth of the educational experience we now offer.

This, then, is the first challenge I face as the new President of the Naval War College. Reasonable and thoughtful officers have for the past year wrestled with the problem of jointness, and all service colleges now approach the matter positively—with the goal of improving joint warfighting by intensifying joint warfighting instruction. It is nevertheless essential that the standards eventually chosen for joint professional military education not force all the war colleges into a rigid, lockstep curriculum that would crush originality and innovation and drive the more thoughtful, creative military and civilian faculty to use their skills and talents elsewhere or in some other pursuit. I understand and wholeheartedly support the congressional goal of increased jointness. In the end, we can best reach that goal by preserving and strengthening the strong intellectual tradition that has characterized our best service colleges. We can ensure that education in joint matters continues to be included in teaching historical case studies, in treating issues of future joint forces, and in gaming the employment of joint forces. Accordingly, I shall work with a committee consisting of some of my most valued academic advisors to devise a plan of action that will not dilute the quality of what we already do at the Naval War College, but will visibly obey both in spirit and in form the instructions of the Goldwater-Nichols legislation. I am sure that my readers will make valuable contributions to our effort to meet the will of the Congress in Goldwater-Nichols. While I may not be able to answer all correspondents, I would welcome letters of comment.

Ronald J. Kurth

RONALD J. KURTH
Rear Admiral, U.S. Navy
President, Naval War College

Violent Peace and the Management of Power: Dilemmas and Choices in U.S. Policy

Eugene V. Rostow

In a legal perspective—and the words war and peace are legal terms, so a legal perspective is appropriate—"violent peace" characterizes the present state of world politics far more accurately than "cold war" or "armed truce." During this century the relatively tranquil peace of the Victorian Age has disintegrated into an increasingly violent and anarchic condition. For compelling reasons of policy, however, it is a condition we should still define as one of peace, that is, of general peace punctuated by episodes of limited war. As compared to "cold war" or "armed truce," the phrase "violent peace" has the advantage of conforming to the vocabulary of international law and thus directing attention to the inescapable role of law in the social process. The widespread neglect and even dismissal of law in studies of security policy, international relations, and diplomatic history is a major intellectual weakness of the literature and of Western policy-making as well.

I wish to make it clear that I am not using the word "law" to signify a static collection of formal rules set down in the books. The law on the books is important, but it is never the same as the law in action, or the living law, the law at the end of a policeman's stick, as Justice Holmes once remarked. The law on the books does not of itself determine the behavior of states or of individuals. In many cultures, notably our own, people are greatly influenced by formal rules and tend to respect them. But the relationship between rules and behavior runs in the opposite direction too. Legal rules are much more influenced by patterns of behavior than patterns of behavior are influenced by rules. The law of a society reflects its customs, its mores, and its aspirations—that is, the patterns of behavior it deems right, seeks to achieve in the future, and finds essential to its well-being or indeed to its survival. Since society is a living organism, its customs and mores change. So do its aspirations, as its moral code improves or deteriorates. Therefore, its law, the external deposit of its moral history, changes as well.

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To put the argument into the proverbial nutshell, the essence of our security problem is to transform the presently violent and volatile condition of world politics into a more stable state of peace before it explodes into unlimited and unthinkable war. To state this same idea in the language of law, the goal of our national security effort must be to bring the real law, the living law of international society, from its woeful condition of near anarchy much closer to the standard of the United Nations Charter which embodies the norms of international conduct with which member nations profess to agree. No lesser goal can assure the survival of our nation and the fulfillment of its heritage.

Some international lawyers have suggested the possibility of identifying a political condition halfway between war and peace, the only two categories used by international law. I looked into the literature on the subject a few years ago and concluded that it is not only impossible but undesirable to establish a third classification to take account of the cold war and its ramifications. The most important reason for this conclusion has to do with the level of warfare tolerated under the two rubrics we now use—war and peace. As bad as the state of violent peace is, it is still preferable to an even more violent state of war in a nuclear environment.

In times of peace, as international law defines the word, some international uses of force have always been permitted. The books say that in peacetime, states are entitled to use whatever force is reasonably required to cure breaches of international law of a violent character when peaceful means are unavailable or would be unavailing. Such uses of force are supposed to be limited, and in fact are limited, and more or less proportional to the breaches of international law they are intended to cure. Episodes of this kind are frequent and familiar, probably more frequent today than ever before. They range from the use of force to rescue citizens in distress abroad, i.e., the Entebbe affair 11 years ago, to campaigns of individual or collective self-defense, i.e., the defense of Greece, Berlin, South Korea, Grenada, and South Vietnam and the Cuban Missile Crisis of 1962.

In all these cases, even when prolonged campaigns were needed, the use of force was restricted by international law. For example, we responded to the Soviet blockade of Berlin only in Berlin and only by an airlift; and during the Korean war the Soviet Union made no attempt to interfere with allied ships or planes carrying troops or supplies. The tacit rule of engagement in the cold war, which in this respect reflects the nominal rule of international law, has been quite consistently and prudently respected. In each case, the Soviet Union was attempting a probe or seeking a limited gain, but was not prepared for escalation to the state of war. In Vietnam, we chose to withdraw rather than escalate further, perhaps because the war had become so unpopular at home or because the nuclear balance was no longer so favorable to us as it had been at the time of the Korean war.

I do not mean to suggest that the rules of international law purport to confine the scope of self-defense against a violent breach of international law in peacetime entirely to the place where the breach occurred. Many such episodes have involved crossing frontiers to deal with the attackers in their camps or bases. The law does not recognize sanctuaries. One of the most frequently cited precedents in this branch of the law involved a British incursion into northern New York State in 1837 to disperse an armed band planning to join a rebellion against British authority in Canada; another concerned an American foray into Spanish Florida in 1819 to eliminate a group of freebooters who had been raiding towns in Georgia. But the law, sustained by an acute consciousness of the risks of going too far, has so far imposed limits on the degree of violence which can be tolerated in times of peace.

In contrast, the distinguishing feature of the state of war under international law—that is, full, general, notorious, and declared war, in the language of international law and the Constitutional law of the United States—is that it contemplates the unlimited use of force, tempered only by the humanitarian conventions of the law of war. The belligerents are not obliged to confine hostilities to the area of the original episode of violence, should there be one, but may bring force to bear on each other wherever they think it might be effective in coercing the enemy to bow to their will: for example, to give up territory, submit to belligerent occupation, overthrow an aggressive government or regime, or abandon a cause. States hesitate before crossing the legal threshold between peace and war, at least while their memories of the preceding war remain alive. In this nuclear age, they should continue to hesitate with particular care. But memories fade and emotional surges of fear, anger, and injured pride can outweigh cool calculation in the minds of those who govern us. After the Napoleonic Wars, the French statesman, Talleyrand is alleged to have said, "the statesmen of Europe were intelligent enough not to go to war with each other, but too stupid to agree." His comment has a certain bitter resonance still.

This discussion assumes that managing the use of power in international society is the business of governments and particularly of the major powers which possess preponderant military strength. Such an assumption is a modern idea which was strongly asserted in the 17th century after the Thirty Years' War and became a maxim of statecraft after the Napoleonic Wars.

The emergence and partial acceptance of that idea marked the beginning of a new era, the era in which we now live. For the first time, the states recognized a serious challenge to their sovereign privilege of making war at will: the notion that each nation's supreme security interest is not aggrandizement or dominance or glory or revenge for ancient wrongs but the

effective functioning of the state system in peace. Since the state system can never be altogether self-regulating, like the solar system, only the major powers have the power to manage it. The essence of the mutation achieved by the Congress of Vienna was the principle that the great powers should manage the use of power in the common interest. What emerged was a condition of unresolved tension between the historic privileges of national sovereignty, on the one hand, and the claim of a general interest in maintaining world public order, on the other. During the 19th century, the claims of the general interest in peace often prevailed over the lure of national expansion. In the 20th century thus far, the balance has tipped in the opposite direction.

But the 19th century experience has decisively influenced our memory and our aspirations. It is a fact, a shaping fact, a part of our collective uncouscious, that for a century after the Congress of Vienna in 1815, the great powers of Europe practiced a diplomacy of restraint, conciliation, and compromise. There were exceptions and backslidings, like the Crimean War and the Franco-Prussian War, and great changes occurred, but the state system somehow absorbed those shocks without major war. Germany and Italy were created as modern national states. Nationalism began to weaken the Austro-Hungarian empire and accelerated the decline of the Ottoman Empire. Germany and Russia pursued policies of expansion, and the orientation of world politics changed in response to the perceived threat of German ambitions. France and Russia became allies. Britain and France reached an understanding. But the new alliances did not come soon enough nor decisively enough to prevent the First World War, the tragedy from which all the other tragedies of the 20th century have flowed. Germany was pursuing goals incompatible with the practices of the Concert of Europe, and the system collapsed under the strain. The British Foreign Minister of the day, Sir Edward Grey, invoked the procedures of great power consultation which had defused so many crises during the 19th century; in 1914 these procedures failed.

The moment the First World War was over, the nations sought to restore and improve the system of concert which had served them well during the 19th century. This time the state system was organized on a world scale to take account of the fact that world politics was no longer Eurocentric. The 19th century practices of consultation and cooperation were institutionalized in the League of Nations, staffed by an international secretariat. A conscious and important effort was initiated to make the system of world order not only peaceful, but more just as well, in terms of the moral standards of the society of nations.

But the League was weak and its member nations faltered in accepting responsibility for preserving the peace. The United States refused to participate in world politics, and for 15 years the Soviet Union was partly isolated behind a *cordon sanitaire*. When, during the thirties, Germany, Italy,

and Japan began to wage war against the territorial settlement of 1919, the other powers refused to recognize the danger and dithered until it was too late to do anything but fight.

Immediately after the Second World War the nations again sought to re-create and strengthen the state system as they had done in 1919, this time under the banner of the United Nations Charter. The United States and the Soviet Union were participants from the beginning. The European empires were dissolved, save for the old Russian Empire, and more than a hundred new states were formed. On paper at least, the United Nations Charter was stronger than the League Covenant in its prohibition of aggression as a principle of law, and the Security Council was endowed with far greater power than the Concert of Europe and the Council of the League of Nations.

Once more, however, the dream of achieving a just and lasting peace has been thwarted. The Security Council has never attained the specific gravity of the 19th century diplomatic congresses at which Bismarck, Disraeli, and their peers averted war and settled the fate of Europe, Africa, and the Middle East.

Why is the United Nations going the way of the League of Nations? The reason is hardly obscure. It is indeed so obvious that even historians, who naturally prefer complex theories, are coming around to the view that the simple explanation of the phenomenon is correct. The cold war was not caused by missed diplomatic opportunities, or American imperial arrogance, or mutual misunderstandings. There were many mistakes but no mutual misunderstandings and no missed opportunities. The United States has engaged in international politics since 1945 reluctantly and spasmodically, driven by instincts of self-preservation, not imperial ambition.

The cold war—the violence of the peace since 1945—was caused by the Soviet Union's imperial appetite. During the early postwar years, the Western allies made every effort to induce the Soviet Union to take its position as a cooperative member of the Security Council and as a responsible great power in the 19th century tradition, but it rejected all such overtures. As Stalin said to Ambassador Harriman in 1944 when Harriman was pressing him to accept a reconstruction loan Stalin had requested some months before, "We appreciate what you are trying to do, but we have decided to go our own way."

The Soviet Union is still in the imperial mood of the 18th and 19th centuries. It refused the Marshall Plan offer and forced the countries of Eastern Europe to withdraw their acceptances of that proposal. It rejected the 1946 American proposal to give up its nuclear weapons monopoly and put all nuclear technology under international control. From the beginning, the Soviet Union has acted as if it were exempt from the rules of the United Nations Charter with regard to the use of and the threat to use force. Starting well before the end of the war, it has pursued a policy of indefinite expansion

based on the aggressive use of military power, beginning in Eastern Europe, Iran, Greece, and Turkey, shifting to Berlin, then to Korea, Southeast Asia, and the Middle East, and later still, to the Caribbean and Africa.

At the end of the war, the Soviet Union held not only its own territories but the Baltic States, East Germany, the states of Eastern Europe, and North Korea. In addition, it was helping the Chinese Communists in their bid for power, and Communist Parties all over Europe and Asia in their attempts to do likewise. The goal of Soviet expansion was not the bauble of prestige or a place at the high table. They were and are interested in more serious things. In 1945, the Soviet Union already possessed a massive geopolitical and military advantage. Adding Western Europe and Japan to the list would make the Soviet advantage overwhelming. If the Soviet leaders could win just one more battle, they thought, they would achieve the prize which had eluded Napoleon, the Kaiser, and Hitler—mastery of the entire Eurasian landmass and all that would flow from it.

In the late forties, Western Europe and the United States became acutely conscious of the magnitude and gravity of the Soviet thrust for dominance. They banded together in the classic response of the balance-of-power minuet. President Truman raised the banner of resistance in announcing the Truman Doctrine 40 years ago, and NATO was born. Japan, then China, and many smaller nations followed suit.

In his famous article on *The Sources of Soviet Conduct* in 1947, George Kennan supplied the intellectual foundation for the policy of containment. He assured the West that if we contained the outward thrust of Soviet power for 10 or 15 years, Soviet policy would mellow under the influence of Russian high culture, and the Soviet Union would become a responsible partner in the tasks of world politics.

For nearly 40 years, the coalitions led by the United States have followed George Kennan's advice. It was persuasive advice 40 years ago, and the West has given it a conscientious try, but Soviet policy has not mellowed. It has become bolder and more persistent in its threat to Western security.

There have been Western successes in this period. Soviet threats to the key elements in the balance of power—Western Europe, Japan, and China—have been deterred or contained, although the Soviet Union never stops probing to gain control of them. With American support, China, Yugoslavia, and Egypt have detached themselves from the Soviet sphere. Soviet-supported military moves—notably those against Berlin, Greece, Turkey, Malaysia, South Korea, and Israel—have been turned back. But Soviet setbacks have not brought about a sea change in Soviet policy. If Soviet efforts at expansion are stopped in one place, the Soviet Union tries again in another. After the failure of the Soviet effort to take Berlin, they switched to Korea, then to Vietnam, to Cuba, and the Middle East.

There has been no change in this pattern under Gorbachev. The nearly unbelievable build-up of Soviet military power continues at a pace which the Soviet Union has maintained since the midfifties. If anything, the Soviet military build-up is gaining in momentum. The military threat of the Soviet nuclear arsenal has become a powerful political tide, tending to divide the United States from its allies and associates and weaken Western confidence in its ability to resist Soviet pressure. Under Gorbachev, the Soviet position in the Middle East is bolder and more intransigent than has been the case for years. More supplies seem to be going to the Caribbean and to the rebellion against the government of the Philippines. While Gorbachev has been an agile juggler in the nuclear arms negotiations, tossing nuclear statistics into the air with the verve of a magician, there is no reason as yet to suppose that he has changed the long-standing Soviet objective in these negotiations—to induce the West to accept massive Soviet nuclear superiority as the rightful foundation for the new world order.

The Soviet thrust for dominion is now more than 40 years old. The limits of Soviet hostility are obvious. They are implicit in what Soviet writers frequently call "the correlation of forces," that is, the military balance, and especially the nuclear balance. The Soviet leaders consider nuclear war both risky and unnecessary. If the United States fails to maintain a credible retaliatory nuclear deterrent, the Soviet Union will be able to attain its strategic objectives through diplomatic pressure alone. And the superpowers cannot engage in open conventional warfare, since the greatest risk of nuclear war is through escalation from conventional war. The Soviet Union therefore relies more and more on political, psychological, and indirect methods of warfare, and on flanking actions in the Third World directed against the great centers of Western power. As Raymond Aron commented in his last book, *Clausewitz: Philosopher of War*, the Soviet leadership has reversed Clausewitz' celebrated maxim. Clausewitz said that war is an extension of politics by other means. The Soviets, Aron said, make politics an extension of war by other means.

Someday the Soviet leadership will realize that the imperial dream is a costly delusion which usually ends with a bang, not a whimper. If the West is even moderately rational—and we cannot expect a higher level of performance by our leaders—the Soviet Union can never achieve its goal of dominion.

Western opinion is frustrated and depressed by indications that the cold war shows every sign of continuing indefinitely. The Western peoples are tired of living under siege, appalled by the costs they have been forced to pay in both blood and treasure in order to maintain the balance of power, and they are increasingly irritated with each other under conditions of prolonged stress. Obviously, it is safer to be angry with your friends than with your

enemies. The Western public and their politicians are casting about to find an easy way to bring this grueling test of will to an end.

What are the choices and dilemmas facing the United States and the other Western nations as they confront this bleak prospect? We have many dilemmas but only two choices. Before examining those choices, however, I shall examine four popular and much discussed choices or options the United States does *not* have.

First is the mystical idea that we can attain salvation and security without tears by reaching arms control and disarmament agreements with the Soviet Union, particularly in regard to nuclear weapons. The second is the chimera that by pursuing the policy former President Nixon called "hard détente" we can reach a new *modus vivendi* with the Soviet Union, that is, an understanding about spheres of influence and rules of the game which would make world politics less violent and reduce the risk of an uncontrollable explosion. The third is closely related to the second, but it goes one step further. It is the notion that we should abrogate our alliances and go it alone—the option of global unilateralism, as it is sometimes called. The fourth, the option of isolation and neutrality, sounds less radical than global unilateralism, but would, in fact, be just as suicidal. Advocates of this view contend that we should cut our policy to fit our resources; pull back from the bogs and pitfalls of the Third World; draw up the wagons around the United States alone, or the United States, Western Europe, and perhaps Japan, and let the rest of the world fall into the Soviet orbit.

Arms control agreements are not a panacea for preserving peace. They should be viewed as a means to an end, not as an end in themselves. Conceivably, good arms control agreements could help to stabilize great power relationships and contribute to the effectiveness of crisis management in times of unusual turbulence. They could reinforce a regime of peace achieved by firm and prudent policies of collective self-defense. They cannot, however, be a substitute for such policies. Bad arms control agreements, on the other hand, could gravely weaken the security of the United States, as the SALT I Agreements did, by allowing the Soviet Union to seek nuclear superiority, thus exposing the United States and its allies to nuclear blackmail. Even the best conceivable arms control agreement would be worthless if it were, in effect, a license for Soviet aggression through the use of conventional force. Western nations should not be interested in arms control as a way to make the world safe for Soviet expansion achieved by conventional weapons, subversion, and terror.

In approaching the subject of nuclear weapons, one should recall that their role in world affairs is far more political than it is military. While the risk of nuclear war can never be entirely excluded, it cannot be considered great, at least not among the industrialized nations. But the threat of nuclear attack, however veiled, has been and will continue to be a potent deterrent in

circumstances of sufficient gravity to make such a threat plausible. For the United States and the coalitions it leads, a clear-cut American capacity for nuclear retaliation is indispensable to the possibility of using conventional forces when necessary to protect their interests.

For more than 30 years, Soviet policy with regard to nuclear weapons has been firmly based on these two closely related ideas. The extraordinary Soviet nuclear build-up during the last generation was designed not to fight a nuclear war, but to achieve overwhelming nuclear superiority, especially in ground-based ballistic missiles, and thus isolate and neutralize the United States. The U.S. nuclear arsenal is intended to deter Soviet or Soviet-supported attacks on American vital interests. The Soviet force, on the contrary, is designed to deter any American assistance in the defense of countries subjected to such attacks. The pattern revealed in the U.S.-U.S.S.R. nuclear arms control negotiations since 1969 reflects this fundamental difference in goals. The United States has been seeking agreements to maintain its nuclear deterrent, while the Soviet Union has sought agreements to attain overwhelming nuclear superiority. In short, the United States perceives nuclear arms and nuclear arms agreements as instruments of collective self-defense, while the Soviet Union sees them as weapons of aggression designed to make collective self-defense impossible.

The second option that is often proposed as a policy the United States should pursue in order to escape the burdens of the violent peace is a *modus vivendi* agreement with the Soviet Union—an agreement that Gorbachev often urges. Forty years of searing experience should have long since convinced the West that no Soviet-American rule of engagement that compromises with the United Nations Charter—that is, the rule of peaceful peace—has worked or can work. The United States has made many *modus vivendi* agreements with the Soviet Union since Yalta and Potsdam, and the Soviet Union has broken them all. As the Committee on the Present Danger has said, the goal of Western policy must be "sound conditions of peace with the Soviet Union, not illusory détente."

The Yalta and Potsdam Agreements were perhaps the most important of the Soviet-American political agreements since World War II. They promised free elections in the countries of Eastern Europe, whose independence remains indispensable to the possibility of achieving and maintaining a stable balance of world power. In a message to the Soviet people, President Kennedy said that there can be no peace between the Soviet and the American peoples until the Soviet promise of free elections in Eastern Europe is carried out. That judgment is as sound today as it was in 1962; Central Europe continues to be a pivot of the world system of power, as Mackinder pointed out.

The list of *modus vivendi* agreements between the United States and the Soviet Union includes a long series of agreements with respect to Indochina,

starting with the Geneva settlement of 1954 which recognized the partition of French Indochina into the separate states of Laos, Cambodia, and North and South Vietnam, and the agreements of 1962 and 1973 committing the Soviet Union to pull North Vietnamese troops out of Laos and South Vietnam, thereby permitting self-determination for South Vietnam. Another important agreement of this kind was that of the Nixon-Brezhnev 1972 summit meeting in Moscow which established a code of conduct for the cold war and promised "détente"—which, according to President Nixon, would substitute Soviet-American "cooperation" for "confrontation." Ambassador Dobrynin once said that the Soviet-American agreement embodied in Security Council Resolution 242 after the Six-Day War in 1967—the resolution that promised peace and territorial adjustments between the Arab States and Israel—was the first time in the history of the cold war that the Soviet Union used the phrase "package deal" in a positive sense. The Soviet Union broke that agreement as it has broken all others.

But the record of broken promises is not the fundamental reason why *modus vivendi* agreements, spheres of influence arrangements, and the like, cannot reduce East-West tensions and lead to peace. That fundamental reason is simple: there is no way in which the United States and the Soviet Union can define and agree to respect each other's national security interests until the Soviet Union gives up its drive for dominant power and settles down to live in peace within its legitimate boundaries.

The facts that compel this conclusion are so familiar that they are easy to ignore. The most basic national security interest of the United States is to prevent any one power from controlling the Eurasian landmass, a reservoir of power which the island and coastal states, including the United States, Great Britain, France, and Japan, could not hope to defeat. Thomas Jefferson defined that aspect of the American national interest vividly when he wrote of Napoleon's invasion of Russia: "Surely none of us wish to see Bonaparte conquer Russia, and thus lay at his feet the whole continent of Europe. This done, England would be but a breakfast . . . [P]ut all Europe into his hands, and he might spare such a force to be sent in British ships, as I would as leave not have to encounter. . . . No. It cannot be to our interest that all Europe should be reduced to a single monarchy."

The primary American national security interest today remains what it was in Jefferson's time: never allow an adversary or potential adversary to become too strong. Jefferson's rule is a conditioned reflex as old as history. Thus the United States fought in the two World Wars of this century in order to prevent Germany from dominating Western Europe and Russia. It helped organize NATO in 1949 and has participated in its activities ever since in order to keep the Soviet Union from dominating Germany and Western Europe. American policy in the Pacific Basin rests on the same principle. We have fought in four Asian wars to prevent the emergence of hegemonic power

in the Pacific Basin. That principle, spelled out in the Shanghai Communique of 1972, is the explicit basis of our relationship with China today.

This pattern of behavior is determined by geopolitical reality. If the Soviet Union gains control of the 300 million people of Western Europe and their skills, capital, productive capacity, and geographical position, then China, Japan, and a great many other countries around the world would conclude that the balance of world power had turned irreversibly against the United States. As a consequence, they would acquiesce to the best possible accommodation the Soviet Union would allow them, leaving the United States isolated, impotent, and too weak to protect its territorial integrity and political independence, but too strong for the Soviet Union to ignore and allow to remain neutral indefinitely. Soviet hegemony in Asia would have precisely the same consequences for Europe and the United States. The Western-oriented nations would face the nightmare so brutally described by Thucydides in the debate between the general of an invading Athenian military force and the leaders of Melos, a Spartan colony which sought to remain neutral. The Melians pleaded for mercy in the name of justice. The Athenian replied: "You know as well as we do that, when these matters are discussed by practical people, the standard of justice depends on the equality of power to compel and that in fact the strong do what they have the power to do and the weak accept what they have to accept."

The third alternative security policy frequently urged upon the American people—the policy of abrogating our security treaties and trying to protect our national security single-handedly—founders on the same rock as the second; it flies in the face of the arithmetic of power. Strong as it is, the United States does not have the power to defend its security without allies in the Atlantic, the Pacific, the Middle East, and Southern Asia. We are in the position held by Great Britain for four centuries between the reigns of the two Elizabeths. Britain was never as strong as the successive bidders for European hegemony—Spain, France, and Germany. But Britain skillfully maintained the balance of power in Europe by a policy of astute alliances backed by its money, its sea power, and the armies its navy deposited on near and distant shores.

The fourth alternative security policy often advocated for the United States—that of narrowly confining our defense perimeter—is a variation on the same theme. The advocates of global unilateralism accept Jefferson's principle that the security of the United States depends on maintaining a world balance of power. Their mistake is to imagine we could achieve that end by our own exertions, or with *ad hoc* alliances made at the moment of crisis. The advocates of withdrawal to either a purely national or a purely North Atlantic defense line, on the other hand, simply ignore the problem of the balance of power. It is fantasy to suppose that if we did abandon the security policy we have pursued since the late forties that we would be

allowed to live as Switzerland does, safe within a stable state system governed by generally respected rules of international law. We are too big, too rich, and potentially too dangerous to be left untouched in such a world.

If the United States follows the counsel of those who advocate pulling our troops and fleets out of Europe and Asia, the American nuclear guaranty would lose all credibility; Western Europe, Japan and China would become neutral, at a minimum; and the United States would be truly isolated and at the mercy of events. With a minute fraction of the world's population and less than 22 percent of the world's global output, the United States could not defend itself against the Soviets if they controlled Western Europe, China, and Japan, a combination astronomically stronger than the United States in every way. In Jefferson's words, we would be "but a breakfast" for the Soviet Union and that fact would be self-evident.

Moreover, even a hint or expectation of an American withdrawal from forward positions in Europe, Asia, and the Middle East would have another consequence: it would necessarily trigger the rapid spread of nuclear weapons and the breakdown of the regime of the Non-Proliferation Treaty of 1967. The influence of that treaty has not been negligible. Today there are fewer nuclear powers than most observers thought likely 20 years ago when the treaty was signed. But if the United States reduced its forces abroad, many countries which now rely on the nuclear power of the United States would feel driven to become nuclear powers themselves. The world political system would become far more volatile and unpredictable, and the Soviet Union would have a plausible excuse for attacking Germany and Japan under Article 107 of the United Nations Charter which provides that nothing in the Charter "shall invalidate or preclude action, in relation to any state which during the Second World War has been an enemy 'of any signatory of the Charter,' taken or authorized as a result of that war by the government having responsibility for such action."

Increased isolationist sentiment in the United States, caused mainly by the fear of nuclear war, has an ironic dimension: as an isolated "neutral" state, we would have to maintain at least as large a nuclear arsenal as we do now because the retaliatory nuclear force required to keep the Soviet Union from attacking Western Europe, China, or Japan is mathematically the same as that required to prevent attacks on the United States itself. Our defensive needs are determined by the nuclear forces of the Soviet Union, not by the particular target chosen for a Soviet attack. This is one of the lessons of the Cuban Missile Crisis of 1962. Because we had full nuclear retaliatory capability then, the Soviet Union could not have opposed an American invasion of Cuba and therefore withdrew its missiles in the face of American preparations for an invasion. If the nuclear balance were unfavorable to the United States, could we oppose a Soviet landing in Florida?

The strong regional coalitions we have helped organize since 1947 to thwart the Soviet bid for mastery have maintained a powerful internal coherence. There is no escape from their logic. Only the United States can frustrate the formidable nuclear arsenal of the Soviet Union, so the United States is an indispensable member of each coalition. And only by maintaining its nuclear guaranty for its allies and other vital interests can the United States sustain the balance of power on which its own primitive safety depends.

If these four familiar approaches to the problem of defining the national security objectives of the United States are not in fact available, what choices do we have? Two, I think, and only two. The first is to muddle through along the lines of our present policy of containment and collective self-defense as it has evolved since the time of President Truman and Secretary of State Acheson. The second, which I much prefer, would be to renew and modernize the policy of containment and supplement it with a policy of active defense.

Muddling through is an unacceptably dangerous course. Ceding the initiative entirely to the Soviet Union and to chance would permit the Soviet leadership to pursue a risk-free strategy. It could try one probe after another without fear of the military consequences. If the probe failed, the Soviet Union would be no worse off than before. It could bombard Western solidarity with an endless stream of political, psychological, and nuclear threats of the kind that have already had such a devastating effect on Western domestic politics and foreign policy. A continuation of the cold war as we have known it is a strategy doomed to fail. True, the United States and its allies have managed so far to prevent the worst. Western Europe, Japan, China, South Korea, Israel, Iceland, the Azores and a few other key countries have not yet been invested by the Soviet Union. But the Soviet attempt to dissolve the nuclear cement which holds the Western alliances together is making great progress, and Gorbachev is showing new flexibility and ingenuity in his choice of tactics to exploit every opportunity given him by the turbulent politics of the West.

One of the difficulties of the concept of containment is that its outer limits are necessarily vague. Certain places are obviously essential components of the balance of power—Western Europe, Japan, China, India and Pakistan, for example. Others are important or even essential to the defense of critical areas or sea lanes, or as sources of raw materials, as Korea is important to the defense of Japan, and the Middle East is essential to the defense of Western Europe. This is not the occasion to analyze the problem in depth. It is impossible to exclude in advance any area from the purview of our concern in the context of the Soviet Union's program of expansion.

Standing in a posture of static defense for 40 years, waiting for one's enemy to see the light, is hardly a strategy for victory. The West can no longer afford

to retire in frustration in the face of Soviet stonewalling and double-talk on the primordially important issue of Soviet expansion. The threat to the balance of power is too great, and the political impact of the Soviet military build-up on the solidarity of the West is too insidious and pervasive to be tolerated indefinitely. Forty years of the cold war is enough. The West must make it clear, by actions rather than by words, that the process of Soviet expansion has gone too far and that its continuation may have consequences which cannot be predicted and could not be controlled.

The worldwide state system cannot survive on the basis of a double standard, with one rule governing the international use of force for the Soviet Union and its satellites and quite another for the rest of the world. The pressures of Soviet expansion are forcing the West into a policy of more active defense. Tit-for-tat may not be a formal rule of international law, but it is the way people behave. And it is the essence of the Reagan Doctrine, as the Soviet Union fully understands.

The principle of a more active defense embodied in the Reagan Doctrine was part of George Kennan's original formulation of the policy of containment. Soviet pressure on the free institutions of the Western world cannot be "charmed or talked out of existence," Kennan wrote, but it can be "contained by the adroit and vigilant application of counter-force at a series of constantly shifting geographical and political points, corresponding to the shifts and maneuvers of Soviet policy." Over the years, the West has neglected this aspect of the policy of containment. The doctrine of "massive retaliation" against the Soviet Union for its Third World campaigns proved to be an empty threat. The West has tended only to respond directly to Soviet and Soviet-sponsored attacks. It is time to consider seriously the use of limited counterforce at a series of constantly shifting geographical and political points as an important tool of Western policy.

Thus far the Reagan Doctrine has been explained in terms of ideology rather than the geopolitics of the national interest. The first few tentative American and Allied moves in the direction of a more active defense—in Lebanon, in Libya, and in Nicaragua, for example—have been poorly planned and badly executed. But in democracies, the first few steps toward a new policy usually have that character. If we learn from our mistakes, the Reagan Doctrine could become an indispensable supplement to the policy of containment which has been the cornerstone of Western foreign policy since 1947. The West cannot remain mesmerized forever within the limits of its 1947 posture, waiting for Soviet policy to mellow.

Ideally, the policy of active defense should be undertaken by groups of allies and the United States working together, not by the United States alone. This is much the better course, both from the military and the political points of view. I can imagine no better antidote for the frustration and irritability which now characterize allied relationships than allied cooperation in

mounting successful applications of counterforce at outposts of the Soviet Empire at shifting geographical points around its periphery.

The Soviet Empire is extremely vulnerable to such a peninsular strategy. As even a glance at the map suggests, it has given many hostages to fortune on the assumption that the West is so completely possessed by a Maginot Line conception of defense that it would never undertake more open, fluid, and mobile operations. (In this forum I do not have to underline the fact that an active defense would necessarily be based on the special capabilities and advantages of sea power, as well as the offensive potential of highly mobile, modern land and air forces functioning as a team.) In this connection, I am much encouraged by the fact that the North Atlantic Council recently reviewed and reaffirmed the Harmel Report of 1967 on the Future Tasks of the Alliance. I regard that study as a valuable and realistic vision of the future for both NATO and the other Western regional security coalitions. One of its most important features contemplates the collaboration within the NATO framework of key allies who wish to concert their policies with regard to threats to allied security arising outside the treaty area. The Middle East, the Persian Gulf, and Africa are obvious examples of areas where the United States should be patiently taking the lead in bringing together groups of allies to undertake careful contingency planning and preparations for combined action should such action be required. The normal difficulties of such an effort are increased at the moment by the memory of the badly handled allied mission in Lebanon a few years ago. But such difficulties can be overcome, and we must try to do so.

Would a policy of modernized containment plus active defense in the peninsular mode be a step towards full-scale war or towards a less violent peace? Would it be more or less dangerous, more or less promising than a policy of muddling through? Or would it be the one policy open to us that might persuade the Soviet Union that its adventures in imperialism can never succeed and that it would be wise to follow the examples of Germany and Japan, and settle down to genuinely peaceful coexistence?

I close with the proposition advanced at the beginning—that the supreme national interest of the United States as an open democratic republic is to achieve an effective and pluralist system of world public order based on a stable and favorable balance of world power. In defining the national interest in this way, I suggest that we are like M. Jourdan in Molière's play: we have been talking prose throughout our history without realizing it. As a group of British colonies and then as a small and medium-sized nation, we always were part of the European balance of power, which in the early days was also the world balance of power. Since 1914 we have been necessarily engaged in the prolonged struggle to achieve and maintain a world balance of power managed by the great powers in accordance with just rules of international law. There is no alternative goal for the United States if

we wish to survive as a free democracy facing the excessive ambitions of the Soviet Union, the predator of the moment, or the threats to world public order which will doubtless arise after the Soviet Union has decided to rejoin the society of nations.

This is a perfectly feasible goal in terms of what Soviet experts like to call "the correlation of forces," if we face the facts as they are. Our problem is intellectual, but not exclusively or even primarily intellectual. It is, like all situations of conflict, above all, a matter of spirit and will.

There is no ground for discouragement in the fact that there have been so many battles lost in the quest for world public order since the Congress of Vienna. There have been successes too. There is nothing unusual in this history of success and failure in an effort to change the living law by governmental action.

The objective of achieving peace through the management of power was and is an attempt to impose new norms of law on habits of war which have the momentum of millennia behind them. What is remarkable is not that success has been intermittent. That was to be expected. The significant feature of the story is that the effort is so persistent. Each time the 19th century equilibrium is disturbed, the states seek to restore it and to improve its functioning. They no longer believe that the quest for peace is a quixotic and utopian activity, a waste of time for practical men. On the contrary, they are convinced that peace is a moral necessity in the contracting, integrated, and dangerous world in which we have no choice but to live. In this way, a new norm of law is struggling to prevail, the idea of peace achieved through the international management of power. The story is the same for all attempts to change customary law through statutes or constitutions. In our own law, it took 100 years for the Fourteenth Amendment to begin to flower, and its promise is not yet fully realized. And, the national government envisioned by the authors of the Federalist Papers and John Marshall, the great Chief Justice, was achieved in the end only by a great war.

I do not mean to suggest that it will take a great war to fulfill the ideal of international peace which has been gaining ground in the mind of the West for more than three centuries and is now embodied in the United Nations Charter. Our task is to attain that goal without a major war, through calm, steady diplomacy backed by visibly deterrent force and will. The tides of history and technology give us no choice. The burden cannot be escaped. But the burden is also an immense privilege. Can you imagine a destiny for Americans more worthy of our past than to lead in the quest for a peaceful peace?

This article is a version of a lecture delivered at the 1987 Current Strategy Forum at the Naval War College.

An Appropriate Use of Force

James H. Webb, Jr.

The differing responsibilities of civilian and military control have not always been fully appreciated by those in the operating units who are responsible for implementing policy. I remember my own frustrations in this regard, and in fact the problem has timeless dimensions. The Duke of Wellington, while fighting the French in 1812, wrote the following message to the British Foreign Office in London:

> Gentlemen:
>
> While marching from Portugal to a position which commands the approach to Madrid and the French forces, my officers have been diligently complying with your requests which have been sent by His Majesty's ship from London to Lisbon and thence by dispatch rider to our headquarters.
>
> We have enumerated our saddles, bridles, tents and poles, and all manner of sundry items for which His Majesty's government holds me accountable. I have dispatched reports on the character, wit and spleen of every officer. Each item and every farthing has been accounted for, with two regrettable exceptions for which I beg your indulgence.
>
> Unfortunately, the sum of one shilling and ninepence remains unaccounted for in one infantry battalion's petty cash, and there has been a hideous confusion as to the number of jars of raspberry jam issued to one cavalry regiment during a sandstorm in Western Spain. This reprehensible carelessness may be related to the pressure of circumstance, since we are at war with France, a fact which may come as a bit of a surprise to you gentlemen in Whitehall.
>
> This brings me to my present purpose, which is to request elucidation of my instructions from His Majesty's government, so that I may better understand why I am dragging an army over these barren plains. I construe that perforce it must be one of two alternative duties, as given below. I shall pursue either one with the best of my ability but I cannot do both:
>
> 1) To train an army of uniformed British clerks in Spain for the benefit of the accountants and copy-boys in London, or, perchance
>
> 2) To see to it that the forces of Napoleon are driven out of Spain.

The Honorable James H. Webb, Jr. is Secretary of the Navy.

One can hardly have experienced combat without some recollection of similar frustrations. As a rifle platoon commander in Vietnam, one of the most ridiculous tasks I had to perform was to fill out a "Mine and Booby Trap Report" every time someone detonated a booby trap. The bomb explodes, people are screaming; imagine trying to clear lanes to your casualties so that other booby traps would not be detonated as you treated the wounded, calling to arrange a Medevac, placing your men into a defensive perimeter to protect against ambush so the Medevac would land, and at the same time entertaining the string of questions from higher authority: What kind of booby trap was it? What size ordnance was involved? What was the actuating device? Trip wire, pressure, pressure release, other? How was it hidden?

And, of course, the accurate response was, if we had known all of that, we would not have set the thing off. But the demands of statisticians and historians prevailed, so what we did, inevitably, was make up some standard responses in order to get people off our backs. If only one or two people were wounded, with no amputations, it was a Mike-26 grenade. If there was an amputation, or if someone was mangled, it was a mortar round. If someone was killed or if there were several people seriously wounded, including amputations, it was some form of artillery shell. If someone got blown to smithereens and you could not find very much of him, it was a 250-pound bomb. And so on.

Of course, the bureaucracy and, I imagine, historians as well, took all of this quite seriously, so that while I was in Vietnam a startling tabulation of these reports was made—their results so alarming that a specially printed message was sewn inside our flak jackets: "Don't leave your grenades lying about. Fully 69 percent of all booby traps are caused by our own Mike-26 grenades."

The point of this, I suppose, is that there are areas in defense policy where the needs of the policymakers and the realities of the implementers diverge, and the two separate elements must seem foreign to each other. However, this cannot be said of the development and continual refinement of our military strategy. The proper definition of our strategic goals is the true meeting place of military and civilian priorities. Our strategy places the proper military means to guarantee the Nation's political objectives. Within the Department of Defense it shapes the nature and extent of our resourcing and dictates the general positioning of our forces and our equipment. That is to say, it often places you and your compatriots face-to-face with the myriad of problems we face around the world.

These are more than intellectual and military issues, especially in a democracy. The importance of a well-defined and properly articulated strategy assumes the realm of moral obligation in a society that nurtures and protects free debate. The defense of a free society depends upon support freely given by its citizenry. That support depends in turn upon understanding

a government's purposes and trusting in its intentions. A democratic government must articulate clearly the ends and means of defense if that trust is to endure.

There are many examples throughout history of democratic governments forgetting this vital, *moral* aspect of strategy and losing the support of loyal citizens who despaired over clouded strategic thinking. One of the most poignant to me was that of Siegfried Sassoon, a talented British poet. After almost 3 years of fighting during World War I, having been wounded several times, and awarded the Military Cross, Sassoon quit the Army in late 1917, causing national headlines. This was not an act of cowardice; Sassoon had been wounded so badly that he would have been kept at home if he had stayed in the service. Rather, it was an act of immense frustration with the leadership of a country he loved and had defended.

Sassoon wrote, "I am making this statement as an act of wilful defiance because I believe that the war is being deliberately prolonged by those who have the power to end it. . . . I believe that the purposes for which I and my fellow-soldiers entered upon this war should have been so clearly stated as to have made it impossible to change them, and that, had this been done, the objects which actuated us would now be attainable by negotiation. . . . I am not protesting against the conduct of the war, but against the political errors and insincerities for which the fighting men are being sacrificed."

Sassoon's objections were classic. The war had begun for Britain, completely without strategic objectives, in response to the violation of Belgium's neutrality. The Germans were implementing an inflexible strategy called the "Schlieffen Plan" and believed the war would be over in exactly 39 days. Instead, it would eventually cost almost a million dead among British Empire soldiers, the deaths of 1½ million French soldiers, and almost 2 million German soldiers. From beginning to end, except for the first 4 days on the part of the Germans, and for Winston Churchill's ill-fated Gallipoli Campaign, the war lacked strategic focus.

Citizens in free societies are unique in this regard: they have the right to know what they might be dying for. This was true in World War I, it was true in Vietnam, and it is true today. If we cannot tell our people what our objectives are around the world, and clearly indicate to them why these objectives are important to our Nation, we cannot expect them to invest the lives of their sons and fathers in the national interest.

I would suggest another key element: in the evocation of U.S. military strategy, the sea services are, and always have been, the linchpin. We are not a continental ground power, except on our own continent, and never have been. In fact, we have never truly fought a continental war, except the Civil War. In contrast to the horrendous figures just mentioned, we lost 55,000 men in combat during World War I and another 50,000 died from illness. In World War II, we basically fought a rearguard action against the Germans while

defeating the Japanese through seapower projection. The Germans and the Russians slaughtered literally millions of each others' soldiers—3.7 million Germans and 7 million Russians. We suffered 290,000 combat deaths in all services and in all theaters of the war. We do not know the price of this kind of warfare because, thankfully, we have never been required to pay it in order to guarantee our national security, except for the horrible bloodletting of the Civil War here on our own continent.

I would say also that, in wartime or in these periods that we now call a violent peace, our Nation's ability to affect world events, either positively or negatively, is most often measured by the size and capability of its Navy. As with Great Britain, who for centuries was Queen of the Seas, and with Japan, who has alternately attempted maritime power or appended itself to the dominant navies of its region over the last century, this is driven by economic and geographic necessity. By contrast, as we all know, nations who concentrate on naval power without such geographic and economic necessity, such as prewar Germany and today's Soviet Union, give us cause for alarm.

The disturbing realities are that, since World War II, allied navies have declined around the world and the Soviet Navy has dramatically expanded. We say this frequently, some of us taking this shift for granted and others not quite believing its enormity, but consider a few examples:

In 1946—and this is after demobilization—the U.S. Navy retained, among other assets, 106 aircraft carriers, 34 of them actively deployed, and 798 larger surface combatants, 220 of them in the active fleet. The British actively operated another 29 aircraft carriers worldwide and 419 larger surface combatants. Five years later, during the Korean war, we were operating 33 aircraft carriers and 308 larger surface combatants in the active fleet, while the British numbers had dropped to 10 carriers and 74 surface combatants. By 1961, we were operating 23 carriers and 262 surface combatants, while the British had been reduced to only 1 aircraft carrier and only 71 surface combatants. The trend continued, with slight undulations, until today when we have been able to rebuild our Navy to 14 active carriers and 217 surface combatants, while the British, once the mightiest navy in the world, operate 3 aircraft carriers and 54 surface combatants.

By contrast, the Soviet fleet has steadily emerged from a coastal force with only 62 larger surface combatants and no carriers in 1946 to a force of 4 aircraft carriers and 284 larger surface combatants today, while at the same time maintaining a huge numerical lead in submarines, minesweepers, and small combatants.

These changes dramatically affect a nation's ability to impact events. For example, there were 418 allied ships in the Mediterranean in 1947 at the time of the crisis that occasioned the proclamation of the Truman Doctrine. There were no, repeat, no Soviet ships. By the time of the 1967 Arab-Israeli War there were 66 U.S. and 21 British ships present in the Mediterranean, and the

Soviets operated 29, for the first time creating a permanent presence in the region. By the 1973 Yom Kippur War, however, there were 59 U.S. ships, only 7 British ships, and 95 Soviet combatants. This is a trend that has replicated itself throughout the globe. We see it in the Pacific, where the Soviets operate their largest fleet and where on any given day at Cam Ranh Bay, Vietnam, there are *two dozen* Soviet combatants. We see it in the Indian Ocean and the Persian Gulf. We see it in the Caribbean, and we see it off of our own shoreline.

Luckily, our country has built up a vast reservoir of experience in the uses of the sea services to influence events. Strategically, we know, first, that our strategic submarine force provides the greatest deterrent to the Soviet nuclear threat, as it provides half of the country's nuclear capability at one-fourth of the overall cost of this element of national defense.

We know, secondly, that our carrier battle groups and amphibious forces have vast maneuverability which allows power projection to occur at key crisis points irrespective of either the need for expensive base rights or the vulnerability that goes along with long-term static positions.

And we know, thirdly, that the battle at sea can ofteu be decisive to the battle on land. I am reminded of Liddell Hart's depiction of the historic race for Tunis during the North African Campaign of World War II when the Germans moved 250,000 occupation troops from France, principally by airlift, and were unable to control the sea in order to equip and resupply their soldiers. The end results were disastrous on a strategic level: we captured more than 200,000 of these troops when we took Tunis, and we did not have to fight them when we invaded Normandy. Without control of the sea, the Germans lost twice. We should not forget this as we contemplate our own reinforcement plans in the NATO arena.

Despite the record, however, we are still afflicted by the persistent illusion that somehow we can remake these fundamentals of maritime strategy through technological breakthrough or mental gymnastics. Sometimes, policymakers seek relief through strategic amnesia, which is perhaps the only way we might explain what happened to the Navy during the 1970s. Twenty years ago we had a thousand ships. By 1979 the fleet had dropped to 479 combatants and was burdened with expanding commitments driven by the crises in the Indian Ocean and Persian Gulf. The 600-ship navy we have been building since 1981 represents less an innovation of strategy than simply the long overdue effort to close the gap between political ends and military means. By revisiting a maritime strategy driven by historic demographics, we remind ourselves that we must have maritime supremacy over any threat to our seagoing communications, and that we must be supreme on the sea if we are to have a chance of prevailing on the land. This is not an option, it is a prerequisite, the very basis of our national strategy.

Any military strategy worthy of the name chooses the means, ordains what we procure and why. The critics of today's strategy claim that 15 deployable

carrier battle groups are too weak to deal with the Soviets, yet not flexible enough to deal with other contingencies. Our main business, in this view, is to convoy supplies to NATO in a long war. The Navy, this view concludes, is irrelevant in a short war.

I would venture two very careful reactions to such logic. First, if you examine any short war in recent history, you will see that the sea services have been predominant. And if you examine any European war duing this century, you will find that, despite a myriad of predictions beforehand, it has never been short. Take your pick: unless a war were to escalate quickly to a nuclear exchange that destroyed the world as we know it, you could not fight it without a strong and capable Navy.

And of course, our purpose is to be so strong that we will not have to fight. The military means at our disposal are dedicated to the prevention of war because we believe that our political objectives are so attractive to other countries that they inevitably will be obtained in peace. This, too, is a strategy. It is called deterrence and requires both military strength and a clear national will. But we have a problem here. Deterrence is often described as a spectrum. We have been most successful at the most dangerous end of that spectrum. And yet, while we have avoided direct confrontation with the Soviet Union, since World War II more than 100,000 Americans have died in the unofficial conflicts at the lower end of the spectrum. This may be a failure of our overall strategy, or it may be a sort of leakage that is uncontrollable in the wake of successfully controlling all-out war. In any event, the fate of our generation has been to learn a new lexicon of warfare, terms like low-intensity conflict, fear of escalation, diplomatic presence, political mission, avoidance of provocation, proportionate response, protective reaction, and rules of engagement.

Such equivocations are in many ways a sad function of our very strength. Our military units are often more vulnerable than they should be because political rules have given an enemy a weird sort of equality by reducing our own level of power to the point that the enemy can compete. We call this restraint. There have been times when our political system has placed combat forces into combat situations and precluded their having a combat mission in the name of gaining a political objective. Too often, as all of us know, military action is taken against these forces, political objectives fail, and our highly competent military leaders are ridiculed because of situations they did not fully control. This may be the most difficult strategic question of the moment: how do we, as a nation, deter military action on the lower end of the scale? Or, if deterrence is not possible, when do we shoot, and how much force do we use to accomplish political objectives that include the containment of hostilities?

Today's sea services are highly capable and highly flexible. We are developing the ability to cross-fertilize our warfare specialties, utilizing a

combined arms approach to many varied situations. Within weapons systems we are developing the capability for multiple missions. But all of this technology is meaningless unless our commanders know that if they take a considered risk in the field, they will be backed up at home. We must not use military force unless we are prepared to see it through in a way that makes military as well as political sense.

Nor should we be confined, in the name of proportionality, to responding to an attacker's aggression at the time or place of his choosing. Tit for tat responses have their uses, but as we have learned over the past 35 years through our frustration and suffering, these uses are narrow. The objective of military force is to prevail, to punish an attacker beyond his ability to respond yet again, to exact a political and, at times, a human cost that will in fact deter future acts.

Our sea services, as I mentioned earlier, are the very symbol of our international commitments. We have long been at the cutting edge of our country's actions abroad. Where we operate and how we operate cause us to be the most exposed forces in this confused, semipolitical, semimilitary era of violent peace. Our response to the challenge of this era is therefore of utmost concern to the Nation. I have suggested that there are things we need to do. We must establish a better balance between our political objectives and our military forces. We must clarify for ourselves and for the world that we know when to shoot and how much to shoot. And, above all, we must review the vital bond between the commander in the field and the Nation at home.

The Nation must understand why our sailors and Marines are out there on the far-flung edges of the world, what it is they are defending, and the value of that effort. And our commanders must know that, above all, should they be required to use force in this era of violent peace, while performing a military mission, they will be backed by their leadership.

And, not incidentally, our political leaders must make the conscious judgment that the introduction of military units carries with it the rather high risk that they will be called upon to use force, and that the appropriate use of this force must be ratified in advance.

These understandings would comprise the basis of a strategy that will address the most troublesome aspect of our ability to deter. And this era might have less violence and more peace.

This article is a version of Secretary Webb's address to the Current Strategy Forum at the Naval War College.

Civilian-Military Relations in the Context of National Security Policymaking

Marshall Brement

Earlier this year, members of the Strategic Studies Group, which is headquartered here at the Naval War College, had the good fortune to hear firsthand of Brigadier General James M. Mead's experiences commanding forces in Lebanon. We were struck by his vivid description of the constant interchange that he, as commander of Marine forces ashore, had with Ambassador Philip Habib as they frantically scrambled to define and protect our nation's interests during that crisis. The message conveyed by General Mead was that the kind of amorphous and nebulous situation he encountered in Lebanon required the employment of Marines in ways which he had not been trained to do and for which no specific doctrine existed. Nevertheless, it was a situation that Marines will be dealing with again and again in the years ahead. It therefore behooves us—both civilians and military—to think through what will be facing us in such situations so that we do not find ourselves coping constantly with the totally unexpected.

The General's remarks struck home with me because his bottom line was completely consonant with the project completed in Newport by the members of last year's Strategic Studies Group, which was tasked by then Chief of Naval Operations, Admiral James B. Watkins, to examine the utilization of naval forces in peacetime and to develop a proactive means of employing these forces to avert crises. Admiral Watkins felt that all too often naval forces were merely being used as a "force of convenience," rather than as an integral part of a broad, overarching strategy.

Although a difficult and sensitive topic for a group of Navy and Marine officers to examine, it was ideal for educating them to the ins and outs of policymaking at the national level. In delving into the problem, they soon

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This article was excerpted by the editors from a speech delivered by Ambassador Brement to U.S. Marine Corps staff, faculty, and students of the Naval War College at a "Mess Night" which took place on 30 March 1987.

learned that there was no significant contingency planning by civilians, no standard procedures to ensure that stated policy was actually being carried out by the relevant agencies, and no systematic, designated means of coordinating policy implementation by the various Government departments. After extensive discussions with members of the National Security Council staff and officials of the State and Defense Departments and of the Central Intelligence Agency, the group came to the conclusion that significant differences existed between civilians and the military with regard to planning and crisis management.

Civilian policymakers, who had given the subject some thought, tended to criticize the military for offering them unrealistic and unusable courses of action in times of crisis. Military officers, on the other hand, criticized civilian decisionmakers for not giving them clear directives and for not revealing their hidden agenda. "If they didn't want me to incur any casualties," one such officer asked, "then why didn't they say so?"

The SSG concluded that a dysfunction existed between civilian and military thinking. For obvious reasons, the military devotes almost all of its planning time to warfighting, which essentially means maximum military effectiveness in putting ordnance on targets. When facing a peacetime situation which may require military action, the military tends to try to fit their wartime plans into peacetime contingencies. But for a variety of reasons this does not work. Civilians confronting peacetime crisis situations usually want low-risk, relatively quick response options that can be publicized as successes on the evening news. Public perception is actually more important to them than military effectiveness. Furthermore, civilian policymakers would much prefer to receive a series of options rather than operate on the basis of the single option generally offered to them by the military, who are naturally reluctant to come up with alternatives that have not been adequately thought through and staffed.

An even more fundamental difference between civilian and military crisis management is the absence of contingency planning by civilians. The military deals with concrete matters. To move a battalion or an aircraft carrier takes meticulous advance planning. There is not a military headquarters anywhere in the world that does not engage in planning and does not consider its plans section to be an important component.

The Secretary of State, on the other hand, deals only with the crisis of the day. The Secretary is without forces at his disposal. His tools are words, and words can be composed rapidly and transmitted instantaneously. He and his staff see no reason to anticipate their responses to upcoming events in any significant detail. Their responses, they feel, will flow naturally as they address the situations that develop—situations that are impossible to predict minutely. They lose sight of the fact that effective peacetime military response requires advance consultation by the military with civilian

components of the National Command Authority in order to ensure that the parameters of the problem to be addressed, and its goals and objectives, are fully understood and factored into the requisite military plans.

For these and other reasons, one of the major conclusions drawn by last year's Strategic Studies Group was that peacetime and wartime targeting and planning are fundamentally different and must be approached in wholly distinct ways. The SSG also concluded that naval options cannot be implemented with maximum effectiveness by themselves. They should be coupled with, and preceded by, coordinated pre-crisis contingency planning that takes into account the political, public affairs, economic, and diplomatic factors. The way to accomplish such comprehensive planning, the group felt, was to work out interagency regional peacetime strategies for the six primary hot spots in the world—those areas where use of U.S. military force is most likely to occur over the next several years.

The key to formulating such strategies lies in the in-depth examination of the various "unacceptable acts"[1] that could occur in each of those regions and in the construction of matrices that outline the political, diplomatic, economic, public affairs, and military actions the United States could undertake to preclude such "unacceptable acts" from occurring; or, if indeed they do occur, to think through appropriate responses to such "unacceptable acts."

It concluded that "unacceptable acts" in any given region were finite and in some cases could be narrowed down to as few as four or five; that once they had thought through their preemptive, proactive, and reactive responses to those four or five "unacceptable acts," they had actually thought through the entire range of response options available to the U.S. Government for dealing with almost any political crisis in that region.

The benefits of coordinated, pre-crisis contingency planning may seem obvious, but the fact is that such planning has not been done by the U.S. Government for the past twenty-five years—not since the Presidency of Dwight D. Eisenhower. In that Administration, such planning was a concept which was considered central to the administration of national security policy. The National Security Council in those years had a Planning Board to engage in policy planning and an Operations Coordinating Board (OCB) to ensure, on an interagency basis, that agreed policies were implemented and, to the extent possible, potential political crises identified and averted. This bureaucratic structure was keyed to regular Thursday meetings of the National Security Council, presided over personally by President Eisenhower, which generally lasted several hours. Eisenhower, who was head of planning for the U.S. Army when General George C. Marshall selected him to command our forces in Europe, was committed to the idea of military planning and brought such concepts into the White House when he became President, as did his former Chief of Staff Walter Bedell Smith, who became Deputy Secretary of State and the Head of the Operations Coordinating Board.

On 6 December 1960, in a meeting with President-elect John F. Kennedy, Eisenhower stressed the importance of the NSC "together with its two supporting agencies—the Planning Board and the Operations Coordinating Board. . . . I did urge him," Eisenhower wrote in his diary, "to avoid any reorganization until he himself could become well-acquainted with the problem. (Incidentally, I made this same suggestion with respect to the White House staff, the National Security Council, and the Pentagon.)"

This is a unique example in our history of one President passing on his wisdom, gleaned after eight years in the White House, to a newly elected President of the other party. It was good advice, but Kennedy did not heed it. He abolished the subordinate OCB structure a few months after he took office. To cut out bureaucratic fat is a good idea, but not if the muscle and the gristle are cut out with it.

The Tower Commission pointed out that the sequence of events in Irangate was an aberration from the way the NSC ordinarily operates and recommended that the NSC continue to do its business using current procedures. In our post-World War II environment, the President cannot operate without a staff to coordinate foreign policy and national security affairs. No department or agency can substitute for that staff because each department and agency has its own parochial interests and its own axes to grind, which do not necessarily coincide with our national interest or with the President's political interest.

The President's staff, however, cannot function as an operational agency or have an agenda of its own separate from those of the great departments which administer our national security policy. The difference between staff work and operations is better understood in the military than in any other segment of our society, as is the need for the clear delineation of responsibility and for adherence to a chain of command. It has therefore been shocking to a great many Americans to see as the culprits in the latest series of White House shenanigans two distinguished military officers on active duty. With this in mind, it is perhaps worthwhile to consider where those officers went wrong. It should be clear that there are certain rules, procedures, and canons in the making of high government policy which, if violated, can lead to catastrophe. These can be encapsulated in the following ten rules, all of which were transgressed recently by officials of the National Security Council staff.

The first rule is stringently to think through the downside. It is not too much to ask White House operatives to make a balanced risk-to-gain assessment before undertaking any action. President Nixon was going to be reelected by a landslide in 1972. Everybody on his staff knew this. Why rob Democratic Party headquarters under those circumstances? What possible gains could have compensated for the losses suffered?

The second rule is never let the maintenance of necessary secrecy impede access to those who have a genuine need to know. To proceed with a deal to exchange antitank missiles for several unfortunate hostages against the advice of the Secretary of State and the Secretary of Defense was folly. To take subsequent action to achieve this end without keeping George Shultz and Caspar Weinberger fully informed was madness—both operationally and politically. Secrecy has its place, but it should never be used as a means to keep unpleasant advice from the President.

The third rule, a variation of the second, is to beware the half-baked expert. Would any admiral commanding the Second Fleet make crucial decisions about submarine deployments without consulting COMSUBLANT? If not, then how can senior officials on the National Security Council staff advise sending Bibles from presidents to ayatollahs without first consulting a genuine expert on Iran and Iranian culture?

The fourth rule is to take every possible step to disassociate the President from actions which have risky or negative consequences. The most bewildering single act of this whole sorry affair was the trip to Teheran. What were the risks and what were the gains of using a former National Security adviser on such a mission? Why not have the negotiations done by a trusted agent or even a third country national so that if the negotiations failed there would be no direct link to the White House?

The fifth rule is never to associate two unassociated policy initiatives. While highly creative, the use of money generated by Iranian arms sales to support the Contras was of dubious legality and could only hurt the Contras in the long run. An iron law of Washington is that everything eventually becomes public. To bank that secrecy will protect you is the mark of an amateur.

The sixth rule is always consult your lawyer and your press secretary before undertaking important policy initiatives. Public and press reaction to what you are doing is fundamentally important in our democracy, as is staying within the boundaries of the rule of law. If what you are planning is deemed too sensitive to reveal to these two key officials, then forget those plans. They are certain to damage the President eventually.

The seventh rule is to think three steps ahead of yourself about the gains you expect to achieve. Even if the U.S.-Iranian arms negotiations had come to fruition and the hostages had been released, the United States still would have endured a net loss. The fundamental geopolitical fact of the matter is that it is not in the interest of the United States for Iran to be victorious in its current war with Iraq or for terrorists to believe that the way to manipulate the U.S. Government is by seizing a few American hostages. Exchanging TOW missiles for such hostages is therefore, on both counts, a very bad idea.

The eighth rule is never to use a military man for political purposes. This can only discredit the military and damage the military-civilian relationship

upon which our democracy is based. The military work for the elected representatives of the people, whichever Party is in power. Military officers should *never* be asked to engage in actions that could be construed as politically partisan. Speaking at fund-raisers and opening Swiss bank accounts is not acceptable behavior if you're wearing a green suit. If you have to engage in such actions, then at the very least retire from active service before doing so.

The ninth rule is to avoid zealots and zealotry. When asked for the prime characteristic of a practitioner of diplomacy, the great French statesman Talleyrand unhesitatingly replied, "Surtout, pas trop de zêle—Above all, not too much zeal." This is as true today as it was in the 18th century. There are better places for true believers than on the White House staff.

The tenth rule is to think strategically and beware the false analogy. One of the participants in the ill-fated journey to Teheran suggested in an Op-Ed article for the *Washington Post* last autumn that the opening to Iran paralleled Kissinger's opening to China. What he neglected to point out was that the two most important foreign policy aims of the Nixon administration were to get out of Vietnam with our honor intact and to establish a détente relationship with the Soviet Union. On both these counts the U.S. opening to China not only made sense, but was a powerful impetus in achieving those aims. Had the negotiations with Chou En-Lai failed, they nevertheless would have been understood by all sensible observers of international affairs as being clearly in the basic interests of the United States and the West. Such cannot be said—to put it mildly—about the so-called opening to Iran.

Exactly eighty-two years ago, the greatest scientific paper of the last several centuries was published, in which Albert Einstein proved that time and space not only look different, but *are* different, for the man traveling in a spaceship close to the speed of light, as well as for the man observing him from a distant vantage point. From my experience, time and space are correspondingly different for those of us outside observing the White House and for the man working in the White House and trying to make sense of the outside world.

But it is nevertheless not asking too much of those who hold the awesome responsibility for decisions that may lead brave members of our military forces to shed their blood to think through, as many moves ahead as possible, all ramifications of any such decisions. Careless and slapdash decisionmaking is inexcusable. The end game is what counts both in chess and in diplomacy.

Note

1. An "unacceptable act" was defined as any action which *required* a response from the U.S. Government which might involve the employment of the U.S. military.

An Analysis of the Falkland/Malvinas Islands Campaign

Admiral Harry D. Train, II, U.S. Navy (Retired)

The profession of arms is not only a life of dedication, sacrifice, and frustration, it is a life of intellectual challenge. For you see, when we are called upon for combat, it means we have failed as a nation. When guns speak and blood flows, we have failed in our pursuit of the first and foremost political objective assigned the armed forces: that of deterring war. We should all be acutely aware that the Armed Forces of the United States has no life in and of itself. It exists for one purpose and one purpose only: to support the political objectives of this Nation. *What* that service shall consist of is determined by the people and by their elected representatives. *How* that service shall be performed, on the other hand, is the central element of the military profession. *How* we perform in our stewardship is the measure of our worth to the Nation.

Rather than expand upon that thought in a philosophical way, let me share with you a slice of relatively recent politico-military history—a tragic episode involving two nations, two friends whose interests coincide largely with ours. This history illustrates most of the points that need to be made.

In North America and in Western Europe it is called the "Falkland Islands conflict." In Latin America it is called the "Malvinas conflict." The British call it the "South Atlantic war." By whatever name you wish to use, it is a classic case of the breakdown of deterrence. It is a war that should never have occurred. But it did and therefore presents a case study rich in political and military mistakes. Ultimately, the outcome of this war was determined more by British professionalism than by the balance of power or the application of such basic military principles as achieving air superiority prior to an amphibious landing.

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This article was delivered by the author as the first annual Hofheimer Lecture to the students, faculty, and distinguished military and civilian guests at the Armed Forces Staff College.

This is a conflict of particular interest to sailors and airmen because it involved the first use of modern cruise missiles against warships of a major navy, and because it was the first time since World War II that sustained air attacks were made against naval forces at sea. It also included the first use of nuclear-powered attack submarines and the first known use of vertical/short takeoff and landing aircraft in combat.

Yet, it is also of particular interest to infantrymen because the action in the Falklands once again demonstrated that the ultimate outcome of a war is determined on the ground. The Royal Marines and the British Army won on the ground. The Royal Navy could have lost the Falkland Islands conflict at sea, but could not have *won* it. Such is the nature of modern war.

The Diplomatic Prelude

The diplomatic prelude to the Falkland Islands conflict contains such a wealth of material as to warrant an entire article by itself. As an essential element of the war's history, it contains lessons of which we military professionals ought to be aware. For after all, it was the failure of the diplomatic process, coupled with the breakdown of deterrence, which led to war. This is an oversimplification, but will suffice for our purposes here.

The diplomatic prelude to the Falkland Islands conflict spans an era of 150 years. I shall concentrate on the last few during which the major players were: the United Nations, the Falkland Islands Company, Foreign Minister Lord Chalfont, the Falkland Islands Emergency Committee, the coal miners in England, the Conservative government, Foreign Minister Lord Carrington, the new junta in Argentina, the Royal Navy, BBC Television, and an Argentine scrap metal dealer named Sergio Davidoff.

The United Nations passed U.N. Resolution 1514 in 1960 urging all colonial powers to divest themselves of their colonies and submit a list of those colonies to the United Nations. The British listed the Falkland Islands as a British colony; Argentina responded by claiming that the Malvinas Islands were no one's colony. The United Nations subsequently created a committee to negotiate the conflicting British and Argentine claims.

The residents of the Falkland Islands derived their livelihood from the Falkland Islands Company, a profitable operation involving the sale of wool produced in the Falklands. This company was particularly profitable because the British Government provided most of the overhead and logistics support for its activities. In 1968, following secret negotiations between Argentina and Britain and subsequent rumors of an imminent settlement of the Falkland Islands sovereignty issue, Lord Chalfont visited the Islands. This high-level visit so alarmed the Falkland Islands Company that they reacted by creating the Falkland Islands Emergency Committee. As a lobbying body, their purpose was to ensure the continuing existence of their unique profit structure.

In 1971 Great Britain and Argentina signed, under U.N. auspices, a communication agreement. Under this agreement, Argentina assumed from Great Britain the burden of communication support of the Islands and instituted air service between the Falklands and the mainland. The use of only a "white card" permitted open movement between the Islands and Argentina by both Argentine and Falkland Islands residents. The card contained no fingerprints, no nationality, and no expiration date. Educational opportunity on the mainland and the availability of medical care were essential elements of the communication agreement.

In the years following, talks that largely focused on the sovereignty issue were subject to periodic breakdowns. Then, in 1981, it appeared as though Lord Carrington were about to embrace a Hong Kong-type lease-back agreement with Argentina. The Falkland Islands Emergency Committee, with their emotions running high, embarked upon a blitz of Parliament and succeeded in obtaining a decision to discontinue all discussions of sovereignty in the talks with Argentina. Violent reactions in Argentina to this diplomatic setback prompted the British to begin dusting off and updating contingency plans for defense of the Islands, and the new Argentine junta began a similar updating of their contingency plans to invade the Islands.

Meanwhile, the riots in England's coal mines and the Labor Party's exploitation of this conservative government's distress were creating pressures within the United Kingdom to seek a unifying cause. Also, the Royal Navy was dealt another setback when John Nott, Secretary of State for Defense, announced that one-quarter of the surface combatants in the Royal Navy were to be deactivated. If ever there was a service looking for a mission wherein lay the means to reestablish its value to its country, it was the Royal Navy in 1981.

Enter upon the scene one scrap metal dealer, Sergio Davidoff. Having purchased three abandoned whaling factories in the South Georgia Islands, he planned to bring "white card" workers to the Islands to dismantle the factories, and ship the scrap to Argentina. The Argentine Navy developed, then later cancelled, a plan to exploit Davidoff's mission by including military personnel among his workers. According to the aborted plan, these commandos were to be left behind in South Georgia after Davidoff had left for the mainland with his scrap. Misunderstandings between Davidoff and British Government officials regarding correct procedures to be followed in the performance of his mission, plus considerable diplomatic and consular incompetence on the part of Governor General Rex Hunt at Port Stanley, resulted in an electrifying report from the British Antarctic survey team in the South Georgia Islands stating that the "Argentines have landed." The stage was set for war. A further announcement on BBC Television that two British nuclear submarines had sailed for the Falkland Islands—a report which later proved to be incorrect—set in motion the events which led to war.

The Breakdown of Deterrence

While previous Argentine governments may have considered the use of military force as a means to regain sovereignty over the Malvinas Islands, ultimately such actions were deterred by their perceptions of Great Britain's *military capability* and its *willingness* to use that capability to defend its interests. However, prior to their commitment of the Argentine military force to occupy Port Stanley on 2 April 1982, the Galtiere-Anaya-Lamidoze junta did *not* believe that the British would respond with military force. What then prompted the shift in their perception of the British military capability and their willingness to employ it? Admiral Anaya, Chief of the Argentine Navy, cites the following sequence of British decisions as supporting the junta's analysis:

- their loss of Suez in 1956 and the associated loss of overflight rights and use of bases created obstacles to sustaining British deployments east of Suez;
- the 1957 British defense review resulting in cutbacks of Royal Navy and British Army forces stationed outside of the United Kingdom;
- the 1966 Labor government economic review resulting in a major reduction of British forces stationed east of Suez;
- the late 1960s mission reduction of the Royal Navy; cancellation for the construction of a new class of large deck aircraft carrier; and plans to deactivate all Royal Navy aircraft carriers, transferring the tactical air mission to the Royal Air Force—all cast doubt on the ability of the Royal Navy to support the vital interests of the United Kingdom;
- failure of the Conservative Party to alter this trend during their 1970-1974 stewardship gave a sense of permanence to these setbacks;
- the 1975 Labor government defense review sealed the doom of the aircraft carrier, retired amphibious ships, projected reductions in the size of the Navy and ordered further withdrawals from British overseas bases; and finally,
- the 1981 Conservative government announcement of the deactivation of one-quarter of the Royal Navy's surface combatants and simultaneous negotiations to sell one-third of their newly constructed class of miniature VSTOL carriers to Australia painted a picture of doom for the Royal Navy.

Admiral Anaya's interpretation was that the United Kingdom had become a nation lacking not only the means to defend its interests 8,000 miles from England, but also the national will to employ what little capability remained.

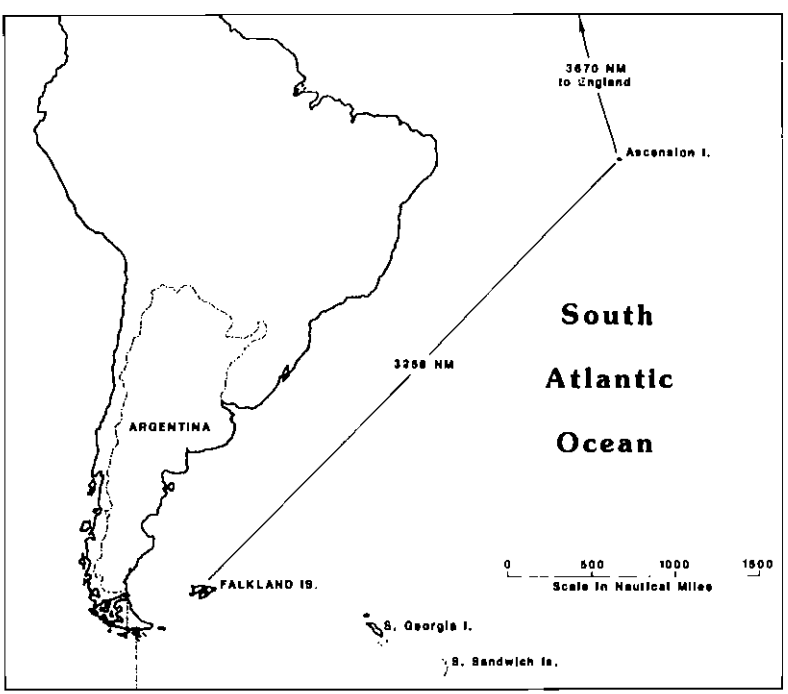
The Argentine Invasion

When the BBC erroneously announced the sailing of two British SSNs on 26 March 1981 in reaction to events in South Georgia, Admiral Anaya faced a dilemma. Up to then his contingency planning had been as "academic" as

that of his predecessors. He even described the Malvinas contingency planning as "war college type planning," simply an exercise. The fact that it was being conducted in an aura of great secrecy by a limited number of carefully selected admirals and generals at a remote and secluded naval base argues against such a conclusion; nevertheless, such was his contention. Whether a war college level planning exercise or a fleet planning effort, the contingency plan called for execution no earlier than June. Argentine conscripts enter service on 1 February each year and do not reach acceptable levels of proficiency until June; Argentine Navy commanding officers assume their commands in February of each year. Another important consideration was the Falkland Islands weather which is miserable in the middle of the winter, thus favoring a defending force, especially against an adversary whose home base is 8,000 miles away.

Following receipt of the 26 March erroneous report of nuclear submarine sailings, Anaya concluded that whatever opportunity might exist for a successful invasion of Port Stanley would disappear when the submarines arrived. He calculated their arrival date to be 12 April. In a now or never frame of mind he directed Vice Admiral Lombardo, commander of the South Atlantic Theater of Operations, to execute the plan known as Operación Rosario at the earliest date possible. D-day was set for 2 April.

The landing was a casebook operation with 700 marines and 100 commandos executing an amphibious assault on Port Stanley on the morning



of 2 April. Their rules of engagement were to shed no British blood and avoid damage to British property. The operation was flawlessly executed. The marines and commandos were back-loaded the same day and replaced with a like number of army occupation troops.

From this point, until the sinking of the *General Belgrano* on 2 May, the Argentine leadership thought they were in a crisis management situation, while the British, on the other hand, believed they were at war. These disparate mind-sets dominated their respective decisionmaking processes. The Argentine leaders considered the invasion to be a mere military nudge to diplomacy and continued to seek a diplomatic solution for gaining sovereignty over the Malvinas Islands. Meanwhile, the British sailed their fleet, including ships taken up from trade, loaded out with paratroops and commandos, toward the war zone.

The First Ten Days

The case can be made that Argentina lost the war between the 2 April invasion and the 12 April arrival of the British submarines. That is not to say the British *won* the war at that time, as they did not win it until early June, but the Argentines lost it early on. Let me explain. The Argentine plan was to occupy the islands with a small force and then negotiate from strength-of-possession. They did not plan to support this force with a major logistics effort since the Argentine leaders did not believe they would have to fight. By similar reasoning, the Argentines saw no reason to lengthen the runway at Port Stanley Airport to permit A-4s, Super Entendards, and Mirages to operate from the Islands.

The size of the British force which sailed from the United Kingdom surprised the Argentine leadership and led them to make hodgepodge decisions on troop reinforcement. They fed in additional regiments by air until their troop numbers reached 10,000. Yet, they took no measures to augment their initial decision to provide limited logistical support. During the period when merchant ships could have safely transited the waters between the mainland and the Falkland Islands—loaded with heavy artillery and mobility assets such as large helicopters, and with food, ammunition, and basic cold weather support gear—they sailed only four ships. They filled one of these ships with air field matting but failed to send earth moving equipment to prepare the rugged terrain for laying it.

Several regiments were sent to Gran Malvinas (West Falkland), rather than to East Falkland. Given that the Argentine Army would most likely have to defend Port Stanley, this decision to split their forces was not particularly helpful—as history proved.

Admiral Anaya says that the unplanned buildup was prompted by the size of the British force. Also, the expectation was that if the Argentines

reinforced to 10,000 men, the British would have to bring more troops. Bringing in additional British troops would require more time, and more time would permit additional efforts to achieve a diplomatic solution.

General Lamidozo, chief of the Argentine Air Force, claims that lengthening the air field was physically impossible. The fact that the British did so and had F-4 Phantoms flying from Port Stanley not long after the surrender would seem to invalidate his assessment. But he persists in that view to this day. Had the Argentines achieved the capability of flying A-4s, Super Entendards, and Mirages out of Port Stanley, the course of the war would probably have been quite different.

The War at Sea

The Argentine naval leaders contemplated a number of alternate naval strategies. They considered interdiction of the sea lines of communication north of the Falklands with the aircraft carrier *Veintecinco de Mayo*, but then abandoned the plan as too risky. They considered using their surface combatants in port in the Falkland Islands as mobile batteries, safe from attack from British submarines, but they abandoned that plan as ineffective. They ultimately decided to employ a "fleet-in-being" concept. Conscious of a perceived need to maintain a reserve maritime capability to defend against Chilean postwar aggression, the Argentines decided against engaging in naval frontal battles, opting instead to fight a maritime war of attrition employing land-based tactical air. Their expectation was to damage the British landing force during the landing when their freedom of movement was limited. The Argentine leaders also believed a premature naval engagement, whether by submarine against merchant ship or combatant ship against combatant ship, would doom the prospect for diplomatic solution.

The British four-phase naval strategy was first to enforce the 200-mile maritime exclusion zone with submarines from 12 April until the arrival of the surface forces on 22 April. Phase two would then begin with the surface force establishing air and sea superiority in preparation for the landing. The third phase would commence with the landing and would include establishing a beachhead, supporting the troops ashore, and protecting them from air attack. The final phase would involve supporting the land war and protecting the sea lines of communication. As you will see, not all of those objectives or missions were achieved.

In committing the Argentine Fleet on 1 May, Vice Admiral Lombardo had in mind a specific tactic that he hoped would distract the British from support of what Argentine intelligence thought were preparations for a 1 May landing on the Falklands. His concept was to bring the *Veintecinco de Mayo* task group in from the north, outside the maritime exclusion zone, to attack the beachhead while simultaneously bringing the *Belgrano* task group in from the

south in a move designed to divert attention from the carrier. This would result in a pincer movement intended to draw the British task force away from support of the landing on the islands. As the *Veintecinco de Mayo* was preparing for its attacks on the British task force, the winds became calm, and engineering casualties limited the carrier's speed to 15 knots. This speed reduction, together with the calm winds that were forecasted to continue for 24 hours, forced the *Veintecinco de Mayo* to download its A-4s from four bombs each to one bomb per aircraft. The odds for a successful air attack with such limited ordnance, together with a report that the British had not landed as expected, prompted the recall of both the *Veintecinco de Mayo* and the *General Belgrano* to the west toward the mainland.

Meanwhile, recognizing a quite valid threat to his forces, the British task force commander, Rear Admiral John Woodward, requested and some time later received authority from London to attack the *General Belgrano* outside the maritime exclusion zone—his objective was to neutralize an unacceptable threat to his force. At the time the nuclear submarine HMS *Conqueror* attacked and sank the *Belgrano*, the cruiser had been steaming on a westerly course for 14 hours away from the British task force and toward the mainland. (The ethics and morality of this act have been a subject for debate in British political circles ever since the South Atlantic war.) With the sinking of the *Belgrano* came an end to all hopes for a diplomatic solution as the war at sea began in earnest. The conflict centered around the first truly naval confrontation since the Pacific campaign in World War II.

The toll inflicted by Argentine Air Force and naval aircraft during the war at sea included the British destroyers *Sheffield* and *Coventry*, the frigates *Ardent* and *Antelope*, the landing ship *Sir Galahad* and the merchant ship *Atlantic Conveyer*. In addition, 2 British destroyers, 14 frigates, and 2 landing ships were damaged by Argentine air and missile attacks. Thirty-seven British aircraft were lost to various causes. The 14 unexploded bombs could easily have doubled the losses of British warships had the bomb-arming devices been correctly set.

The British task force lacked an in-depth defense. It required the type of tactical air support a large deck aircraft carrier could have provided with its tactical reconnaissance and airborne-early-warning aircraft. Instead, it was forced to rely on small, not too terribly well-armed combatants that were much more vulnerable to damage than larger, better armed, generally more capable ships.

A small force of Argentine diesel electric submarines created enormous concern for the British. It dictated, at least as much as did the air threat, the conduct of British naval operations and caused the expenditure of a vast supply of antisubmarine warfare weapons. Virtually every antisubmarine weapon in the task force was expended on false submarine contacts.

An equally small force of British nuclear attack submarines dominated Argentine naval leaders' decisions and held the Argentine surface navy at bay. It also controlled some of the earlier Argentine political decisions made at the onset of hostilities.

Selection of a Landing Site

As the British invasion force steamed toward the Falkland Islands, one of the major decisions facing British military planners was where to make the initial assault on the Islands. Some of the more relevant considerations governing this decision were:

- political expediency—the perception on the part of the British Government of the need to engage the Argentines quickly to appease a British public, hungry for action;
- the rapid approach of winter in the Southern Hemisphere with its attendant environmental problems;
- the effects on the training, morale, and general physical fitness of ground forces subjected to a protracted stay on land in the already poor weather conditions;
- the logistics problems attendant with maintaining a large ground force ashore for a protracted period of time;
- the mobility problems attendant with moving a large ground force and its support for any distance over the rugged Falklands' terrain; and,
- the lack of intelligence regarding the willingness and/or capability of Argentine soldiers on the Falklands to fight.

In the end, British planners were faced with two diametrically opposed concepts for conducting the initial assault on the Malvinas Islands. The first was to conduct an opposed landing by massing all available forces and boldly storming ashore either at Port Stanley itself or at a site nearby from which the main objective of the campaign could be brought under direct attack by ground forces as quickly as possible. Or, secondly, to conduct a more or less administrative landing at an undefended site somewhat removed from Port Stanley in order to make it difficult for the Argentines to attack the fragile beachhead. The potential sites first considered by the British for an initial assault on the Falklands were:

- Stevelly Bay (Gran Malvinas), the farthest from the objective at Port Stanley and the least subject to counterattack by Argentine ground forces. The possibility of building an airstrip here to relieve the British VSTOL ships was also a consideration at one point;
- San Carlos, closer to the objective and still difficult for the Argentines to counterattack from Port Stanley;

- Bluff Cove, closer still but also nearer to a response by Argentine ground forces from Port Stanley;
- Berkeley Sound, much closer to Port Stanley but also practically in the Argentines' backyard and almost certainly subject to a ground force counter-attack by the Argentines; and
- Port Stanley, rejected almost immediately as too hazardous.

It was finally decided to make the initial landing at San Carlos, a point where no immediate ground resistance would be met. The plan was for the initial force, under the command of Brigadier Julian Thompson, to consolidate the beachhead and await the arrival of augmenting forces en route from Britain. At this point, command of the entire land operation would be assumed by Major General Jeremy Moore. Both Thompson and Moore were Royal Marines.

The pros and cons facing planners in selecting San Carlos as the initial landing site were:

Pros

- the protection from submarines offered by the restricted waters of the anchorage;
- protection from air attack which the surrounding high ground offered the landing force ships and its excellent potential for siting AAW Rapier batteries;
- Special Air Service (SAS) reports indicating a lack of enemy presence in the area other than infrequent patrols;
- Special Boat Squadron (SBS) reports indicating no presence of mines on the beaches and no evidence of mine-laying activity to seaward; and
- the delay that could be expected in enemy ground forces' response from Port Stanley due to the distance and terrain involved (approximately 50 miles of rugged terrain).

Cons

- the distance and rugged terrain between the landing site and the main objective of Port Stanley which would have to be traversed in some fashion by the landing force;
- the proximity of a strong enemy garrison at Goose Green (13 miles to the south);
- the lack of suitable beaches for landing large quantities of men and supplies;
- the proximity of the surrounding high ground which could be used to advantage by the enemy in repelling or dislodging the landing; and
- even though unobserved by SBS patrols, there was the possibility of the Argentines having already mined the seaward approaches of the site because

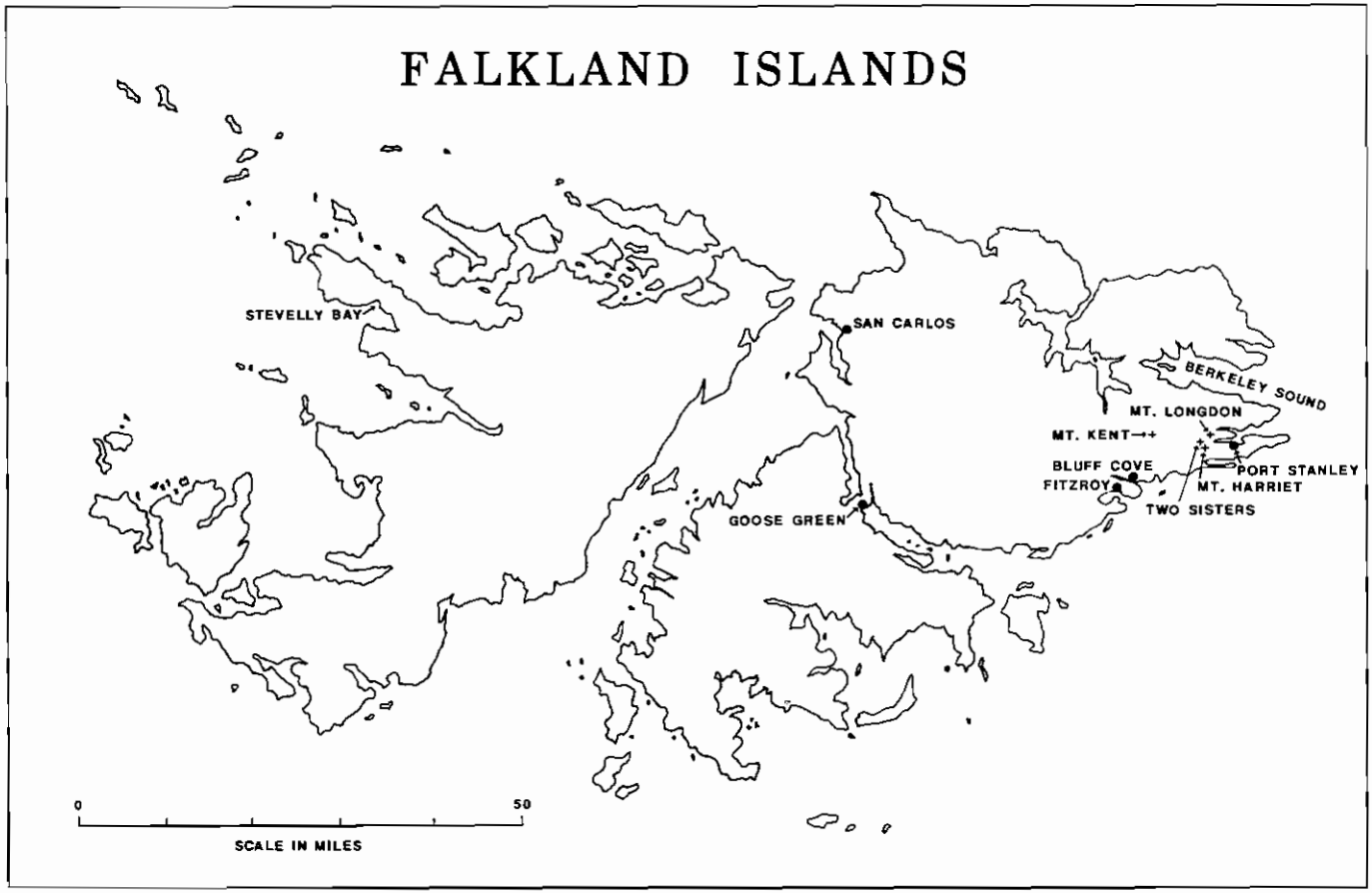
of its obvious potential for an amphibious landing—at least it was obvious to the British planners at the time. In retrospect, this perception proved to be erroneous; an Argentine study conducted prior to the conflict had concluded San Carlos to be an "impossible" site for a successful amphibious landing.

Overall Argentine Land War Strategy

As the seat of government, the center of population, and the location of the principal seaport and air field, Port Stanley was the key to the campaign. The initial Argentinian concept was to defend Port Stanley against direct attack by deploying air defense weapons and ground troops. A follow-on measure was to erect defenses against a direct amphibious assault by deploying three battalions against a possible thrust from the south. Three other battalions were deployed facing west and north. The defensive perimeter was determined not only by the terrain, but also by the difficulty in supporting distant troop emplacements with the limited available mobility. Commanding heights dominated the inside of the perimeter and these points had to be occupied and defended. There were superior high points farther out that would still dominate the inside of the perimeter, however, the ground commanders did not believe they had the mobility to occupy and support these more distant high points, given the terrain and assets available to them. Could this have been a fatal miscalculation?

The Argentinian plan most likely deterred the British from a helicopter assault and probably deterred a direct amphibious assault on Port Stanley. This gave the Argentine ground forces time to bolster and adjust their defenses while the British searched for another place to land. Yet the time gained by the ground dispositions around Port Stanley was of little value because the political leadership in Buenos Aires was unable to bring about a diplomatic solution. The Argentine field commanders held the view that their defensive disposition gave the political leadership an additional 15 days in which to achieve a diplomatic solution. Despite the sinking of the *Belgrano* and the *Sheffield*, political leaders still kept faith in a negotiated solution; meanwhile, the field commanders viewed the *Belgrano* sinking as the point of no return, leaving a military solution as the sole option.

In the Army's view, this state of mind on the part of the junta restrained action and deprived the ground forces of their most important means of fighting, mainly, air power. Surrounding the island and while preparing for a landing, British naval forces conducted a war of attrition against Argentine land forces, and then landed with their landing force intact. It is the view of the Argentine Army commanders that the British landing was successful because the political authorities in Buenos Aires restrained the air force and navy from acting at their full capability. The army believes that if the navy and air force had persisted in their attacks against the naval transports and


FALKLAND ISLANDS
STEVELLY BAY
SAN CARLOS
BERKELEY SOUND
MT. LONGDON
MT. KENT
BLUFF COVE
FITZROY
PORT STANLEY
MT. HARRIET
TWO SISTERS
GOOSE GREEN
0
50
SCALE IN MILES

carriers on 30 May, the outcome might have been different. As it was, the attack was too late, the beachhead had been formed, and British troops were able to move at will.

When the British landed, the Argentine Army considered modifying its defensive positions, with the notion of aligning them to the west—this realignment began *five days later*. They reinforced their western positions but refrained from moving farther west because of mobility and distance limitations. They intended to cover the distance between Port Stanley and San Carlos with commando patrols but, by the time they had made this decision, the British had already occupied the outer high points. The commandos offered some stiff resistance but were unable to slow the British advance.

British Land War Planning

The British had their share of problems and faced some difficult decisions prior to the invasion of the Falkland Islands at San Carlos. Although the deteriorating political situation in the South Atlantic was being closely monitored in London, the Argentine invasion of the Falkland Islands still came as a distinct surprise. There is no question that the British demonstrated remarkable ingenuity and resourcefulness in putting together a task force of some 36 ships and sailing for the Falklands within 2 days of the invasion. But, their hasty departure precluded the landing force ships from being "tactically loaded," and this meant that their stores could not be unloaded in the order needed by the landing force once it was ashore. This situation was somewhat remedied by making cargo adjustments while the force was delayed at Ascension Island for loading additional supplies. Nevertheless, there is little question that the load-out of the ships slowed the buildup of supplies ashore in the landing area at San Carlos.

The Landing at San Carlos

For all the agonizing over the choice of a landing site and the worry over what could go wrong, the British landing at San Carlos was accomplished without incident. Their amphibious task force approached and arrived undetected in the objective area—aided by the cover of darkness, poor weather conditions, and diversionary actions conducted at Goose Green, Fanning Head, and sites on East Falkland. British troops wading ashore in the early dawn of 21 May met no resistance from Argentine ground forces and were able to move into their planned defensive position around the area without delay. As it turned out, the Argentine ground threat to the landing never did materialize. The military battle eventually fought at San Carlos was between Argentine tactical air, both air force and naval, and the ships of

the amphibious task force. Much to their frustration, the British ground forces ashore found themselves playing the role of spectators. While awaiting word to move out, the main enemies to be overcome ashore were the environment, poor logistics support, and boredom.

Although not directly a part of the air versus ship battle that evolved at San Carlos, the forces ashore were affected by the results of the action. During day one of the assault at San Carlos, the British lost one frigate and had four others damaged by air attacks. In the days following the landing, British ship losses continued at an alarming rate. In the face of the Argentine air threat, the British were forced to change their basic logistics plan—they massed their supplies ashore vice supporting the ground force from afloat. This change in plan—plus an acute underestimation of helicopter assets required for logistics support, coupled with ship movements limited to night only—made the buildup ashore painfully slow. A near fatal blow to the British land campaign was dealt on 25 May when the *Atlantic Conveyor* was lost with three of its Chinook helicopters whose large cargo capacity was central to both the logistical and operational plans. The loss placed an even heavier strain on the remaining helicopters and virtually limited their use to the movement of supplies for the duration of the conflict.

British Plan of Maneuver

The British plan for the San Carlos landing conspicuously lacked a follow-up land campaign strategy. The operation planned for the landing, but neglected to devise a land campaign. As one account somewhat drolly stated, the assumption was that once forces were ashore they would just go on and win. Perhaps it is more charitable to surmise that the British, either consciously or unconsciously, expected the Argentines to quickly oppose the landing with ground forces, and that the employment of British ground forces ashore would be more or less driven, at least in the short-term, by the defensive actions/reactions necessitated by this confrontation. When Argentine ground opposition failed to materialize, the British were at something of a loss for an employment scheme for their forces ashore.

Goose Green. With ship and aircraft casualties continuing to mount, the logistics buildup at San Carlos proceeded at a snail's pace. The British augmenting force was still too distant from the scene to warrant a major thrust against Port Stanley. The British Parliament perceived that public sentiment required a quick victory in the land war to justify the mounting ship losses in the Falkland Islands conflict. This perception eventually forced the political decision to attack the Argentine garrison at Goose Green. The decision was a clear example of politicians apparently not wanting to assume accountability for the direction of the war but unable to restrain their

political frustrations over the inaction of the ground forces ashore at San Carlos. The attack on Goose Green was keyed to the political imperative to engage and defeat the Argentines *somewhere* or *anywhere* as soon as possible. The simple fact is that as a target, Goose Green was strategically and tactically irrelevant to the overall campaign to retake the Falklands.

Prior to the attack on Goose Green, the BBC aired a broadcast with news of the impending approach of British troops to Goose Green. This resulted in the reinforcement of the area by the Argentines before the attack could begin. Such is an example of the growing problem of how to reconcile the role of the modern media and its instantaneous communications capability with the requirement for secrecy which has always been attendant to military operations.

The Move to Mt. Kent. The unopposed move of the British on foot, with 100-pound packs over rugged terrain in awful weather conditions, from San Carlos to the unoccupied outer high ground on the outskirts of Port Stanley some 50 miles away, was remarkable. The lack of transportation to satisfy simultaneously both logistics and tactical mobility requirements eventually imposed the requirement to advance on Port Stanley either on foot or not at all. The planning that had been done for the offensive movement of ground forces was based on the implicit assumption that the advance of ground forces would be accomplished in leapfrog fashion, utilizing helicopters to move both troops and their supplies over the rugged terrain. The enormous demands placed on the limited helicopter resources for logistics flights—just to keep the landing force supplied—and the loss of the three large Chinook helicopters on the *Atlantic Conveyor* quickly made it obvious that the advance on Port Stanley would have to be accomplished by means other than helicopter.

The Landing at Fitzroy. With the arrival of the 5th Brigade in the Falklands, the obvious question was how best to employ them in the advance on Port Stanley. They could either be held afloat as a reserve for the troops already ashore, or they could be employed as a second landing either to the northeast or southeast of Port Stanley, thereby opening a second axis of advance on the objective. Owing to lack of assets, primarily AAW, to support a second landing, this idea was for the moment rejected and elements of the 5th Brigade began coming ashore at San Carlos on 1 June. As often happens in war, unexpected events drove the decisionmaking process for employment of the 5th Brigade. The tentative plan was for the brigade to make its way from San Carlos to Fitzroy via Goose Green and to form a southern prong of the final advance on Port Stanley. Thought was given to movement of the 5th Brigade as far as Goose Green by helicopter. However, it was soon determined that this would be impossible, as all available airlift was needed to

support the 3rd Commando Brigade which was already moving toward Mt. Kent and Port Stanley from the west-northwest.

In what could be termed either a bold move or a grossly irresponsible act, elements of the 2nd Paratroops, which had been resting at Goose Green after the battle there, moved via commandeered helicopters to Fitzroy and made an unopposed landing late on the afternoon of 1 June. This presented the British planners with a two-edged sword. On the one hand, the toehold at Fitzroy, obtained without casualties, represented a significant leap toward the final objective at Port Stanley. On the other hand, the 2nd Paratroops, miles from the nearest British support, were now exposed to attack. How to consolidate the 2nd Paratroops position at Fitzroy occupied British thinking for the next several days. Faced with insufficient helicopters to move the remaining elements of the 5th Brigade over the rugged terrain between San Carlos and Fitzroy and faced with the requirement to reinforce the position as soon as possible, the British reluctantly resorted to movement by sea. In effect, the British option to choose whether or not to make a second amphibious landing had been removed by the course of events.

The attempt to move troops ashore at Fitzroy turned out to be a disaster. The landing was eventually conducted using only naval auxiliary LSLs, with no support from major naval units for AAW protection. (Support was in fact deliberately withheld in compliance with orders from London to lose no more ships.) Command control was lacking due to the absence of coordination with units already ashore at Fitzroy. On the afternoon of 8 June, the unprotected LSL *Sir Galahad*, unloading troops in the harbor at Fitzroy, was attacked by Argentine air forces and 51 men were lost.

Given the British vulnerability at Fitzroy, one must ask the question, "why did the Argentine ground forces not take advantage of the successful Argentine air attack on the British forces at Bluff Cove and Fitzroy and conduct a counterattack?" The Argentine field commanders in the Malvinas rationalize their decision not to counterattack at Bluff Cove by pointing out that Bluff Cove was 16 km to the southwest, and an advance force of British troops was between Port Stanley and Bluff Cove. The Argentine Army, which was equipped with 105 mm artillery with a range of only 10 to 12 km, also had two or three 155 mm howitzers with a range of 20 km, but this was considered inadequate to support an action 16 km from the Port Stanley base. Moreover, it would have taken one battalion away from the defense of Port Stanley—the battalion could have been attacked by the British covering forces, and it could have been in front of the British battalion coming ashore. Finally, the Argentine battalion in position to make this move would have been the elite 5th Marine Infantry Battalion, which would have had to depart from their key position on top of Tumbledown Mountain.

The Final Assault on Port Stanley. The British were now in position to mount the final phase of the attack on Port Stanley. They faced 33 enemy formations totaling some 8,400 men equipped with heavy guns and ample ammunition, dug into positions that they had been fortifying for 6 weeks. Even though the Argentines had been passive to this point, the British prospect of having to attack with limited mobility and nowhere near the overwhelming strength supposedly needed by an attacking force against a well-armed and entrenched enemy was less than appealing.

The British commenced their move on Port Stanley with a series of night attacks on 11 June against Mt. Longdon, Mt. Harriet, and Two Sisters Mountain. These positions comprised the next line of high ground toward Port Stanley. Some determined resistance was met by the forces attacking Mt. Harriet and Two Sisters, but the British were able to seize these two objectives with minimal casualties. The attack on Mt. Longdon met with far greater resistance, and the objective was taken only after fierce fighting and numerous casualties.

The final phase of the British attack began on the evening of 13 June with night attacks on a ridgeline just west of Port Stanley. The immediate objectives were Wireless Ridge and Tumbledown Mountain. Wireless Ridge succumbed fairly quickly to a preponderance of British firepower. Tumbledown Mountain was a different story and fell only after fierce fighting; once again demonstrating the spottiness in the quality of Argentine troop performance and the inability of the British to predict what kind of resistance they might expect in any given action.

Shortly after the British were finally successful in taking Two Sisters, the word was passed on the morning of 14 June that the Argentines were in retreat toward Port Stanley.

Approximately 1,000 lives were lost in the Falkland Islands conflict (nearly one for every two inhabitants of the island), 30 combatant and support ships were sunk or damaged, and 138 aircraft were destroyed or seized. The "interests" of the Falkland Islands inhabitants were successfully defended by the British, and the efforts of Argentina to gain sovereignty over the Malvinas Islands were frustrated. The Royal Navy regained its stature in the eyes of the political leadership of the United Kingdom, and military rule in Argentina was replaced by an elected civilian government which remains in place today. The war that "did not have to be" was over. While the failure of diplomacy would soon be forgotten, the war would not be. Prisoner exchanges proceeded with efficiency and were done with those humane instincts which separate the West from some not so benevolent cultures.

The conflict has spawned a cottage industry in which military writers, historians, and analysts seek to describe dozens of "different" wars, including lessons learned and relearned. As the military professional studies this event

he should not become too obsessed with the whole truth and nothing but the truth. There is a gold mine of lessons here. Also, here is an opportunity to examine a conflict—so rich in lessons learned—*without* the normal baggage of American human nature that prefers being ruined by praise to being saved by criticism. Such opportunities rarely occur.

In retrospect, the strategic dynamics of the Falkland Islands conflict were more of two ships passing in the night than a head-to-head politico-military confrontation. The Argentine political objective was to gain sovereignty over the Malvinas Islands *through diplomacy*. On the other hand, the British political objectives were to restore British administration in the Falkland Islands and to punish aggression. Throughout the conflict it was basic British military professionalism that surfaced and prevailed time and time again, even when the politico-military situation became murky and Clausewitz' fog of war overtook the principles of war.

Mass, firepower, and logistics support are still the essentials in a military campaign. (Occasionally the Holy Ghost deals himself a hand, the Battle of Midway being the classic example.) But war—and the deterrence of war—is built upon a foundation of military professionalism. We may not know how to measure it, how to analyze it, or how to quantify it, but we know what it is—it is *how* we go about doing the things that the people of this Nation and their elected representatives direct us to do with the assets they have provided us.

When, in the application of force, the military assumes the political leadership's role of deciding *what* to do with the armed forces, or when the duly accountable political leadership assumes the military role of deciding *how* the armed forces will perform their duties, the nation has a problem. The Falkland Islands conflict contained examples of both forms of transgression. But in the end it was British military professionalism that pulled the fat out of the fire.

Sea Control in the Arctic: A Soviet Perspective

Commander Dennis M. Egan, U.S. Coast Guard
Major David W. Orr, U.S. Marine Corps Reserve

In the Punic Wars, Hannibal surprised and strategically dislocated the Roman legions by attacking them with his war elephants as he made his way across what had been considered to be an insurmountable geographical barrier, the Alps. In a similar fashion, recent developments in Soviet Arctic mobility and logistics give the Soviets the capability to inflict strategic surprise on the West. Although there is no evidence that the Soviets intend to implement the strategic plans or concepts of operations discussed here, they do possess substantial capabilities in the Arctic which could threaten the United States and Canada. U.S. and Canadian strategists must consider these capabilities in determining our territorial defense plans and our Arctic defense forces. The medium of conversation between two fictitious Soviet strategists, one a politician and the other a senior military official, is used to allow for a more open discussion of strategic issues and concerns. Factual references are listed in the notes; other information is conjecture. Fictitious political events and names are used in the development of Soviet strategy. The intent of this paper is to present the perspective of a Soviet strategist looking

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Major Orr graduated from Oregon State University in 1972 with a B.S. degree in forest management. He has over 15 years experience in both military and forest engineering, with specialties in Arctic logistics, transportation, road and bridge design, and construction. His Marine Corps Reserve experience includes service as an international observer in NATO amphibious exercises conducted in northern Norway.

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beyond the borders of the homeland at what has been historically an unfriendly array of nations. We challenge the reader to do the same—put on a Soviet hat and look at the world from a traditionally Russian point of view.

Setting

It is winter, 1987. Voroshilov Academy has recently been tasked with examining Soviet maritime capabilities and doctrine. Comrade Mikhail Sorokin, professor of military economics, Voroshilov Academy, Moscow, and candidate member of the Politburo Communist Party of the Soviet Union (CPSU), is meeting in his office with General Ivan Yermak, an assistant to the First Deputy Minister of Defense (Chief of the General Staff), who has, among his other responsibilities, an administrative support function for the Soviet Northern Fleet. General Yermak has been instructed to brief Professor Sorokin and answer questions that may ultimately facilitate the economic planning necessary for enhancing the military posture of the State.

Discussion

Comrade Sorokin: Welcome General Yermak. Thank you for visiting me on such a cold winter's morning. I trust that your son is doing well. He was an honor graduate from our Academy just 3 years ago. Where is he now?

General Yermak: Thank you for your hospitality, Comrade Sorokin. It is always a pleasure to visit the Academy. It has been some time since I have heard from my son. He is still in Afghanistan, however, and has recently received a medal for valor in combat.

Comrade Sorokin: I wish him well. I expect he hopes that the efforts of Party Secretary Gorbachev will bring the war to a successful conclusion?

General Yermak: Yes, a satisfactory solution to that war would be most suitable.

Comrade Sorokin: Well, I would like to hear more about your son's observations and experiences in Afghanistan. Perhaps we can discuss this over dinner. I know you have a very busy schedule, so I will get to the point of why I asked you to visit today.

General Yermak: Thank you, comrade. I have been given a very busy schedule to fulfill today. I believe I will be ready for a leisurely dinner once this day is finished.

Comrade Sorokin: As you may know, the Voroshilov Academy recently has been tasked with critically examining our maritime strategy and capabilities. My old friend Admiral Gorshkov told me that you and Captain Kiril Chubakov of the Defense Ministry have been working on some strategic concepts that he thought you and I should discuss further. He also indicated that the two of you made some interesting observations about the recently

published American novel, *Red Storm Rising*, by Tom Clancy.[1] Although the book is filled with disinformation, deliberately outdated strategic doctrine, and includes slanderous misrepresentations of the peaceful motivations of the Communist Party, I believe Mr. Clancy has revealed some valuable insights. I have heard that he gleaned much of his information from conversations on the Washington, D.C. cocktail circuit following his acclaim as author of the novel *The Hunt for the Red October*.[2] What do you think of *Red Storm Rising*?

General Yermak: As I discussed with Captain Chubakov, it amazes me that an American writer would have so much insight into his country's war plans and defensive capabilities. I understand that the book has even received the acclaim of the American President and many of his top military advisors. Personally, I was troubled by the novel. In my opinion Mr. Clancy made some gross simplifications concerning the capabilities of our northern forces which might be misinterpreted by our leaders. I believe our military and political leaders should be reminded of our true capabilities.

Comrade Sorokin: Still, the novel recognizes the essence of some of our strategic maritime potential that I wish he had not stressed. Even though Admiral Gorshkov was pleased that Mr. Clancy had used some ideas from his book, *The Seapower of the State*,[3] I felt that Clancy's use of the MV *Julius Fuchik* as an amphibious force transport ship capable of moving an entire regiment to Iceland in order to capture NATO military facilities was just too close to some of the highly classified scenarios we have played in various war games at this school.

General Yermak: I do not think that Clancy's observations concerning a minor portion of our maritime sealift capability should be viewed with much concern. *Jane's Fighting Ships 1986-1987*[4] already emphasizes the possible military significance of some of our merchant fleet. Fortunately, the Americans seem naive, believing that if a ship is not painted gray it cannot have military application. For example, they are still trying to determine if the MV *Ivan Skuridan* was used to support our recent amphibious operation in the Volkovoya Fjord during April 1986. (The Fall/Winter 1986 issue of *Amphibious Warfare Review* indicates that the United States is still uncertain as to the use of Soviet RO/RO ships.)[5] Of course we would never consider using our merchant fleet for anything other than peaceful maritime purposes, but as Captain Chubakov pointed out, we have true capabilities for sealifting considerably more divisions to Iceland than Clancy might envision!

Comrade Sorokin: Having the strategic lift capability is not sufficient in itself, General. Mounting a successful amphibious operation in open water entails controlling the air, the sea, and even the regions under the sea. As Admiral Gorshkov said, "any fleet always seeks to create in a particular area of the sea the regime necessary for it . . . to gain control of shipping and ensuring its safety, freedom to deploy one's forces, etc."[6] He also said, "Combat actions [in the air] . . . to secure dominance at sea in selected areas

or in particular directions, may either precede the solution by the fleet . . . or be conducted simultaneously."[7]

General Yermak: You are absolutely right comrade. This is one of many errors which are apparent in Clancy's book. At the start of a war with the United States, it would be far too risky to attempt to seize and hold Iceland. It is just too far forward for us to reliably maintain safe air and sea lines of communication and control over the island without the use of a very large force. The plan simply is not feasible.

Comrade Sorokin: Yet, undoubtedly there are other amphibious operations on the northern maritime front that would make strategic sense during the initial stages of a conflict.

General Yermak: Yes, comrade, but only on islands located in waters that can be struck by our land-based aircraft. For example, because it is on the direct path of air attack from North America to Moscow, Svalbard is the group of islands that are of immediate concern.[8] Several thousand Soviet miners live and work there, and they outnumber the Norwegians two to one. Svalbard has an adequate airport which could provide us with an advanced base for staging tactical fighter aircraft. By initially controlling Svalbard rather than Iceland, we are far better situated to attack enemy forces trying to enter the Arctic Ocean from the Norwegian and Greenland Seas approaches. Other strategic islands such as Bear and Jan Mayen could be seized simultaneously and quickly developed to provide radar sites and forward tactical aircraft recovery airstrips. All of these islands are located along the approximate maximum limits for pack ice during April. What this means is that most of our surface navy and merchant ships can then operate near or inside the perimeter of the ice. Our sea lines of communication (SLOCs) will be relatively safe from enemy submarines and surface ships. As long as we can also maintain air superiority, it will be nearly impossible for anyone to strike at our fleet. This will ensure the availability of our fleet for combat on our terms, rather than on the enemy's terms.

Comrade Sorokin: But Admiral Gorshkov emphasized using surface ships in a more active and aggressive antisubmarine warfare (ASW) role. He said, "Surface ships remain the basic and often sole combat means of ensuring deployment of the main strike forces of the fleet—our submarines."[9] The current declaratory version of the U.S. maritime strategy,[10] which we take more seriously than Mr. Clancy's outmoded G.I.U.K. Gap barrier strategy, suggests that the United States will try to penetrate deep into our bastions in order to seek out and destroy our SSBN forces. We know that their attack submarines have under-ice capability. How can your idea of seizing airstrips at Svalbard and Jan Mayen Islands, installing radar on Bear Island, plus keeping our surface fleet in the marginal ice zone, by themselves, ensure the protection of our SSBNs and deny the Norwegian Sea approaches to the U.S. Carrier Battle Groups (CVBGs)?

General Yermak: Individually, they will not. However, by capturing Svalbard, Jan Mayen, and Bear Islands, we will greatly increase the effective coverage by our tactical fighter forces for another 600 miles north of the homeland and substantially over the Greenland and Norwegian Seas approaches. With improvements to the air runway at Svalbard, we can also launch bomber forces from outside of the Norwegian territorial defense zone. These bombers can fly undetected by land-based radar and can strike any U.S. battle forces which may be operating in the area. Additionally, our ASW aircraft, such as the Ilyushin Il-38 and Bear F, can have continuous fighter protection between the Kola Peninsula and the edge of the permanent polar ice cap. This is the zone where we intend to locate, trap, and destroy submarines and ASW aircraft attempting to kill our SSBNs.

Our massive fleet of fishing and research vessels will assist our ASW aircraft and submarines in destroying American submarines. I envision this fleet operating as picket ships throughout the ocean area between Greenland and Norway, wherever tbey fall under the umbrella of our air forces. It would be a defense in depth, with increasingly dense numbers of these ships the closer we get to our homeland. Many of these ships have highly accurate sonar, good radio transmitters, and radar. Some are even equipped with satellite communications. Because they are relatively small vessels, no American submarine would risk exposure to attack them, much less expend costly ordnance. Ships that stay inside the ice zone are also relatively immune to attack by U.S. surface forces because their ships are not ice-strengthened and therefore cannot pursue us into our sanctuary.

Trawlers can employ towed tactical sonar arrays and fish-finding sonar to assist in locating American submarines and ensnaring them with fishing nets. We can also equip the trawlers with depth charges so that they will have the capability to engage any submarines whicb can be located. The larger factory and research ships which are equipped with helicopters can also have an important ASW role. These ships have helicopter platforms which may be capable of supporting ASW helicopters (Hormone A or Helix KA-32S helicopters).[11] We need to explore this concept further. Perhaps some of the ships will need additional modifications. The ASW helicopters have dipping sonar and torpedoes for searching out and destroying enemy submarine contacts. They should be especially successful at prosecuting targets that have been identified by the smaller trawlers. The helicopters can be armed with air-to-air missiles for the purpose of attacking any enemy P-3s or other slow moving aircraft that might attempt to damage our fleet of picket ships.[12] We also have plans to arm this fleet with surface-to-air missiles and antiaircraft guns for self-defense. Deck space has been allocated for these weapon systems and it is a relatively simple task for the crew to perform this modification.[13] As you said, comrade, it takes a combination of air and sea supremacy to ensure the survival of our SSBNs and indeed to protect our northern defensive

zone. This combination of land and sea-based forces will ensure our initial survivability while providing the basis for future options.

Comrade Sorokin: Yes, General, Admiral Gorshkov said that "The experience of two world wars showed that fishing fleets were widely used as part of the Navy for solving auxiliary and combat tasks, chiefly in the sphere of defence."[14] Is your scheme feasible, though? How big is our fishing fleet? Is it strengthened to operate in ice-strewn waters, and what threat can the enemy pose to such small targets? Lastly, how do you envision they can defend and sustain themselves?

General Yermak: The scheme is highly feasible. In 1975 we owned 3,833 fishing vessels grossing 3 million tons. A separate study completed in 1976 indicated that we had an additional 547 factory ships grossing another 3 million tons.[15] Not all of these ships were designed for frozen seas, however. Recently I identified over 1,714 ice-strengthened fishing vessels which were listed in the 1985 edition of *Lloyd's Register*. Even though I did not have time to record the sizes of the various vessel classes, I can assure you that many are as large as a medium-sized freighter and can stay at sea continuously for over 6 months at a time. For example, we have 175 trawlers of the Atlantik class in excess of 2,100 registered tons, and 178 trawlers of the Super Atlantik class that are in excess of 3,000 registered tons.[16] Perhaps a more complete inventory and analysis of the capabilities of our small boat fleet could be conducted. We should not have to learn the lessons of World War II all over again.

The enemy will have little interest in attacking our fishing fleet from the air. He probably will be operating at the limits of his combat radius in a hostile environment. He will not be able to expend his limited ordnance on anything but our larger merchant ships and naval combatants. On the other hand, if he does attack our fishing fleet, his main striking force will be diluted.

Did I tell you about the *Odissey*-class research ships that carry small submarines? The submarines descend from their holds covertly to provide ideal vehicles for Spetsnaz (Special Operations Forces) missions such as cutting deep-sea surveillance and communication cables and sabotaging enemy installations. These ships look just the same as 187 other Mayakovskiy-class trawlers. It is very difficult to detect which of these ships is carrying submarines when viewed from outside.

Comrade, we have a very sizeable fleet of self-sustaining fishing vessels that can be employed for self-defense and for use in the role of picket ships to assist in the detection, targeting, and interdiction of the enemy.

Comrade Sorokin: I believe Admiral Gorshkov was aware of this when he said, "The fishing fleet is a constituent part of the civil fleet and an important component of the sea power of the state. Modern fishing vessels possess considerable seaworthiness, a long operating range and independence of action. They are, as a rule, equipped with the latest navigational, sonar, and radio electronic devices and fishing and technological gear."[17] Until now, I

had failed to fully understand the military significance of the "fishing and technological gear" that these vessels apparently carry. Your ideas sound promising.

Admiral Gorshkov emphasizes the importance of keeping the SSBN force inviolate not only for their nuclear warfighting capability, but also for intimidation, deterrence, and their potential to serve as a strategic reserve to exact war termination on favorable terms. Since we now can keep our Delta and Typhoon submarines at home in ice-strewn waters[18]—and can, by exploiting our surveillance systems, including our fishing fleet, quickly detect and cue our air and sea ASW resources to intercept and kill NATO SSNs—do you see any strong arguments for keeping the majority of our diesel and nuclear attack submarines bottled up in our own waters?

General Yermak: No! I have demonstrated that we already have the capability to protect our SSBNs. By 1995 our new aircraft carriers, with their navalized version SU-27 jets,[19] and our greatly expanded Arctic Fleet, will ensure that the role of the attack submarine can be changed from defending SSBNs to one of forward deployment. I believe our diesel submarines will have the greatest potential against forward deployed NATO submarines and aircraft carriers, especially in chokepoints and coastal waters, as the Americans still have not gained the ability to reliably detect these boats when they are operating on batteries.[20] Our new superconductor technology promises to further extend the silent operation of these submarines, which will significantly enhance their threat potential.

Comrade Sorokin: Just one minute, General! Are you proposing that we assign our most powerful nuclear-attack submarines to a peripheral role of attriting NATO merchant shipping while tasking our less sustainable diesel submarines with taking on the entire American battle fleet? My friend, think of what you are saying. Interdiction of SLOCs at such an early stage of the war employs a protracted war strategy that does not address the enemy's immediate threat of striking the motherland, particularly with cruise missiles. To restrict our multimission nuclear attack submarines to such a SLOC interdiction role is preposterous and a complete waste of assets.

General Yermak: Professor, you have completely failed to comprehend what I am saying. I do not propose that we initially conduct SLOC interdiction with our nuclear submarines. It is true that our diesel submarines might be highly successful against forward deployed carrier battle groups. Had you let me finish, you would have realized that I propose a far more important initial role for our SSNs. They will carry submarine-launched cruise missiles (SLCMs), such as the SS-N-21, directly to waters off the United States.[21] This capability will deter the Americans from risking retaliation in kind should they be considering a first-use policy for their own SLCMs (Tomahawk) strikes against our forces on the Kola Peninsula or elsewhere on the motherland.

Comrade Sorokin: You are suggesting that our SSNs can deter cruise missile attacks on our motherland, but our SSNs are used in a pro-SSBN role. Our SSBNs are currently using the ice to their advantage and only the SSNs can protect them in their icy bastions. You have expanded upon some of Admiral Gorshkov's recommendations to integrate the fishing fleet into our defensive maritime strategy, even in the ice. You infer that SSNs will thereby be released for your new mission of cruise missile strike deterrence. However, the fishing fleet may not provide an adequate substitute for SSBN protection. Perhaps our naval combatants and auxiliary ships could make up the difference if they were able to operate in a similar environment. Admiral Gorshkov has used the pro-SSBN mission as justification for building expensive surface combat ships such as the *Kiev, Kara*, and *Krivak* classes.[22] Can these vessels operate in ice?

General Yermak: Comrade Sorokin, I realize that your position does not regularly lend itself to mixing with the operational side of the military. Your background is, of course, in economics and long-term strategies for industrialization. Because I have been told to answer all of your questions concerning operational concepts for our armed forces in northern areas, let me put things into perspective for you. Suppose I told you that a large percentage of our naval combatants might be capable of negotiating heavily ice-strewn waters. *Jane's Fighting Ships 1986-1987* [23] is finally suggesting that some of our naval auxiliary ships might be ice-strengthened (see table 1). However, as early as June 1969, the Center for Strategic and International Studies at Georgetown University in Washington, D.C. recognized some important concepts: "The Northern Sea Route of the Soviet Union is of both military and economic importance."[24] The study emphasized that most ordinary merchantmen on this route are operating craft with specially reinforced hulls, ice-strengthened by techniques developed in modern Finnish shipyards. Suspicions were also raised about similar ice-strengthening designs in our warships.[25] These conclusions probably evolved from observing *Kiev*-class Surface Action Groups (SAGs) assigned to the ice-strewn waters of our Baltic, Northern, and Pacific Fleets.[26]

However, the real clue is found in the 1985 edition of *Lloyd's Register of Shipping* which shows that over 95 percent of our entire merchant marine is ice-strengthened. Comrade, do you really think that the senior defense and political strategists who envisioned our rise as a maritime power would have been so foolish as to build the world's largest ice-strengthened merchant marine and submarine fleet without having a surface navy capable of protecting that fleet? Western observers know that we operate our combat ships in ice as an operational requirement driven by our environment.[27]

Comrade Sorokin: General, you have made your point, but you would be well advised not to assume such an insulting, condescending manner toward a member of the Central Committee. I need not remind you that Clausewitz

SOVIET NAVAL SHIPS AND SPECIALIZED CRAFT CAPABLE OF OPERATING IN THE ARCTIC

Type/Class of Vessel (1986)	Number of Ships
A. Naval War Ships*	
1. Suspected ice-strengthened	
a. Aircraft Carrier (CVN)	0
b. *Kiev* (CV)	4
c. *Kirov* (CG)	3
d. *Kara* (CG)	7
e. Kresta II (CG)	10
f. *Sverdlov* (CA)	14
g. Polnocny A (LSM)	43
h. *Ivan Rogov* (LPD)	2
i. Ropucha (LST)	21
j. *Sovremennyy* (DDG)	5
k. *Udaloy* (DDG)	7
l. Kashin & Kashin Mod. (DDG)	19
m. Kanin (DDG)	8
n. Riga (FF)	45
B. Air-Cushioned/Surface Effect Vehicles	
1. Non-rigid skirt	
a. LCPA (Gus) (24 troops)	31
b. LCUA (Aist) (80-ton)	19
c. LCMA (LEBED) (40-ton)	18
d. Pomornik (350-ton)	1
e. Tsaplya (not available)	1
f. Utenok	2
2. Wing-in-ground effect (WiG)	
a. Ekranoplan (Casp-B) (900 troops)	2
b. Bartini T-wings (80 passengers)	?

*Currently there is little information available with which to confirm or deny the authors' suspicions that Soviet warships are ice-strengthened. As a result, we selected these particular vessels on the basis of hull characteristics, the unique appearance of the bow wave which the ship made when moving through the water, and an abnormally large horsepower rating which is typical of ships that have been designed to negotiate heavy ice conditions. In most instances, we were able to confirm that the ships had operated in the Arctic or other regions subject to heavy ice conditions.

Table 1

said, "A major military development, or the plan for one, should not be a matter for purely military opinion. Such a situation would be unacceptable and could be damaging!"[28] I tire of your word games. Let us return to the basics. Since the mid-1960s our foreign policy has stressed: strategic deterrence, defense of homeland, preservation of political alliances, and support of national liberation movements.[29]

Obviously, this foreign policy is one of peace. With the exception of our problematical experience in Afghanistan, we have been careful not to commit ground forces to combat.

Meanwhile, the West, led by the United States, continues to escalate their weapons buildup at a frightening pace, developing new weapons of mass destruction and leaving us no alternative but to follow suit. The weapons that we are forced to mass at the inter-German border serve as a constant reminder of the nuclear sword the United States and their NATO allies have hung threateningly over our head. But now they have gone too far. They have introduced into the German theater hundreds of ground-launched nuclear cruise missiles which have the capability to hit Moscow. What is more, after foolishly allowing West Germany to rearm over the last 30 years, there has now been the suggestion that the United States should provide West Germany with access to the top secret Permissive Action Link (PAL) codes which would allow them to unilaterally activate the nuclear weapons within their zone.[30] There has also been a dangerous resurgence of German neo-Nazi nationalism in the West, along with substantial pressures to ease the U.S. burden of NATO expenses. The United States and its allies have conveniently forgotten who unleashed the two most catastrophic wars of destruction in this century and are abandoning their responsibility to keep the Germans' "evil genie" in the bottle. Why could they not have allowed West Germany to develop into a peace-loving industrial and trading power such as Japan? Instead, to gain defense "on the cheap," they placed the nuclear lance virtually into the hands of the aggressive German people and pointed it at the peace-loving people of the U.S.S.R. Simultaneously, there is a growing atmosphere of distrust and unrest among NATO-European nations who deeply resent U.S. hegemony. Pacifist and antinuclear movements are growing in strength. The United States is finding it increasingly difficult to gain consensus among NATO members. The basing rights for U.S. forces are a frequently discussed thorn in the sides of the European nations.[31] U.S. elements have reacted in a characteristically disjointed, irrational, and warlike manner. They persist in building a large naval fleet and continue to proliferate tactical nuclear weapons throughout these forces. They have increased their number of fleet exercises in the maritime approaches to our homeland in an obvious attempt to intimidate our forces and demonstrate that offensive maritime power projection is a key element in their war plans. Recent weapon developments allow the United States an extremely long, standoff offensive strike potential. We must develop an effective counterstrategy. We see Germany as the primary land threat, NATO as a brittle alliance, and the United States as a potent aggressor who must be neutralized in the event of a major European conflict. Consequently, we are developing the following war aims:

Disarm Germany. Despite our forebodings of a united Germany, we feel that a West Germany in control of her own nuclear destiny is far more dangerous. Since the United States and its allies have abrogated their responsibility to keep Germany from ever rising to make war on the world again, we must act swiftly to exercise control over all of Germany. Our aim is to disarm West Germany, reunite the German people, and guarantee a peaceful German Government under Soviet protection and supervision consistent with our declaratory policy to promote a nuclear-free Europe.

Eliminate U.S. hegemony on the European Continent by destroying the cohesion of NATO. This can be achieved if the European NATO members see the nuclear threat of Germany in its proper perspective and relate it to the U.S. unilateral defense interests. Why should Europe risk becoming a nuclear graveyard just to promote U.S. prestige abroad? Clearly, the interests of European member nations are becoming increasingly parochial. We must make our war aims clear as to their objectives *and* limitations. We must also stress that we do not want nuclear war. Rather, we seek a disarmed Germany and a nuclear-free world where all can live in peace!

Neutralize the United States. The principal threat to the Soviet homeland is the United States. As long as they have not achieved an effective strategic defense, history has shown that our ICBM and SLBM forces can keep them in a conventional response mode. However, their navy is increasing their offensive posture, particularly in the maritime approaches to the Kola Peninsula. We would prefer to achieve a strategy in which the United States stays at home. If they have launched a massive resupply of military force to the inter-German theater, we would like to achieve a strategy that will turn their ships around. Keeping the United States in North America will neutralize them.

Improve access to the sea and defense of the maritime approaches to the homeland. In part this becomes resolved with the reunification of East and West Germany under Soviet control. We thereby acquire access to the North Sea through the Rhine River and internal canal systems in addition to gaining a virtual monopoly on all significant inland waterway river transportation on the European Continent north of France. In addition, we will introduce a resolution in the United Nations General Assembly changing Svalbard from a Norwegian trust territory to a Soviet trust territory. Since we outnumber the local populace with our Soviet mining community on the island, we should make the territorial redistribution a question to be self-determined by a "local" plebiscite. We also feel that by giving our guarantees to Denmark, The Netherlands, and Norway that we will not attack their territory on the mainland, we can fracture the public support they must rally to actively participate against us in a war with Germany. The neutrality of Sweden and Finland will be respected. However, we might have to intimidate or cajole our Norwegian neighbors to abide by our temporary occupation of

Jan Mayen Island as a forward air base for our defensive tactical air power. Other war aims can follow in time, such as better access to the Mediterranean Sea and Indian Ocean. However, these are secondary concerns which may ultimately develop through political means as a result of our support for Third World liberation movements and our increasing stature as a world maritime trade power.

In summary, General, our concise war aims will be:

- Disarm Germany to achieve a nuclear-free Europe.
- Eliminate U.S. military hegemony over Western Europe by destroying the cohesion of NATO.
- Defend our homeland by neutralizing the United States.

Until now, I have had difficulty in reconciling the very expensive naval fleet-building programs, promoted by Admiral Gorshkov, with a coherent Soviet maritime strategy that substantially contributes to our potential war aims. Do you have such a maritime strategy, General?

General Yermak: I must differ with your observation that there is no coherent maritime strategy component in the Army's overall defense plan. Let me point out the 5 major objectives that have been the foundation of our naval planning and strategy for over 20 years:

- Protect our SSBNs.
- Protect the maritime avenues of approach to our homeland.
- Destroy American carrier battle groups before they are capable of striking our homeland.
- Interdict enemy sea lines of communication (SLOCs).
- Seize the initiative and take fight to the enemy's shore.

I have already discussed some concepts for accomplishing the first two elements of this strategy. By freeing our attack submarines from the role of defending our SSBNs, we will have the ability to put severe pressure on the enemy's SLOCs. By combining long-range bombers and our new generation of cruise missile-carrying, wing-in-ground (WiG) effect aircraft[32] with simultaneous submarine attacks, the enemy convoys and CVBGs will soon find the high seas to be untenable. We might even force the surviving portions of the American CVBGs to pull back from their forward deployed positions, thus aborting their mission to escort convoys across the Atlantic and Pacific Oceans.

Before proceeding further with my explanation of a proposed maritime strategy, however, I would like to ask if you are beginning to see how all of our assets interrelate?

Comrade Sorokin: Not entirely, General. You have presented a reasonably clear description of how you might accomplish the first four objectives mentioned earlier. However, your fifth objective, seizing the initiative and taking the fight to the enemy's shore, is most troublesome.

General Yermak: What do you mean, comrade?

Comrade Sorokin: Our ability to take the fight to North America seems to be limited to a nuclear option. This is because we still do not have the conventional capability to establish air and sea superiority in either the Atlantic or Pacific Oceans. You have suggested that attack submarines can be used as platforms for launching cruise missiles against targets ashore. I have no problem with this concept because it provides a powerful deterrent. However, the use of these missiles to accomplish your fifth objective will be extremely destabilizing and capable of escalating into a full nuclear exchange. It is common knowledge that these cruise missiles have nuclear warheads.[33] The United States may launch strategic nuclear weapons upon detection of incoming cruise missiles simply because they do not have the capability to differentiate between tactical and strategic nuclear warheads.

General Yermak: But neither do we!

Comrade Sorokin: Very perceptive of you, General. As I was saying, I do not see any politically acceptable way that submarines would be decisive in a scenario to take the fight to North American shores unless the conflict had already become nuclear. I need not remind you that Clausewitz said, "war is an instrument of policy."[34] Secretary Gorbachev has publicly stated our policy that the Soviet Union will not initiate a nuclear war.[35] If the war stays conventional, the use of submarines as the only means to take the fight to North America will not be decisive.

General Yermak: You misunderstood me, Comrade Sorokin. Having cruise missile submarines stationed off either coast of the United States does not in itself escalate the war, especially since the enemy has the same capability. Until those missiles are launched, the SLCM situation is merely one of deterrence. However, while our submarines are forward deployed, they can be used to close harbors by mining, or they can sink ships with their torpedoes. This is what I consider to mean taking war to the enemy's shores, short of crossing the nuclear threshold. This, however, is only part of the effort we would need to employ in a war of global consequences.

Consider, if you will, our war aims, and then consider what must be accomplished in order to achieve those aims. Clausewitz says that in order to succeed in war, we must strike at the enemy's center of gravity.[36] Comrade, I suggest that the center of gravity for the Americans is the cohesion of their alliance with NATO. If we can divide NATO from the United States, we will win!

This lesson is as old as history itself. The great Chinese General Sun Tzu observed: "Look into the matter of his [your enemy's] alliances and cause them to be severed and dissolved. If an enemy has alliances, the problem is grave and the enemy's position is strong; if he has no alliances the problem is minor and the enemy's position weak."[37]

Before we could even consider attacking Western Europe, we must first examine the purpose of the NATO alliance. As you know, NATO was

created after World War II as an American and British effort to establish a permanent foothold on the Continent. More importantly, the alliance was originated for the defense of Western Europe and portions of Eurasia; it was not created to protect North America. It appears, however, that the alliance serves only to keep a war in Europe rather than to ensure that the United States will have allies to come to her aid if the American Continent were invaded. If you are following my lead so far, comrade, let me emphasize something else which our naval strategists have recognized for some time. "The final destruction and occupation of the territory of [a] maritime opponent cannot be accomplished without amphibious operations."[38] To take that one step further, I am suggesting that it may be necessary to transport our army to North America if we are to successfully terminate a war.

Comrade Sorokin: General, I have heard arguments before that amphibious landings and subsequent operations ashore are necessary to defeat a maritime opponent. Yet, launching an amphibious operation into the teeth of U.S. blue-water naval and air superiority is an act that only a madman would consider.

General Yermak: Yes, I agree. Only a madman or a fool would sail into the arms of an awaiting American fleet. What I have been contemplating, however, is a great white fleet operating in an area where we anticipate having sea control—the Arctic Ocean TVD.[39] Do you think the Americans can sail their blue-water fleet into the ice to do battle with us?

Comrade Sorokin: Of course not, General. We know that their few icebreakers are unarmed and their surface ships are thin-skinned. Even advanced concepts of arctic warfare using air-cushioned amphibious vessels languish for lack of interest and funding on the part of U.S. war planners. Their marines are finally deploying air-cushioned vehicle landing craft (LCAC),[40] but their craft are not designed for Arctic duty.[41] Our air-cushioned vehicles are designed for Arctic duty and, even though they have limited endurance, Admiral Gorshkov told me that a squadron of these can conceptually operate out of our Arctic-class RO/RO ships, barge carriers, and LASH carriers (RO/RO and LASH refer to roll on/roll off and lighter container aboard ship handling carriers) recently developed for our Northern Sea Route. Did I understand Captain Chubakov to say that the two of you have discovered a new strategic military use for our ice-capable merchant fleet as well?

General Yermak: Remember I said it was fortunate that Mr. Clancy missed the essence of our maritime strength by suggesting that one large RO/RO ship, the MV *Julius Fuchik*, would carry portions of an airborne division to Iceland for the purpose of securing that island. Clancy leaves his readers with the impression that this is just about the extent of our amphibious capability. This is good, comrade! If our enemies continue to think this way we will catch them by surprise. Let me show you some tables of data which my staff has

compiled concerning our ice-strengthened merchant fleet.[42] Table 2 includes all ships having more than 10,000 horsepower. We felt this was the minimum power necessary for ships to safely negotiate Arctic ice at a reasonable convoy speed. There is a second category of ships of less than 10,000 shaft horsepower and a substantial number of them are in the 9,000 shaft horsepower range. The ships in the less than 9,000 horsepower category are predominantly used in internal waterways and seas to haul cargo to embarkation ports at points along the north coast of the Soviet Union.[43] Although there are seasonal periods when these ships could independently operate in the Arctic, their primary purpose will be to keep supplies moving northward along our internal lines of communication.[44]

ICE-STRENGTHENED SOVIET MERCHANT SHIPS WITH GREATER THAN 10,000 SHAFT HORSEPOWER RATINGS

Type of Ship	Total Number of Ships	Total Net Cargo		Total Bulk Cargo		Tot. Liquid Capacity*	Tot. 20 ft. Container	Total** Passenger Capacity
		M	Tons	M	Tons	Gal.	TEU	
Bulk	108	N/A	N/A	5,057,702	3,795,198	470,713	3,536	N/A
Container	22	318,220	280,925	N/A	N/A	N/A	14,644	N/A
Drilling	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General Cargo	162	3,211,462	2,835,078	N/A	N/A	N/A	8,898	N/A
Hospital	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Icebreaker	40	12,688	11,201	N/A	N/A	N/A	5,770	N/A
LPG Tanker	2	N/A	N/A	N/A	N/A	[40,021,701]	N/A	N/A
Ore	10	139,974	123,569	N/A	N/A	N/A	N/A	N/A
Pass/Ferry	2	N/A	N/A	N/A	N/A	N/A	N/A	1,966
Pass/GC	9	5,736	5,064	N/A	N/A	N/A	N/A	6,002
Ref GC	78	974,249	860,067	N/A	N/A	2,797,335	11,036	28
RoLo/GC	12	224,004	197,751	N/A	N/A	N/A	5,352	N/A
RoRo/Ferry	20	N/A	N/A	N/A	N/A	N/A	N/A	11,574
RoRo/GC	31	1,208,270	1,066,660	N/A	N/A	N/A	24,138	138
Tanker	160	480,132	423,861	N/A	N/A	1,937,871,877	N/A	N/A
Whaling	2	16,980	14,990	N/A	N/A	14,058,523	N/A	N/A
Totals:	662	6,591,715	5,819,166	5,057,702	3,795,198	1,955,198,448	73,374	19,708

* Capacity of LPG tankers are not included in the totals.

** This figure represents only certified berth passenger compartment capacity and certified deck passenger space for purposes of insurance registration with Lloyds of London. In emergency situations, or during times of war, troops could be billeted aboard all of the ships, in any space not devoted to cargo, including on top of cargo. In other words, the actual capability to carry passengers is considerably greater than the figure shown above.

Table 2

Comrade Sorokin: Your staff has done considerable homework, General. However, I noticed that you have included Romanian, Polish, and East German vessels in this report—in addition to ships of the Soviet Union. Were you trying to inflate the numbers?

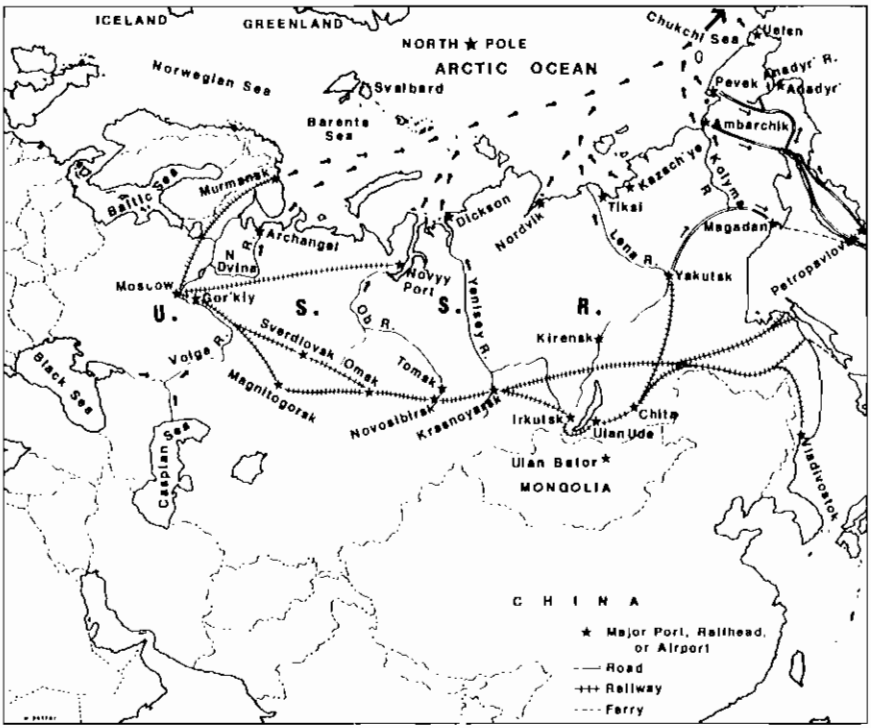
General Yermak: No, but we did think it was necessary to include all of these ships because our records show that these vessels are capable of flying any flag of opportunity as the political situation requires. You might remember that in October 1983 our valiant Romanian allies had many of their ships, along with ours, caught in the ice of the East Siberian and Chukchi Seas. Of that fleet of 50 resupply vessels, only 1 was sunk despite one of the worst ice seasons on record.[45] Captain Chubakov has insisted that many critical lessons were learned during that winter. In a recent article he wrote:

(1) The 1983 winter was uncommonly severe.

(2) The nuclear-powered icebreakers successfully saved the merchant fleet from disaster.

(3) Ice forecasting and air surveillance is now conducted on a 24-hour basis, as this proved to be invaluable during the 1983 ice rescue missions.[46]

Comrade Sorokin: General, I am aware of all this. The 26th CPSU Congress directed the fitting of nuclear power plants on our new fleet of transport vessels.[47] The 27th CPSU Congress reaffirmed Captain Chubakov's optimistic forecasts and allotted billions of rubles for the building of a huge icebreaking cargo fleet capable of year-round navigation across the Northern Sea Route.[48] Many nuclear-powered icebreaking ships have been launched or are now being constructed. Once all of these new ships are in service, we will have a year-round navigational capability across the entire Northern Sea Route. Convoys will be able to achieve an average transit speed of 12 knots by the 1990s.[49] The State Research and Project Development Institute of Merchant Marine Affairs has played an important part in developing rapid cargo transfer capabilities at our most northern Arctic seaports.[50] The resulting development has been the capability to unload tons of containerized cargo from RO/RO-type ships directly onto the ice and then onto intermodal advanced river transport systems such as air-cushioned assist barge trains and shallow water hydrofoil transports.[51] No doubt this has given us substantial experience in establishing a beachhead in Arctic terrain. We also have the necessary mobility for rapid transit over ice, snow, tundra, swamps, and rivers. Our ability to open the huge gas fields in Western Siberia required us to develop the capability for carrying heavy loads of gas pipeline equipment by timber carrier ships to northern Siberian seaports such as Novyy Port in the Bay of Ob and to develop modularized transport systems to off-load and rapidly move the cargo overland. This capability was required to build the huge gas pipeline that increasingly supplies Western Europe's natural gas requirements from our fields in Siberia. I fully understand the economic and political aspects of this surge in our Arctic mobility capabilities, however, I



also find the military perspective to be intriguing because I recognize Lenin's imperative that economic development and the interests of defense must proceed hand in hand.[52]

General Yermak: Actually, the decision to navigate the Northern Sea Route was made many years ago. You might remember that near the end of World War II, Marshall Stalin emphasized the strategic importance of the Trans-Siberian Railroad and its vulnerability to the Japanese during that war. After the war, Stalin began making plans to eliminate our strategic "Achilles heel." Unfortunately, this process was not expedited because the Japanese were no longer a threat, and the Chinese became our allies. As a result, there was little immediate priority for building a new fleet of ice-strengthened vessels capable of negotiating our northern sea-lanes.

When our relations with China deteriorated in the early 1960s, we again focused upon our strategic West-East communications vulnerability. We dramatically upgraded the defense of the Trans-Siberian Railroad, built tactical bypass trackage, and began building our Northern Fleet in earnest. Plans were completed to begin construction of the world's mightiest fleet of icebreakers, both nuclear and conventionally powered. In the early 1970s, an unexpected thaw in Sino-U.S. relations further intensified our need for Arctic-class ship construction. The threat to our vital interior railroad lines was never clearer. This was the period when our concepts for highly specialized barge carriers, RO/RO ships, tankers, ferries, and air-cushioned

vehicles became a reality. Using Finnish shipyards, we were able to trade for dozens of these types of ships having the hull strength and horsepower necessary for operations in polar ice, without icebreaker assistance. We have come a long way since the end of World War II and are now able to keep the Northern Sea Route completely open for 10 months each year. During the 12th 5-year plan (1985-1990), our goal is to achieve year-round operations. By 1990, our fleet of icebreakers, ice-strengthened cargo vessels, and ships of all kinds, will provide us with the capability to fully develop our entire Siberian region.[53] We will then be able to tie our Atlantic and Pacific naval forces together by a common sea route completely within the territorial waters of the Soviet Union. In time of war or hostilities, we can completely protect these SLOCs, using our land-based air forces, fleets of ice-strengthened naval auxiliaries and combatants, and indeed have sea control in the Arctic Ocean.

Comrade Sorokin: If I understand your thinking, General, the normal peacetime operating areas of our blue-water combat and merchant fleets may radically change in times of a major conflict with the United States and NATO powers.

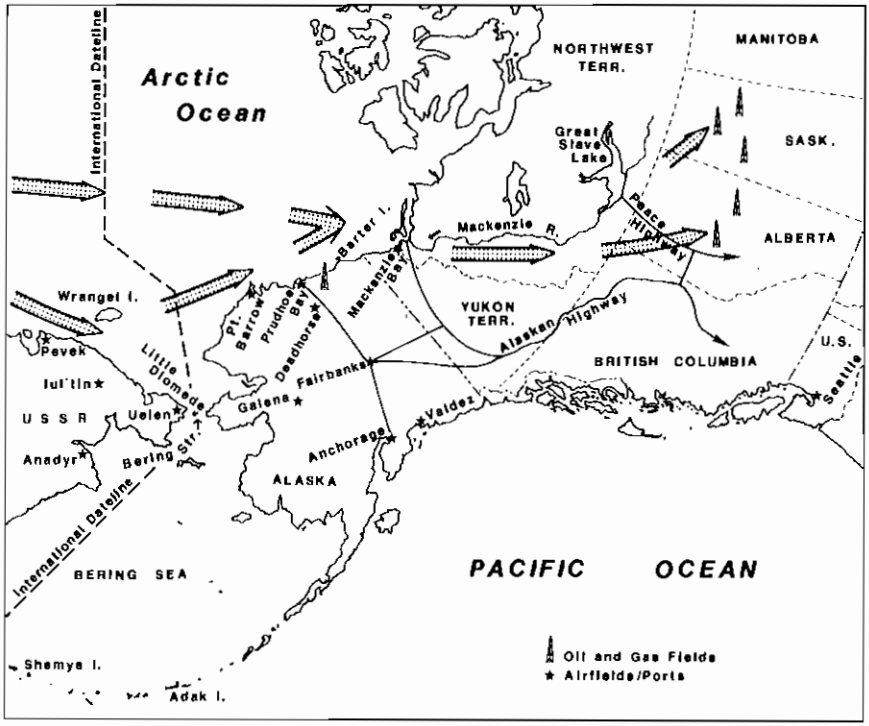
General Yermak: That is exactly what I am suggesting, comrade. While some of our less capable ships may stay in neutral ports in warm-water countries, there is a good chance that we will recall most of our ice-capable ships back into our sphere of protection prior to the start of hostilities. The largest of the merchantmen and capital ships will reassemble in the Arctic TVD. We must preserve as much of our fleet as possible until our submarines and aircraft can roll back those NATO forces which would prevent our fleet from sailing. The fleet will not move forward any faster than we can expand our defensive perimeter by establishing air and sea control outward from the homeland. Because of our virtually uncontested capabilities to operate in the Arctic, we can swiftly expand our defensive perimeter across the Arctic Ocean to the northern shores of Alaska and the Northwest Territories of Canada. With the majority of our large ships attached to the Arctic TVD prior to the commencement of hostilities, we may subsequently be in the position of being able to project a very large force onto the North American Continent at the start of the war. The purpose of such a campaign would be to strike a decisive surprise counterattack that would decapitate vital North American energy supplies and strategically dislocate forces and materiel needed to feed the NATO war machine. The element of surprise and methods for employing advance forces would be similar to that which Mr. Clancy[54] alludes to, however, the magnitude would be greatly increased. Many of our RO/RO ships, barge carriers, and other highly specialized ships are already making port calls and conducting trade with the United States and Canada. In a few more years, carefully negotiated bilateral economic development agreements will allow us to use our ice-strengthened fleet to assist the United States and Canada in developing their Arctic resources.

Comrade Sorokin: General, please be more precise in your use of terms. "Bilateral economic development agreements" are used only with Third World countries to extend our political influence, win their people's hearts and minds, and to provide them with ships that allow them to transport their raw materials to our world markets. I think you mean "bilateral trade agreements."

General Yermak: No Professor, I mean we should treat the people of Alaska and northern Canada exactly the same as we treat developing nations of the Third World. Use of our ships to carry North American Arctic raw materials would be similar to our earlier grain agreements whereby our ships were consigned to carry a great percentage of U.S. grain. Once we establish a routine presence, this will facilitate our ability to swiftly land large forces at important points along Alaska's northern coastline and the Mackenzie River Delta in Canada's Northwest Territories.

Comrade Sorokin: But General, what if the American surveillance system detects such a large movement of ships and aircraft?

General Yermak: Surveillance systems must be focused along anticipated axes of advance. It is not their system that we will defeat as much as their interpretation of and conventional thinking about what they see. Most of the U.S. forces will already be forward deployed in Europe and in the Pacific. Even Canada will retain only 2,000 troops to defend her homeland after fulfilling her commitment to NATO.[55] If surveillance systems alert the enemy, they will lack the logistic capability to stop us before it is too late. On D-day, we would begin flying in reinforcements, using our rapidly growing fleet of WiGs, Candids, Cubs, and Cocks.[56] They would rendezvous with equipment and supplies being shuttled in by our ships. Although in theory we currently have an ice-strengthened lift capacity for over 40 armored divisions,[57] we certainly would not want to sail such a force in one gigantic armada. What I envision is the initial projection of 5 to 10 motorized rifle divisions into Alaska and the Mackenzie River Delta concurrent with the start of war in Europe. Where we expect to encounter lightly opposed landings, such as at Barrow and Prudhoe Bay, we would plan to use our naval combatant and amphibious assault ships to conduct forcible entry onto the coast.[58] Our naval infantry would probably be the logical force for securing the beachheads, with regular army units providing rapid reinforcement either from the air or by the sea. If the naval infantry were not available for this operation, we still would have many army divisions trained in amphibious operations.[59] The main penetration would be rapidly directed south, up the Mackenzie River drainage and along all of the roads that open this territory. The extensive transport technology we have developed for mobility in Siberian regions would be ideal for negotiating the terrain of northern Canada and Alaska. This penetration would continue south into the oil and gas fields of central Canada which supply the industrial heartland of the



United States. All land lines of communication from the continental United States to Alaska would be severed. All North Slope oil would cease to flow south because we would seize control of the giant oil production center at Prudhoe Bay.[60] We would secure our flanks by seizing other key Alaskan objectives such as Little Diomede Island, Point Barrow, Deadhorse, and Barter Island. We would also neutralize as much of the Alaskan Air Defense system as possible, including key installations on the Aleutian Islands, just prior to our landings. This task would be assigned to our long-range bomber fleets equipped with conventional cruise missiles and also to our airborne and Spetsnaz forces. By creating enough confusion among the Americans over the uncertainty of the situation in Europe, I believe there is a good chance that we could initially overwhelm the North American commands long enough for our initial landings to become firmly established ashore.

There is one more important factor in our favor, comrade. We are much closer to Alaska and northern Canada than is the rest of the United States. Their SLOCs to Europe are over twice as long as our SLOCs to North America. In terms of distance, we have considerable advantage over the Americans.

Comrade Sorokin: General Yermak, I gather that you are exploiting the Western strategist's mind-set—the Mercator Global Projection. Soviet strategic planners prefer the polar projection which results in a much more meaningful presentation of strategic geoproximities.

General Yermak: Precisely! As Sun Tzu once said, "Make it appear that you are far off. You may start after the enemy and arrive before him because you know how to estimate and calculate distances. He who wishes to snatch an advantage from his enemy takes a devious and distant route and makes it the short way."[61] If we could effectively invade the North American Continent by way of the Arctic, it could drive a wedge into the NATO alliance. Consider these thoughts:

- Will the political powers in the United States allow for the bulk of critical U.S. follow-on forces and war materiel to be sent to resupply Europe when Soviet troops have successfully landed on the North American Continent?
- If hostilities are essentially confined to the Federal Republic of Germany, which NATO nations will cling to the alliance when the United States cannot abide by its treaty obligations? If we make a case that our war is only with West Germany, that the cause is their dangerous rearmament that now includes control of nuclear weapons, and further, that the United States is the true cause of instability on the Continent and is practicing nuclear brinksmanship, perhaps Western European nations will be more sympathetic to our goals.
- When the United States has been politically severed from its NATO responsibilities because of greater priorities on the North American Continent, what will deter us from success in Europe?

Comrade Sorokin: General, I can just imagine the chaos such a situation could throw into the U.S. mobilization infrastructure where all time schedules and transport vectors are directed towards the European resupply scenario. The diversion of such gigantic logistic momentum would not only be disruptive, it could buy us the necessary time to win our objectives and favorably terminate the war in the European theater. This scheme of yours has a certain insane logic to it, but where would such a strategy lead? You surely do not propose to invade and conquer the United States; especially with such a small force?

General Yermak: Initially, I envision a landing on the North American Continent to be an effort designed to break the United States free of an alliance with NATO. If our current estimates for war in Europe are in any way reasonable, we should be able to complete such a war in about 30 days.[62]

We could ensure that the world clearly understood that our war aims were limited. Once again, as Comrade Gorbachev has so pointedly stated, we will not be the first nation to introduce nuclear weapons in a global war. Because conducting an unlimited war with the United States can only be concluded through the use of weapons of mass destruction, I believe that what our Party Secretary is saying is that he does not envision a war with the Americans except to accomplish limited objectives. As such, this proposed strategy we have been discussing hinges on the presumption that the war to this point has

remained conventional. An attack on the North American Continent, therefore, can only be for limited objectives, not the overthrow of the American system.

What I am suggesting is that the Canadians and Americans may find it in their best interests to terminate the war by acknowledging our historical interests for stabilizing Europe in exchange for release of any territory that we may occupy as a result of invading North America. As Clausewitz pointed out, "If the enemy is to be coerced, you must put him in a situation that is even more unpleasant than the sacrifice you call on him to make."[63]

Let us say that we have reached the point where this strategy is on the verge of accomplishing our war aims. The United States will finally have to decide whether Western Europe has greater importance than the defense of the North American Continent. If the United States decides that North America is more important, thereby stopping its reinforcement of Western Europe and perhaps even recalling some of the forces it has already deployed, then the NATO alliance will be fractured because the United States will be perceived as no longer capable of fulfilling the terms of its treaty alliance. If the U.S. military establishment ignores our Arctic campaign and treats it as a diversion, we can continue to build our effort in North America until the United States is politically forced to take notice and respond. We have no doubt that the Canadians will take immediate notice and will valiantly defend their homeland; but what can they do alone?

I want to reiterate a point that Clausewitz expounded, and which may assist you in rationalizing this strategy: "No one should go to war or even contemplate doing so without knowing in advance what final goals they intend to accomplish."[64] Our long-term goal has always been to create long-term stability on the European Continent. The only purpose in quarreling with the Americans, therefore, is to neutralize their support for the NATO alliance.

Comrade Sorokin: Our Arctic capabilities may make your strategy feasible. Depending upon our political sophistication, your strategy may be suitable in fracturing the cohesion of the NATO alliance. But, what of the risks, and are they acceptable? I see the following problems:

- You propose diverting critical forces to a secondary theater.
- Your lines of supply and communication are particularly susceptible to air and submarine interdiction.
- The United States and Canada may choose to escalate the war by using nuclear weapons in such a remote area.

General Yermak: As you know, Professor, the use of nuclear weapons is a political issue. I doubt that the United States has the political will to use such weapons on its own citizens while other options exist, and I am certain that the Canadians will have strong reservations about using such weapons to poison their own soil. Canadian winds are born in their Northwest

Territories and will carry the seeds of their own destruction. This they cannot forget. Regardless, should nuclear weapons be employed, our fleet of warships, merchant ships, and ground forces are well-equipped for operating in a nuclear battle zone. (See *Jane's Naval Review*, 1985.)

Concerning your other points, it is true that valuable resources would be diverted to a secondary front. However, our scheme of mobilization can provide these forces without severe impact to our other TVDs.[65] One can also argue that the potential gains derived from preventing or detaining U.S. follow-on forces from being sent to Europe, and the resultant fracturing of the NATO alliance, are more than commensurate with the possible losses we might incur if the secondary effort were not successful. Even though we have the lift capability for transporting more than 40 divisions over the ice,[66] realistically, only 10 to 15 divisions are all that will be initially required. The establishment of a sizeable beachhead on the North American Continent could possibly require as many as 30 to 40 U.S. and Canadian divisions to dislodge our force. To accomplish this they would need to use more than all of their existing active and reserve divisions. So where do they get their divisions? They obviously must use divisions otherwise designated for the timely reinforcement of Europe. Inadequate logistics to meet our new threat axis and required mobilization time will delay our enemies' capability to dislodge our North American expeditionary forces. It is this delay time that is critical to ensuring the success of our main effort in Europe. In addition, the North Americans will suffer greatly from inadequate cold weather training and lack of Arctic materiel. What little cold weather materiel they do have is not easily accessible because it is stored at pre-positioned sites in Europe and Korea.

You correctly analyzed that our flanks might be exposed to air and submarine attack. However, our Arctic SLOC can be reasonably well-protected by land-based air and in-depth cordons of antiair batteries. Icebreaking vessels such as our SR-15 *Norilsk*-class RO/ROs could be modified to carry both helicopters and jump jets in a manner similar to concepts successfully used by the British in the Falklands war. Our new aircraft carriers, and even our smaller *Kiev*-class carriers, might be assigned protective roles. The same may be true for some of our cruisers, destroyers, and frigates. We are also evaluating new integrated warfare concepts with our growing fleet of Arctic Sea Control air-cushioned vessels[67] operating in both AAW and ASW screens. The logistic support would be facilitated by our helicopter-equipped nuclear-powered icebreaking barge carriers and other ice-strengthened vessels.

One of the biggest problems that we have in taking the war to North America is establishing air control over our convoy routes and amphibious objective areas. The Americans' B-52, F-111, F-15, and F-18 aircraft pose a constant and serious all-weather, night attack air threat. If we were to invade

North America today, we would be at a serious disadvantage due to our lack of training and limited inventory of fully capable air attack/air defense all-weather, day/night tactical aircraft. Fortunately, we have finally developed and are producing fighter attack aircraft which may be as good as, or even better than, anything currently in the U.S. inventory. Our new Sukhoi, SU-27(Flanker), all-weather, counter-air fighter with its large pulse-Doppler radar and beyond-visual-range air-to-air missiles, provides us with lookdown/shootdown capabilities against low flying aircraft and cruise missiles. It is even more effective when it is utilized in conjunction with our Ilyushin Il-76 airborne electronic warfare and countermeasures aircraft (AEW&C), Mainstay. A navalized version of the SU-27 fighter is currently being tested for service with our new 65,000-ton nuclear-powered aircraft carriers, the first of which was launched over a year ago.[68] If these new aircraft carriers and SU-27 fighters are allowed to join our Arctic forces, we will indeed have a vastly improved capability in the regions of the Arctic Ocean. Regardless, both our MiG-29 fighter (Fulcrum) and MiG-31 interceptor (Foxhound) are excellent land-based aircraft.[69] These aircraft have large pulse-Doppler lookdown/shootdown radar and beyond-visual-range missile capabilities. The MiG-31 has a combat radius, without refueling, that would give us good initial protection of our SLOC from several of the air bases in our Far Eastern theater. Once airfields are seized and secured along Alaska's northern coast, we can shuttle both of these aircraft onto the North American Continent for air defensive use in conjunction with our long-range picket ships and AEW&C aircraft. This will allow us to have an early warning capability and the means to engage enemy aircraft within our maximum effective combat radius before they can close with, and target, our convoys and installations ashore. If we can also be effective in damaging or destroying runways and support facilities at key air bases in Alaska and northern Canada, we will have seriously degraded the enemy's capability to conduct effective, sustained air attacks against our forces.

One method that we could use to get our land-based tactical aircraft into position prior to D-day would be to upgrade well-camouflaged and protected airfields on some of the large ice islands within the polar ice pack.[70] Our nuclear-powered icebreakers could escort an ice-strengthened tanker, an RO/RO support ship, and long-range, air-search, radar-equipped research vessels right to the edge of the ice island, thus giving us the rapid potential to activate the airfields for self-sustained air operations. As you know, we have had considerable experience in operating our aircraft from marginal Arctic runways, and our aircraft are designed for these types of conditions. Whether operating off ice islands or from bases ashore in Alaska and Northern Canada, there will be an urgency to develop aircraft revetments, protected SAM sites, and hardened logistic support facilities. Fortunately, we already have large, highly trained engineer forces that are adept at using snow and water to

construct massive fortifications or repair damaged runways. As usual, the engineers will accomplish the critical support tasks.

Old concepts are being merged with new. We are evaluating the use of lighter-than-air dirigibles as surveillance, targeting, and communication devices towed by ice-strengthened timber carrier ships[71] or other surface platforms. These dirigibles, used in conjunction with our over-the-horizon targeting, video data-link-equipped helicopters (Hormone B),[72] could have considerable potential if equipped with a combination of lookdown sensors and tightly linked communication relays, enhancing our detection of incoming threats and allowing for a coordinated antiair defense in-depth.

To aid in countering submarine threats to our convoys, the Bering Straits approach to the Chukchi Sea could be mined, making enemy submarine passage extremely hazardous. Finally, U.S. carrier battle groups operating in the Bering Sea will find their own flanks vulnerable to missile, air, and sea attack by our forces operating from air and naval bases in the vicinity of the Kamchatka Peninsula.

Comrade Sorokin: General, I found this discussion to be quite enlightening and helpful in terms of directing future economic programs and understanding new technologies for exploiting Arctic Sea control. You have made considerable progress in analyzing the military application of technologies that were designed initially for economical development in our northern regions. You have also strengthened my understanding of our world from a polar perspective. Your scheme of attack is very appropriate to contemplate in the context of our response to the U.S. maritime strategy. It offers a feasible, acceptable, and suitable means to achieve our four objectives: (1) to protect our SSBN bastions; (2) to strategically dislocate North Americans away from Europe; (3) to deter or respond in kind to U.S. attacks on the Kola Peninsula, the Kamchatka Peninsula, and the Kurile Islands; and (4) to avoid the use of nuclear weapons. I like it! Please keep me informed of any significant new developments, for who can say with certainty what opportunities future world events will bring. I would appreciate a written summary of your recommendations for bases and facility requirements, research and development projects, capital equipment procurement schedules, and general support requirements to round out our existing capabilities for supporting such a concept of operations. We may be able to address some of these shortages in the next 5-year plan. Unfortunately, our time is up. Shall we discuss dinner for this evening?

Conclusions

1. The Soviets are rapidly developing an Arctic Ocean warfighting and strategic-lift capability couched in massive, ice-strengthened naval, fishing, commercial, and icebreaking fleets.

2. Because of their Arctic maritime geography, ice-strengthened Soviet war vessels are postulated, including the *Kiev*-class and new, larger aircraft carriers. When combined with new generations of all-weather, day/night tactical aircraft (SU-27, MiG-29, and MiG-31), a potential to project military force across ice-strewn seas and defend it under cover of the long Arctic night becomes credible.

3. When the inability of U.S. forces to operate in the ice is taken into account, Soviet sea power assumes a unique and far more dangerous nature. Their massive ice-strengthened fleet of fishing, research, and merchant ships may greatly complicate our ASW prosecution of Soviet submarines in their Arctic bastions. Potential uses of this fleet also include picket duty for intelligence gathering, covert operations, general surveillance, and targeting of U.S. forces.

4. The Soviet ice-strengthened merchant fleet and strategic airlift *are now capable of landing on the North American Arctic shore with a force as great as 40 equivalent U.S. armored divisions.* Soviet icebreaking tankers and cargo vessels are more than sufficient, in deadweight capacity, to support such an effort over a sustained period of land combat.

5. Technology has increased Soviet mobility in the Arctic Ocean, with the result that the protective polar ice barriers have come down. Long exposed Arctic coastlines have become vulnerable to exploitation by economic enterprises as well as by military forces possessing the necessary platforms. Due to geostrategic advantages, a new Soviet axis of advance has evolved that combines internal lines of supply with Soviet sea control in the Arctic Ocean. In combination, these factors open the gate for Soviet power projection into the North American Continent.

Recommendations for the United States

1. North American defense plans need to address the growing Soviet threat of sea control and surface power projection in their Arctic Ocean TVD. The requirements of the United States and Canada to defend their maritime zones out to the 200-mile limit and to deny amphibious landings on North America's Arctic coasts need to be as carefully considered as other NATO defense commitments.

2. Future shipbuilding and conversions for the U.S. strategic lift fleet should encourage ice-strengthened hull designs and sufficient horsepower ratings in order to be effective in Arctic marginal ice zone conditions. If the economics do not lend to such upgrading of privately owned strategic lift shipping, it is important that the Federal Government provide necessary incentives to the private sector to facilitate the conversions.

3. The U.S. Navy should begin an experimental conversion program to retrofit selected categories of combatants with ice-strengthened hulls and

propulsion systems and then conduct routine operations in the Arctic Ocean areas with these ships. Because of the massive number of potential surface targets in the Soviet Arctic Ocean TVD, naval gunfire platforms should receive priority in the conversion process. U.S. icebreakers should be armed accordingly.

4. The U.S. Navy should prepare for forward defense in the Arctic Ocean with overall concepts of operation developed from the U.S. maritime strategy. New Arctic warfare concepts, including the use of properly armed and Arctic-equipped Landing Craft Air-Cushion (LCAC) squadrons as antiair warfare (AAW) defense screens and as Antisubmarine Warfare (ASW) screens, need to be evaluated in concert with the use of armed icebreaker surface raiders as logistics (POL) motherships. (Icebreakers are critical to extend the range and project the power of such a task force. They could be equipped with naval guns, Harpoon missiles, Tomahawk missiles such as TASM-C or TLAM-C, antiaircraft missiles and ASW weapons, including the LAMPS-III helicopter.) For amphibious strike power projection, new classes of ice-breaking LASH or barge-carrying ships need to be built and configured for helicopter, vertical launched jets (Harrier), and air-cushioned landing craft. They need to be able to carry the air-cushioned craft, launch and retrieve them, refuel them directly, or use helo-delivered fuel bladders to serve as integrated battle management platforms. These ships could be configured in a manner similar to the U.S. Marine LHA-type ships, but would also have ice-breaking capability and preferably nuclear propulsion. The two planned U.S. Navy nuclear aircraft carriers (CVN) should be built to operate in all the oceans of the world, including the Arctic.

Notes

1. See Tom Clancy, *Red Storm Rising* (Annapolis, Md.: Naval Institute Press, 1986).
2. See Tom Clancy, *The Hunt for Red October* (Annapolis, Md.: Naval Institute Press, 1984).
3. S. G. Gorshkov, *The Sea Power of the State* (Malabar, Fla.: Robert E. Krieger Publishing Co., 1983). Admiral Gorshkov has consistently stressed the essential prerequisite for cross-compatibility between merchant vessel cargo configurations and military sealift requirements.
4. See John Moore, ed., *Jane's Fighting Ships 1986-1987* (London: Jane's Publishing Co., Ltd., 1986).
5. David D. Isby, "Soviet Amphibious Warfare, 1986," *Amphibious Warfare Review*, Fall/Winter 1986, pp. 42-45.
6. Gorshkov, p. 229.
7. *Ibid.*
8. See Wilbur E. Garrett, "Arctic Ocean," (Azimuthal Equidistant Projection), *National Geographic*, February 1983.
9. Gorshkov, pp. 196-197.
10. James D. Watkins, "The Maritime Strategy," U.S. Naval Institute *Proceedings*, January 1986, pp.2-17; D. B. Rivkin, "No Bastions for the Bear," U.S. Naval Institute *Proceedings*, April 1984, pp. 37-43.
11. Norman Polmar, *Guide to the Soviet Navy* (Annapolis, Md.: Naval Institute Press, 1986), p. 404.
12. Additionally, *Kiev*-class and *Breshnev*-class aircraft carriers with YAK 38 (Forger) jump jets and the new navalized version of SU-27 (Flanker) aircraft, all equipped with air-to-air missiles, can be very effective against P-3 aircraft that venture into weapon ranges. See W. R. Taylor, "Gallery of Soviet Aerospace Weapons," *Air Force Magazine*, March 1987, pp. 89-90.

13. For instance, on the *Artika*-class civilian icebreakers, a complete suite of AA and ASUW weapons was fitted but taken off immediately after acceptance trials, leaving the attachment platforms only. See Polmar, p. 370.

14. Gorshkov, p. 44.

15. Bruno Bock and Klaus Bock, *Soviet Block Merchant Ships* (Annapolis, Md.: Naval Institute Press, 1981), p. 68.

16. See *Lloyds Register of Shipping* (London: Lloyd's Register Printing House, 1984-85).

17. Gorshkov, p. 43.

18. Hamlin Caldwell, "Arctic Submarine Warfare," *Submarine Review*, July 1983, pp. 5-13; see also Polmar, p. 117.

19. Taylor, p. 89.

20. Caldwell, p. 9.

21. Polmar, pp. 4, 431.

22. Kenneth R. McGruther, *The Evolving Soviet Navy* (Newport, R.I.: Naval War College Press, 1978), p. 55.

23. See Moore.

24. Center for Strategic and International Studies, *Soviet Sea Power* (Washington, D.C.: Georgetown University, June 1983), p. 85.

25. *Ibid.*

26. Polmar, pp. 5, 460.

27. *Ibid.*

28. Carl Von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1984), p. 607.

29. McGruther, p. 33.

30. Although the political scenario of this article is fictitious, in his *Wall Street Journal* article Mr. Melvyn Krauss recommended that West Germany and our other allies be allowed to control their own nuclear weapons and claimed support of this position by several highly influential U.S. defense analysts and politicians. See Melvyn Krauss, "Let Europe Negotiate with Gorbachev," *The Wall Street Journal*, 6 March 1987, p. 30.

31. For further discussion of these issues see John Cushman, "U.S. To Cut Arms Aid To Allies, Includes Some Hosts of Bases," *New York Times*, 14 November 1986, p.1; Edward Schumacher, "U.S.-Spanish Discord Over Bases Is Growing," *New York Times*, 14 December 1986, p. 6.

32. NATO has code-named this WiG aircraft the Orlan. It has been observed in performance trials armed with the air-launched version of the SS-N-22 cruise missile. Stand-off attack radius of this WiG aircraft is therefore in excess of 60nm. Maximum speed is estimated to be 300 knots at a cruise altitude of 20-25 feet. The SS-N-22 cruise missile can carry either a conventional or nuclear warhead at an estimated speed of Mach 2.5. See Polmar, pp. 104, 108, 431.

33. *Ibid.*, p. 431.

34. Clausewitz, p. 610.

35. This policy was not originated by Gorbachev. It was articulated in 1982 by Soviet Defence Minister Ustinov when he said, "Only extraordinary circumstances—a direct nuclear aggression against the Soviet State or its allies—can compel us to resort to a retaliatory nuclear strike as a last means of self-defence." See D.F. Ustinov, "We Serve the Homeland and the Cause of Communism," *Izvestiya*, 27 May 1982.

36. Clausewitz, pp. 595-596.

37. Sun Tzu, *The Art of War*, trans. Samuel B. Griffith (London: Oxford University Press, 16th ed., 1981), p. 78.

38. *Soviet Sea Power*, pp. 45-46.

39. The Arctic Ocean Teatrii Voyennykh Deystviy [Arctic Ocean Theater of Operations] is one of four maritime theaters of operation established by the Soviets for unified direction of operations. The other maritime TVDs are the Atlantic, Pacific and Indian Oceans. See Polmar, p. 13.

40. Norman Polmar, *The Ships and Aircraft of the U.S. Fleet* (Annapolis, Md.: Naval Institute Press, 1984).

41. William Mathews, "Soviets May Be Building Giant LCACs for the Arctic," *Navy Times*, 23 March 1987, p. 33.

42. *Lloyds Register of Shipping*; Moore; R.A. Streater and David Greenman, eds., *Jane's Merchant Ships 1985-1986* (New York: Jane's Publishing Co., 1985; Bock and Bock, p. 67. "Most new Soviet freighters are completely equipped for ice conditions."

43. These ships are an across-the-board mix of carriers, containers, RO/ROs, tankers, ferries, icebreakers, cablelayers and dredges. There are 262 in the 9,000 shaft horsepower range and a total of 2,123 under 10,000 horsepower. See Dennis M. Egan and David W. Orr, "Sea Control in the Arctic: A Soviet Perspective," Unpublished Student Research Paper, U.S. Naval War College, Newport, R.I.: 1987, appendix C.

44. The Soviet Union's internal transportation system connects the West-East corridor Trans-Siberian Railroad to intermodal cargo handling river ports on the Irtysh, Ob, Yenisey, Angara, and Lena Rivers which move cargo north to Arctic port facilities. The Trans-Siberian Railroad also connects port facilities on the Volga River which, in turn, are linked by a river and canal network from the Danube River, the Black Sea, the Caspian Sea, and the Baltic Sea to the White Sea on the northern Arctic coast. By the early 1990s the Danube River will also be connected to the Rhine River in a joint West German-Soviet project. The Rhine River connects with the North Sea through outlets in The Netherlands and through the Rhine-Weser Canal in West Germany. Most of the Soviet Union's naval combatants can be shuttled from one fleet operating area to another, completely within Soviet territorial waters and internal waterways. See D. M. Egan, "The Triumph of Technology over Geography: Unlocking the Siberian Maritime Icebox," Unpublished Student Research Paper, Newport, R.I.: U.S. Naval War College, January 1987.

45. "The Arctic Autumn '83," *Soviet Shipping Journal*, January 1984, pp. 32-35.

46. *Ibid*; see also Captain Chubakov's historical review of the Northern Sea Route in Kiril Chubakov, "The Northern Sea Route—Past and Present," *Soviet Shipping Journal*, April 1982, pp. 26-29.

47. Timofei Guzhenko, *U.S.S.R. Marine Transport in the Period of Developed Socialism* (Moscow: Transport Publishers, 1981), as summarized in *Soviet Shipping Journal*, February 1982, p. 13.

48. "Forward to New Frontiers, 27th C.P.S.U. Congress," *Soviet Shipping Journal*, March 1986, p. 1; see also, Timofei Guzhenko, "Programme for Long-Term Action," *Soviet Shipping Journal*, March 1986, pp. 2-6.

49. As a demonstration of things to come, in 1978 the Soviet nuclear icebreaker *Sibir* accompanied an ice-strengthened containerized cargo ship through multiyear polar pack ice at an average speed in excess of 11 knots. See Lawrence Brigham, "Future Developments in the Soviet Arctic Marine Transportation System," *First Spilhaus Conference Proceedings*, Williamsburg, Va., 14-17 October 1984, p. 213.

50. "Morflot Ports: Yesterday, Today, Tomorrow," *Soviet Shipping Journal*, April 1984, pp. 2-4.

51. *Jane's Surface Skimmers 1985* (London: Jane's Publishing Co., Ltd., 1985), pp. 59-90.

52. Vladimir Lenin, "Better Fewer, But Better," *Pravda*, 4 March 1923, trans. Robert C. Tucker in *The Lenin Anthology* (New York: W.W. Norton Co., 1975), p. 745.

53. In a recent (January 1987) newspaper article, Captain Anatoliy Kozanov, master of the SR-15-class Arctic freighter *Kapitan Man*, was quoted as follows, "off season voyages to end next year or the year after . . . when the Soviets plan to open the eastern Arctic to year-round shipping." See "Soviet Ice-Breaking Freighter Offers All Creature Comforts," *Journal of Commerce*, 21 January 1987.

54. See Clancy, *Red Storm Rising*.

55. David R. Francis, "Canada Ponders Major Shift in Defense Policy," *Christian Science Monitor*, 4 February 1987, p. 9.

56. To air deliver personnel, approximately 125 Candid aircraft sorties will move one equivalent U.S. Mech Division (approximately 17,500 men). For example, using a distance of 2,000 nautical miles and 55 percent of available Soviet Candid aircraft, 125 sorties could be completed each day. The Candid aircraft requires a minimum runway length of 1,600 feet and can operate on dirt airstrips allowing for the use of many alternative North American austere landing sites. (Assumes availability of 1,600 ft. (minimum) runway.) Use of much larger Soviet logistics aircraft joining their air fleet, such as the Condor or Casp B WiG (see table 1), will substantially decrease their sortie requirements. See John L. Scherer, *USSR Facts and Figures Annual 1985* (Gulf Breeze, Fla.: Academic International Press, 1985), v. 9, p. 90.

57. *Logistics Handbook for Strategic Mobility Planning*, Military Traffic Management Command, PAM 700-1, January 1986, pp. 4-8. Authors use lift needed for armored division, the heaviest unit.

58. Ships of the *Ivan Rogov*-class (LPD) carry over 550 troops, 30 armored personnel carriers, 10 tanks, and 3 air-cushioned landing craft. Alligator-class ships (LST) can carry 375 troops and up to 26 tanks. The Soviets have a large fleet of air-cushioned vehicles of various sizes, all of which are highly capable of negotiating shore ice. They also have the Polnocny A-class landing craft (25M) capable of carrying 200 troops and 6 tanks; and the Polnocny C-class landing craft can carry an additional 30 tons of cargo. (See table 1.)

59. John Moore, ed., *Jane's Naval Review* (London: Jane's Publishing Ltd., 1985), p. 170.

60. This would immediately stop about 20 percent of U.S. domestic oil production.

61. Sun Tzu, p. 102.

62. Speculation on the part of the authors and perhaps overly optimistic.

63. Clausewitz, p. 77.

64. *Ibid.*, p. 579.

65. This is a conservative estimate based upon worst-case lift requirements for 40 equivalent U.S. armored divisions. Soviet armored divisions are believed to require considerably less lift weight capacity.

66. The initial Soviet divisions could come from Mongolia in the Far Eastern TVD and from the Central Strategic Reserve. See The International Institute for Strategic Studies, *The Military Balance, 1984-1985* (Oxford, England: The Alden Press, 1984), pp. 18, 19, 22, 105; Soviet forces in Mongolia would be replaced by highly trained and loyal forces of the Mongolian People's Republic Regular and Reserve Army as part of a regularly practiced routine. See David W. Orr, "The Geo-Political Significance of Outer Mongolia and

its Relationship to China and the Soviet Union," Unpublished Student Research Paper, U.S. Naval War College, Newport, R.I.: 3 March 1987, p. 8. The Soviets can mobilize 4-6 million Reserves within 48 hours, all of whom have had active military service within the past 2 years. See William F. Scott and Harriet F. Scott, *The Armed Forces of the USSR* (Boulder, Colo.: Westview Press, 1979), pp. 322-326. These Reserves will more than replace initial divisions sent to North America. Also, the Soviets have a highly efficient system for rapid absorption of Reserves. Each division has a duplication of officers. When a division moves out, the division commander and one-half of the officers (full complement) go with the unit. Meanwhile, the division commander's deputy and a full complement of officers stay behind and immediately form a new division once the Reserve complement of enlisted soldiers arrive. It is strongly suspected that there are enough officers in the original division so that the chief of staff can form a third division. The first division uses category 1 equipment (brand new), the second division uses category 2 equipment (almost new), and the third division uses older war stocks or equipment with which the parent division trains on a daily basis. Mobilization in this context is practiced by all units. See Viktor Sugurov, *The Liberators* (New York: Norton, 1983); also, *Inside the Soviet Army* (New York: Berkley Books, 1982), p. 164.

67. The Soviets are now operating an impressive fleet of more than 70 air-cushioned/Arctic-capable landing craft (each having an unrefueled range of 200-plus nautical miles) including the Pomornik class, a 360-ton, 59-meter craft which operates at a speed in excess of 50 knots and carries over 200 troops, 3 medium tanks, SA-N-5 antiair missiles, 30mm/65-caliber Gatling guns; the Aist class, a 250-ton, 47.3-meter craft which operates at a speed in excess of 60 knots and carries 220 troops, 2 medium tanks, 2 quad AS-N-5 Grail antiaircraft missiles, 4 30mm/65-caliber Gatling guns; and the Gus class, a 27-ton, 21.3-meter craft which operates at a speed in excess of 50 knots and carries 25 troops, and a 30mm Gatling gun. These craft can sortie out of a barge carrier or Lash ship for logistics and control, refuel from helicopter-delivered fuel bladders, and replenish from ice-breaking tankers in the convoy. Given this logistic support to extend their range, air-cushioned vehicles can be deployed in conjunction with helicopters and vertically launched aircraft to establish dispersed AAW and ASW formations. See Polmar, *Soviet Navy*, pp. 266-270.

68. John W.R. Taylor, comp., "Jane's All the World's Aircraft Supplement," *Air Force Magazine*, February 1986, p. 129.

69. Harriet Fast Scott, "Organization of the Soviet Armed Forces," *Air Force Magazine*, March 1986, p. 86.

70. Lowell Thomas, Jr. said, "Between 1937 and 1958 Russia airlifted the astonishing total of 565 temporary scientific stations onto Arctic ice-pack islands." See Lowell Thomas, Jr., "Scientists Ride Ice Islands on Arctic Odysseys," *National Geographic*, November 1965, p. 675.

71. *Soviet Shipping Journal*, February 1986, p. 6.

72. Polmar, *Guide to the Soviet Navy*, pp. 406-407.

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Being "Red": The Challenge of Taking the Soviet Side in War Games at the Naval War College

David Alan Rosenberg

Over four decades have passed since the U.S. Navy was last locked in combat at sea with a determined and capable oceangoing enemy. During those years, more than two generations of American naval technology have come and gone, as have the two generations of U.S. naval officers trained to operate and command that technology in combat. During those same four decades, the once minor Soviet Navy has emerged in both quality and quantity as a formidable seagoing force.

In the absence of actual hostilities between the United States and the U.S.S.R., an eventuality the United States has actively sought to deter, there has been no opportunity for the Navy to test its officers and its technology against the Soviet threat under wartime conditions. As the World War II reality of sustained combat at sea fades into distant memory, alternative means of measuring the U.S. Navy's strategic and tactical readiness to fight a full-scale naval war have taken on increasing importance in the development of sound American maritime strategy.

Following the approaches established in the U.S. Navy of the 1920s and 1930s, two complementary techniques for measuring strategic readiness have emerged over these past 40 years. The first of these is a massive program of both regularly scheduled and special fleet exercises involving both U.S. and allied navies. Such exercises have their antecedents in the twenty-one fleet problems conducted on a more or less annual basis by the concentrated U.S. Fleet between 1922 and 1940. As mounted today, these exercises are designed to test interoperability, tactics, and operational capability in various regions, in all types of seasons and weather, against a wide range of possible combat scenarios. More than 100 major exercises involving actual forces afloat took place in 1985 and another 90 in 1986.[1]

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The second approach is that of war gaming. The War Gaming Department of the Center for Naval Warfare Studies at the Naval War College in Newport, Rhode Island has emerged as the major institution where the U.S. Navy can test its strategic concepts and tactical and operational doctrine in a dynamic atmosphere of simulated battles and campaigns. Whereas during exercises commanders are restricted from firing a shot in anger against the U.S. and allied forces simulating the enemy, at Sims Hall in Newport, a full range of ordnance may be employed through the use of computer models of combat engagements and logistics generation. Experienced and prospective naval commanders are given the opportunity to make combat decisions and observe outcomes, and subsequently review their choices, explore alternatives, analyze the results, and draw lessons from the experience.

War gaming was introduced at the Naval War College a century ago. In the fall of 1886, two years after the War College opened, Lieutenant William McCarty Little, U.S. Navy (Retired) presented a lecture on "Colomb's Naval Duel Game"—a simulation of two-ship combat. By 1894, gaming was a standard part of the course of instruction. It was conducted at three levels—single ship combat, tactical fleet formations and actions, and a strategic game simulating an entire war—as a means of teaching students to apply broad principles to specific situations. It was also useful in preparing plans and tactical formations for the fleet's annual war problem.[2]

Gaming became increasingly important in succeeding decades. In the interwar years, as the battles and campaigns of World War I were studied and the future shape of naval warfare examined, war gaming became a central element of the War College curriculum. An inexpensive (if imperfect) alternative to full-scale fleet exercises—an important consideration given 1920s economy and 1930s austerity—the games were fought with increasing frequency in Luce Hall and, after 1934, on the checkerboard floor of Pringle Hall. In 1932, a standard game schedule was established which called for 304 of the 326 days in the academic year to be devoted to tactical and strategic exercises, tactical operations and quick decisions problems, critiques of gaming experiences, and a Battle of Jutland Board Maneuver.

Gaming played an important role in shaping the Navy's strategic thinking and planning during the interwar period. While the Battle of Jutland exercise was used primarily as a training tool for gaining familiarity with gaming procedures and infusing the gamers with enthusiasm by offering the opportunity to refight the famous but inconclusive 1916 battle, the war games that pitted the U.S. Navy against the Japanese Navy, code-named "Orange," served a more specific purpose. They cast doubt on the assumption that the U.S. Navy could easily defeat the Japanese in the Pacific by virtue of numetical superiority. By the early 1930s, as intelligence improved, awareness of logistical problems increased, and the games grew more sophisticated, it became apparent that the U.S. Navy might well lose. During the rest of the

decade, war gaming helped shape U.S. naval strategy, particularly by preparing those who would become the high command, to meet the challenges that lay ahead.[3]

One important element of gaming, even during the interwar years, was intelligence. Beginning in 1929, the War College maintained an intelligence department as an integral part of its institutional structure. The actual work of the department remains something of a mystery. An examination of the college staff rosters from 1929 through Pearl Harbor reveals that at least one captain and two to five commanders or lieutenant commanders, and even an occasional Army and Marine lieutenant colonel were assigned to the department along with the college's professor of international law, G.G. Wilson, who was also on the faculty of Harvard University. Unlike the Department(s) of Operations, Strategy, and Tactics (actual departmental organization varied from year to year), which prepared the college curriculum and set the standards for gaming, the Intelligence Department appears to have been the research arm of the college, providing information on U.S. and foreign navies to support the curriculum, including gaming.

The kind and amount of information the Intelligence Department provided to students and faculty is not clear from War College archives. Three things are known, however. First, modern intelligence gathering was a factor in establishing the tactical situation for the game: mock radio intelligence intercepts were provided to "Blue" and "Orange" teams as they prepared for combat. Second, there was no dedicated "Orange" team: students played both sides of the conflict. Finally, the absence of a dedicated "Orange" team, with its own unique approach to warfighting, reflected an assumption that the opposing navies were not only similar in force structure and weapons systems, but would rely on similar tactics. The theory of naval warfare at the time centered on the decisive fleet action, primarily involving battleships in a battleline engagement. Within this context, there appeared to be only a finite number of possible permutations in tactics or variations in military philosophy.

The U.S. Navy was in fact "reading the Japanese mail" during the 1920s and 1930s through radio intelligence code breaking, and used information gleaned from broken naval codes to ascertain the size and readiness of the Japanese Fleet. The full story of that intelligence effort has yet to be declassified, much less written, but based on information that is currently available, intelligence on the Japanese tactical and operational approach to war does not appear to have been a major concern of those in the Navy's leadership who directed the collection and use of the "secrets from the ether" as such intercepts were called. It is possible that such information was collected and analyzed but was considered too sensitive for dissemination. In any event, it was not made available to either the fleet or to the War College.[4]

During the interwar years, the Naval War College was the pinnacle of the Navy's professional education. As of 7 December 1941, every active duty flag officer qualified to command at sea, save one, was a War College graduate. That leadership, shaped by a curriculum centered on war gaming, had already anticipated, through gaming experience, most of the strategic challenges that World War II in the Pacific would present. Fleet Admiral Chester Nimitz' comment that the courses and war games at Newport in the 1920s were so thorough that "nothing that happened in the Pacific [during World War II] was strange or unexpected" has been widely quoted. But Nimitz was referring to overall strategy and the "fantastic logistic efforts required to support the operations of the war."[5] The inattention to enemy tactics and operational practices in the interwar war games contributed to the startling and devastating tactical surprises the Japanese were able to inflict on the U.S. Navy in a series of battles from Pearl Harbor through the Guadalcanal campaign in 1941-1943. The lesson of this experience—not to assume that an enemy's tactics and strategy will mirror one's own—was paid for dearly.

War gaming suffered something of a decline at the Naval War College after World War II. The Navy perceived its mission in the 1950s in terms of readiness to conduct forward defense, power projection ashore, and sea control—concepts that did not lend themselves readily to then existing techniques of manual war gaming. The most likely enemy of the United States—the U.S.S.R.—was not nearly so formidable a seagoing power as the Japanese had been in the interwar period. In the absence of a real naval opponent who could be cast in the "Orange" role, it was difficult to generate scenarios that were as credible or compelling as those of the 1930s. In 1958, the old game board in Pringle Hall, where warship models had been maneuvered by hand, was replaced by the Navy's first war-gaming computer, the Navy Electronic Warfare Simulator (NEWS), which had been under development since 1945. The following year a separate war gaming department was established in Sims Hall. In contrast to the interwar period, however, the NEWS was used for only 63 days of war gaming in 1965, including War College games, and Atlantic Fleet and Destroyer School training exercises.[6]

In the late 1960s, plans were laid for replacing the NEWS with a new and updated computerized war gaming center. In 1972, War College President Vice Admiral Stansfield Turner introduced a variety of reforms in the college curriculum. Among his many ideas, Turner disapproved of the way in which naval war games had been played at the college up to that time. He felt that in the past they had overemphasized the writing of complex operation orders and should be used more effectively as a teaching tool in educating students in the decisionmaking process. Turner ordered extensive modifications in the new computer equipment for this purpose. He wanted every student, not just the select few, to have the opportunity to play an admiral's role in a war game. While modifying the computer equipment for this purpose, Turner

also encouraged the development of tabletop games created by Professor Jacques Naar, the first occupant of the McCarty Little Chair of Gaming and Research Technique.

It was the emergence of the Soviet Navy as a serious oceangoing challenge, however, which was primarily responsible for a resurgence of war gaming at the Naval War College. By the mid-1970s it had become apparent that the Soviet Navy would be a formidable opponent. War gaming would be a valuable tool for testing U.S. strategy, tactics, and capabilities against this potential threat, but only if the opposition were portrayed in the games as realistically as possible. Just as detailed intelligence about Japanese capabilities had been a critical component of the interwar games, so detailed intelligence about the Soviet Union had become a critical element in the 1970s. This time, however, it was apparent that knowledge of capabilities was not enough. The Soviet approach to naval warfare was known to be fundamentally different from that of the United States. To achieve a degree of realism, it was necessary to use the best possible information on Soviet strategy, decision-making, and tactical doctrine in designing and implementing the games.

To meet this need, the Naval War College called on the Navy Field Operational Intelligence Office (NFOIO). In April 1976 the NFOIO (which became the Navy Operational Intelligence Center in 1984) sent a detachment to Newport to provide a "more comprehensive and informed intelligence input, particularly in the area of Soviet naval tactics, force structure, and capabilities." A "dedicated intelligence team," composed initially of one captain with an intelligence specialty, one commander or lieutenant commander line officer with a warfare specialty and intelligence subspecialty, one civilian intelligence analyst, and a civilian secretary, was attached to the Center for War Gaming.

Their mission, as established by an agreement between the President of the Naval War College and the Director of Naval Intelligence, was to act as "a permanent, in-residence 'Opposition Team' in appropriate war games," with responsibility for directing opposition play or supporting a designated opposition force commander. The unit would provide opposition force intelligence data for operational units played in the game; simulate play of appropriate opposition political echelons and military commands; and "provide intelligence support to the Center for War Gaming on all matters pertaining to Soviet naval operations and tactical doctrine," including all source briefings on the "capabilities, limitations, historical trends, and current developments in the Soviet Navy." In addition, the detachment would conduct independent research on the Soviet Navy, assist in the preparation of intelligence publications, and assist NFOIO in preparing tactical analyses.[7]

The establishment of the intelligence detachment at the Center for War Gaming reflected growing concern about the expansion of Soviet military

power, the same concern that prompted other U.S. intelligence innovations such as the creation of a permanent Office of Net Assessment in the Office of the Secretary of Defense during James Schlesinger's tour as Secretary of Defense from 1973 to 1975, and the 1976 Team B reassessment of National Intelligence Estimates. It was part of a broad national effort to become more vigorous and professional in assessing and confronting Soviet military capability. Not since the interwar period had the Navy treated war gaming and simulation so seriously.

The creation of a dedicated opposition team also marked an important change in the Navy's philosophy of war gaming. For one thing, it was a giant swing of the pendulum away from a long-standing institutional bias toward "mirror imaging" the enemy during war games. Equally important, it was designed to counter the kind of personal competition fostered by older approaches to war gaming. Under the old system, the games often became merely a test of skill between Navy commanders assigned to the two opposing sides. It was a personal contest between real-life competitors in which the main objective was not to play the "Red" or "Blue" side realistically or even to explore tactical and strategic lessons, but simply to beat the opposition. The question of who won and who lost overshadowed everything else. By taking the "Red" side out of the hands of the students or visiting admirals who were utilizing the war-gaming facility, the emphasis was shifted to the learning experience offered by simulated strategic interaction and tactical exchange.

By the late 1970s, war gaming at Newport had become much more than a means of training students in decisionmaking and tactics. The revised operations course created by retired Vice Admiral Thomas Weschler in 1977-1981 changed the focus of the games from the level of individual ships or small units to the fleet and task force level. The multi-week Global War Game was begun in the summer of 1979 to examine changing strategic, logistic, and tactical options for U.S. worldwide military operations. Originally intended primarily to occupy War College students who stayed in Newport over the summer break, this innovative, broad-ranging game soon took on a life of its own. In recent years, sizeable contingents of flag officers and civilian decision makers from Washington have come to Newport every summer to play in the most extensive simulation of general war staged in the United States.[8]

In 1981, the creation of the Center for Naval Warfare Studies further encouraged the shift from using war gaming primarily as a training tool toward using it for the analysis and development of strategy. The new center incorporated the old war gaming center, along with the Center for Advanced Research, the Naval War College Press, and the new Strategic Studies Group, made up of front-running Navy and Marine officers who were chosen by and reported directly to the Chief of Naval Operations. The center was to serve as a vehicle for the development and dissemination of naval strategy or, more accurately, to define the Navy's place in national strategy.

The establishment of the new center meant greater responsibilities for the NFOIO detachment. To meet the challenge, the size of the detachment was increased. As of 1984, it was composed of seven naval officers, two civilian analysts, and two enlisted personnel for office and library support. Reflecting its increased capability, the detachment was assigned the additional task of providing the director of the new Center for Naval Warfare Studies and the Strategic Studies Group with intelligence support and background information "on matters pertaining to Soviet strategy and doctrine."[9] An eighth officer was added to the now redesignated Navy Operational Intelligence Center (NAVOPINCEN) detachment in 1986.

Presenting the Soviet side in war gaming and analysis, whether for the purpose of training officers or with the intention of shaping naval and national strategy, is a large, intricate, and time-consuming task. The 1986-1987 war gaming schedule listed more than 50 separate games or exercises. In addition, gaming personnel and NAVOPINCEN detachment members participated in training sessions and seminars related to war gaming. Since completion of the new enhanced naval war gaming computer system in early 1987, it has become possible for more and more games to be played at remote sites, including fleet headquarters in Norfolk, Pearl Harbor, and even London. This will decrease the amount of travel required of fleet personnel to Newport, allowing state-of-the-art Navy war gaming to reach more commands. However, War Gaming Department and NAVOPINCEN detachment members have found that such remote gaming *increases* rather than decreases their work load because pregame preparations usually require as much, if not more, travel and advance planning as games played solely in Sims Hall.

Fewer than 40 percent of the games played at Newport are sponsored by the Naval War College, and an even smaller percentage are used purely for the instruction of War College students. The game sponsors today are active operational commanders and strategic planners in Washington. Among the game sponsors for 1986-1987 were the Commanders of the Atlantic and Pacific Fleets and U.S. Naval Forces Europe; the Supreme Allied Commander, Atlantic; the NATO Strike Fleet Atlantic; the Fleet Marine Force, Atlantic; the U.S. Seventh Fleet; Submarine Group Two in New London; and the Strategic Concepts Branch and the Director of Naval Warfare in the Office of the Chief of Naval Operations. The game sponsor sets the parameters of the simulation to be played, including the general questions that need to be explored and the range of specific tactical and strategic issues that should be included during game play. Each one of these games has a War Gaming Department staff mentor assigned to it as a scenario design representative, and a NAVOPINCEN detachment member assigned as a representative to develop ways for the opposition to be played.[10]

The NAVOPINCEN detachment's approach to playing the opposition in war games is more of an art than a science. The detachment draws heavily on

data from the Washington intelligence community, including the Navy Operational Intelligence Center in Suitland, Maryland, the rest of the Naval Intelligence Community, plus the National Security Agency, Central Intelligence Agency, and Defense Intelligence Agency. The Operational Intelligence Center provides data on current Soviet operations and exercise activity, while National Intelligence Estimates and Soviet open-source literature provide reference points for building scenarios and conducting the games. In games involving joint action, the detachment can call upon the services of two Army Fellows assigned to Newport for two-year tours to assist the War Gaming Department in getting ground operations correct. One of the Army Fellows is a military intelligence officer; the other is a combat arms professional. In addition, the NAVOPINCEN detachment regularly calls upon the U.S. Air Force "Checkmate" office and other Air Force commands for answers to questions regarding the simulation of Soviet air operations.

Before a game begins, NAVOPINCEN detachment members engage in extensive preparations. They work with the game sponsor and the War Gaming Department design representative in setting up scenarios that are realistic and yet tailored to facilitate analysis of the issues and courses of action the sponsor is concerned about testing. Opposing simulation forces are built up, computer data bases prepared, and scenarios worked and reworked to fit the requirements of the game. By the time the players arrive and the game begins, much of the work of playing or being "Red" has been completed.

It is never possible to achieve complete accuracy and fidelity in playing the opposition. War games are by their nature only approximations of combat situations. Furthermore, intelligence is never perfect, and questions inevitably arise for which there are no answers. The problem of incomplete intelligence is compounded by the pressures of game play. When the NAVOPINCEN detachment is presented with an unexpected choice, it may be possible to come up with relevant data by doing a quick search of the literature or querying intelligence community sources. Sometimes, to expedite the game, the detachment is forced to fall back on the cumulative experience of its members in making a "best military judgment" regarding likely courses of Soviet action. In such instances detachment members are nagged by the thought that the answer might have been found if only there had been time to look for it, and the choice that was made may not have been consistent with the best possible information. The professional "Red" team players find it sobering to consider that "rightly or wrongly, we are leaving high-ranking military officers with a certain perception of how Red is going to fight," although every decision is not backed by hard data.[11]

This problem is further compounded when intelligence is available but cannot be used without violating security. The NAVOPINCEN team makes use of even the most sensitive information in preparing its scenarios, but once

play begins, caution is in order since only a few of the games are classified above the "Secret" level. Detachment members will utilize their knowledge of highly classified information during game play only if this can be done without revealing the source. It may be necessary on occasion to play the Soviet side with less than total fidelity and precision in order to avoid compromising critical intelligence sources.

The NAVOPINCEN detachment also faces another more mundane, but not insignificant, constraint on how realistically it can portray Soviet forces. The U.S. side in any given game will always have the use of far more computer terminals than the Soviet side. This is a logical arrangement since U.S. choices, not Soviet ones, are the focus of the game. Nevertheless, it does mean that the detachment is not able to present the actions of Soviet forces in full detail. For example, it is particularly difficult to present Soviet air operations on a full-scale basis with this constraint. The shortage of control terminals has occasionally turned out to be a blessing in disguise. The fewer terminals "Red" has available, the fewer dedicated "Red" personnel are needed to man them. In a sense, the NAVOPINCEN detachment gamers face fewer command, control, and communication problems this way. Still, the lack of a fully staffed "Red" side means that those on the U.S. side may not have as complete a simulated picture as possible of the array of threats they would be facing in a real war.

There are also some larger questions about the design and use of the war games which are of concern to those who have served with or played against the NAVOPINCEN detachment. These are not specific constraints on how accurately the Soviets can be portrayed, but more general problems that are particularly apparent to those charged with being "Red."

First, it should be noted that not all war games are alike. Some have a comparatively narrow tactical focus, i.e., examining military issues and possible options for the use of set numbers and types of forces to resolve certain specific regional problems. Others are strategic in orientation, looking at a large number of issues over a variety of regions and with a great array of military forces. These are more scenario and personality dependent; the designers and players have greater latitude in making decisions because of the complexity inherent in large numbers of variables. Both tactical and strategic games have their uses. Tactical games are most useful in assessing, through computer modeling, the technical boundaries and general parameters of military options. Strategic games are best characterized as politico-military simulations whereby the military interaction is dependent on game-oriented political decisions rather than on more narrow technical and military considerations. They stimulate creative strategic thinking and are most useful in giving the players an opportunity to role-play decisionmaking in wartime and crisis situations.[12]

Both strategic and tactical games often begin with a scenario that is strategically realistic but politically improbable at best. This inconsistency

arises because, in order to mount a game, it is necessary to posit an outbreak of hostilities between the Soviet Union and the United States, something both nations are, in fact, anxious to avoid. Since the United States never acts as the aggressor in war games, it is often necessary to "force" the Soviet Union to engage in open hostilities without adequately explaining its reasons for doing so.

A related problem revolves around the question of the "first salvo." While the large, strategic global war games begin in peacetime or a crisis, many smaller games (particularly tactical exercises) open after war has actually started. To focus on naval engagements that permit room for American commanders to take the initiative, it is often necessary to skip over the Soviet attack that signalled the outbreak of the war and zero in on the U.S. response. The impact of the initial attack is merely written into the background scenario. It is never described as so devastating as to preclude response, since that would abort the game before it had begun. The Soviet Union, however, attaches great strategic importance to the first salvo and is likely to make it as devastating as possible. Skipping over this phase of the conflict could easily leave the wrong impression with those playing the game.

Navy and NAVOPINCEN detachment concerns about the battle of the first salvo have not been ignored at Newport. A number of specific games have been designed to focus on this phase of the conflict, and the experience gained from them has made the U.S. Navy much smarter about the first-salvo challenge and, theoretically at least, more capable of dealing with it, both in simulation and real life. Real war is always uncertain, however, and students and officers who begin play in war games without experiencing and countering the first salvo need to be constantly aware that there is another dimension to the problem that they have missed, and about which they cannot become complacent.

War games are, of course, only best approximations of operational reality. Even discounting the problem of a summary initial scenario, the time frame in which war games are played does not permit a natural unfolding of events. Most war games last only a matter of hours, days, or, at the very most, weeks. Although it is possible to telescope time to simulate a somewhat longer period, it is impossible to game a prolonged conflict realistically under these conditions. The pressure of artificial time constraints distorts the interaction between the opposing sides and may result in unrealistic decisionmaking.

Despite the best efforts of the War Gaming Department and the NAVOPINCEN detachment to make the scenarios, simulations, and interactions realistic, war games are competitive exercises in which the will to win is often stronger than the desire to learn. This is particularly true when those playing are knowledgeable operators who have come to Newport to test tactical concepts. They often have both a good grasp of the "Blue" side and a sophisticated understanding of the Soviet side; further, they have experience in playing war games against the NAVOPINCEN opposition

teams at the war gaming center. Reality can be sacrificed when players become too familiar with the game. Those who have had experience with how the NAVOPINCEN detachment plays the opposition can often begin to take that experience into account in making subsequent war game decisions. They will become increasingly proficient at playing the gamers, rather than the game.

This is not necessarily a negative aspect. The war gaming program at Newport is intended to give players experience in thinking about how the Soviet Union does things so that they will not be surprised in real life. To the extent that "Blue" understands what "Red" is likely to do (even if only as a result of playing the gamers, not the opposition they represent), the purpose of the gaming experience will be served. It is imperative, however, that the "Blue" gamers be aware that tactics and techniques confirmed through this sort of game play may not be so validated in a real engagement.

One important way to avoid such misplaced lessons is for "Red" to avoid playing his side of the games so consistently as to become predictable. It may be difficult to introduce inconsistency deliberately, while still being faithful to the intelligence that has been gathered and analyzed so painstakingly over time. But the realities of naval (or any other kind of) warfare make it necessary, however, to think through to the unexpected on the game floor rather than at sea. With the best recent intelligence providing a solid base on which to build, the challenge for the "Red" war gamers is to find ways of simulating not just what we think "Red" would do in the event of war, but also what "Red" *could do*. This requires additional attention to nuance and detail, as well as increased dedication to the already difficult job of thinking "Red."

Finally, it must always be remembered that war games are not surrogate history. The conflict they simulate did not actually happen. The lessons they teach are not lessons of history. Outcomes will vary even if the same game with the same scenario and the same players is repeated. Neither the scenario nor the outcome of any particular game is likely to be replicated in the real world. War gaming can be used legitimately to raise questions and identify potential problems, but beyond this it must be treated with caution. Those who cite the outcomes of war games as evidence in support of a particular theory or strategy may well be building a house on sand.

This is especially true when the conclusions (war gamers prefer the terms "insight" and "issues") being drawn from the games focus on the actions taken by the opposition. The members of the NAVOPINCEN detachment do their job well and faithfully, but they can only make educated guesses as to what the Soviet Union might or might not choose to do in combat. To conclude that the Soviet Union is likely to respond to a particular situation in a certain way because of what happened in a war game is to distort and misuse the war gaming concept.

Conclusions

During the past century, war gaming has proved itself a valuable tool in preparing officers for combat and strategic decisionmaking. Although students at the Naval War College have less exposure to war gaming today than they did in the interwar period, it is likely to remain an important element in the curriculum.

The need for accurate intelligence about probable opponents has been recognized as a critical element of war gaming since the interwar period. The naval intelligence community currently plays a crucial role in war gaming at the Naval War College, providing systematic, detailed information about Soviet forces and doctrine during both the design and the implementation of the games, and seeking to "think Red" in order to give players a consistent, credible opponent.

Despite the constraints they face, the officers and analysts of the NAVOPINCEN detachment have every reason to be proud of their record. By playing a credible Soviet opponent, they have injected a measure of realism into war games that otherwise might be exercises in mirror imaging or even wishful thinking. Their professionalism generates the kind of challenge against which those engaged in war gaming can truly test their skills and their strategies.

Nevertheless, the current popularity of war gaming raises questions that deserve careful consideration. If war games are not surrogate history, just what role can and should they play in the development of strategy? To a large extent it comes down to the experience of each individual in the game. Just as in strategic planning, where it is not the plan but the planner who is important for the future, so too in war gaming, it is the gamer not the game. To the extent that individuals expand and test their minds in playing against a credible opposition and use that experience to inform (but not dictate) their actions and plans, the investment made in manpower, hardware, and money at Sims Hall at the Naval War College will continue to be a sound one.

Notes

1. On current exercises, see Christopher C. Wright, "U.S. Naval Operations in 1985," U.S. Naval Institute *Proceedings*, *Naval Review*, May 1986, pp. 34–40ff; and "U.S. Naval Operations in 1986," U.S. Naval Institute *Proceedings*, *Naval Review*, May 1987, pp. 30–43ff. Interwar fleet problems are documented in the National Archives and Records Service microfilm publication M496, *U.S. Fleet Problems, 1922-1941*; their importance is discussed most recently in Thomas C. Hone and Mark David Mandeles, "Managerial Style of the Interwar Navy: A Reappraisal," *Naval War College Review*, September-October 1980, pp. 88–101.

2. John B. Hattendorf et al., *Sailors and Scholars: The Centennial History of the U.S. Naval War College* (Newport, R.I.: Naval War College Press, 1984), pp. 24–25, 40–41; see also Francis J. McHugh, *Fundamentals of Naval War Gaming* (Newport, R.I.: Naval War College, 1966), chap. 2.

3. Hattendorf et al., pp. 137–161; Michael Vlahos, *The Blue Sword: The Naval War College and the American Mission, 1919-1941* (Newport, R.I.: Naval War College Press, 1980), pp. 131–156; see also Michael Vlahos, "Wargaming, an Enforcer of Strategic Realism, 1919–1942," *Naval War College Review*, March-April 1986, pp. 7–22; and Edward Miller's forthcoming study of War Plan Orange for the Naval Institute Press.

4. The evolution of organization and personnel of the intelligence department is documented in U.S. Naval War College, *Register of Officers, 1884-1977*, Naval War College Archives, Newport, R.I., pp. 37-62; on radio intelligence code breaking and the work of the Office of Naval Intelligence in the interwar period, see the declassified Top Secret Ultra history by Laurence Safford, "A Brief History of Communications Intelligence in the United States," SRH 149, Record Group 457, Modern Military Headquarters Branch, National Archives, Washington, D.C. This 22-page paper contains more detail on what was being read, when, and how it was used before World War II than any published source. On using simulated radio intercept messages, see Vlahos, *The Blue Sword*, pp. 136-139. The failure to consider Japanese tactics and training in war games is discussed by T.J. McKearney, "The Solomons Naval Campaign: A Paradigm for Surface Warships in Maritime Strategy," Unpublished Student Research Paper, U.S. Naval Postgraduate School, Monterey, Calif.: September 1985, pp. 105-138.

5. E.B. Potter, *Nimitz* (Annapolis, Md.: Naval Institute Press, 1976), p. 136, contains the quote from Nimitz' letter to Vice Admiral Charles Melson. The quote also hangs in the lobby of the Naval War College War Gaming Center at Sims Hall.

6. Hattendorf et al., pp. 237-238; on NEWS, see McHugh, chap. 5.

7. Memorandum of Understanding between Rear Admiral B.R. Inman, U.S. Navy, Director of Naval Intelligence, and Vice Admiral J.J. LeBourgeois, U.S. Navy, President, Naval War College, Subject: NAVINTCOM Element at War Gaming Center, April 1976, from the files of the NAVOPINCEN Detachment, Naval War College, Newport, R.I.; on the Turner reforms, see Hattendorf et al., chap. 11, especially pp. 286-287.

8. Hattendorf et al., pp. 312-315.

9. Revised Memorandum of Understanding, Subject: Naval Intelligence Support to the Center for Naval Warfare Studies, 1 November 1982, NAVOPINCEN Detachment files, Naval War College, Newport, R.I.

10. Naval War College War Gaming Department, Operations Division, War Gaming Schedule Update, 1986-1987, 15 August 1986.

11. Robert Marshall, "Thinking Red Wargaming: Naval Issues," unclassified brief prepared for a 1985 National Defense University War Gaming Center Conference, copy courtesy Commander Marshall.

12. For a general discussion of contemporary war gaming, its varieties, and its usefulness to planners and policymakers, see the forum on "Political and Military Gaming" with articles by Lincoln Bloomfield, Paul Bracken, Garry D. Brewer, and Lloyd H. Hoffman, Jr., in *ORBIS*, Winter 1984, pp. 783-822. Hoffman's article on "Defense War Gaming," pp. 812-822, surveys the various U.S. Government gaming organizations and types of games played.

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Teaching about Arms Control

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Here at the Naval War College, in struggling to tie together our sessions on arms control and negotiation, we have finally settled on a simulation exercise. This game has proved to be a powerful synthesizer, and several players in various positions within Government and civilian academia have suggested we share this tool with others. Our purpose here is to describe the game in a manner so intriguing that our readers will want to use it.

Our clientele, the student body, consists of senior military officers from all services, civilians from defense-related Government agencies, and select naval officers from over 35 other countries; all highly qualified and experienced leaders in the national security policy field. To this clientele we attempt to portray the processes of arms control and negotiation as legitimate complements to other methods of providing for national security. We are speaking of strategies to be integrated with all other available courses of action leading to "deterrence," however defined. Our primary objective is to prompt our clients to contemplate their role in the arms control and negotiation processes: what contribution can these processes make to security, and what contribution can they make to the processes? As leaders in national security planning, our clients have no choice but to be involved and the issue becomes the quality of their advice.

Our principal aim is to concentrate on the rational end of the spectrum. Yet we are well aware that actual agreements are fused by an array of factors on both sides of the table, not the least of which is a complex interaction of organizational process and bureaucratic politics which often obscures rational analysis. For several years our teaching methods paralleled what we observed in actual negotiations, using past agreements and current proposals for case studies. Unfortunately, seminar discussions collapsed into counting drills. Further, those whose careers had been spent with various weapons

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systems quickly became advocates, and we were often mired in definitional issues. Although there was a certain value in having our clients experience the same frustrations as our negotiators, it did little to accomplish our overall objective—to build a framework for rational analysis. We needed to develop a teaching method that would leap beyond the bureaucratic abyss and focus on the central comparisons, which are:

- the relative contributions of U.S. weapons to U.S. national security strategy;
- the competitive nature of U.S. and Soviet strategies; and
- the possibility of a negotiated arms limitation between these two powers which would provide mutual security.

We attributed most of our difficulties to the static, comparative nature of our presentations. As the very process of negotiation is dynamic, we felt a simulation exercise would meet our objectives. We therefore set out to place our clients in the role of participants in the negotiation process, rather than critics. Given the myriad factors which could be "simulated," we sought simplicity through the following assumptions: each side will protect, in the bargaining process, those assets which they value most; and each side will attempt to eliminate from the other those systems which present the greatest risk. These two principles, and these alone, form the basis of the game.

We then built the simulation around the procedure a parent often uses when two children contest a single candy bar: one child divides the candy bar and the other chooses which half to have. In our game, the "candy bar" is your own set of nuclear forces which you yourself divide, and so divided, the other side selects the portion to be eliminated. More specifically, the participants are segregated into two teams, Red and Blue. Each side places a value on his own systems of up to a total value of 10,000 points at the start of the game. Then each side removes 1,000 points of the other's systems, based on that assigned point value. Afterward, each side revalues his remaining systems, this time at 1,000 fewer points, or 9,000 points for the second cycle. Again, each side removes 1,000 points worth of the other's systems. The procedure is repeated for five cycles. The end result is approximately a 50 percent reduction in armaments.[1]

With this procedure we have made operative our two assumptions. Each side's system values are expressed quantitatively by the points assigned to them; risk is reduced in succeeding increments of 1,000 points. Given this, neither side need insist on imposing its value structure or definitions on the other—nor *can* it, in actuality. Similarly excluded from planned play are the political and bureaucratic factors discussed earlier. It was not our intent to ignore those real pressures, but we did feel it was beyond our capability to simulate them in a meaningful manner. However, we did not preclude them from coming to bear if the participants brought these perspectives to the game.

The simulation, then, is built from simple but realistic assumptions. The assumptions, translated as value preservation and risk reduction, are, by construction, independent events. They are independent relative to the two sides' perceptions as well as within a single side. Although artificially segmented, procedurally, the iterative nature of the game forces integration of these two factors as well as many of the other interrelationships we wanted to explore—the crucial stimulus and integrator is the point system.[2] The result is a manageable and exciting teaching tool which may also lend itself to experimental design.

An Example Game

Let's take an example game, beginning with the same starting systems (shown at table 1) as were used in a developmental game played recently by a select group of scientists, engineers, and military officers, many of whom possessed extensive knowledge and experience in the arms control arena. We ask you to play the game and compare your results to those of the developmental game. Ideally, you would have a friend take the Red inventory and you take the Blue; however, if you are reading this by yourself, take the Blue side, but keep Red in mind. Now, what would be your strategy for five cycles of negotiations? What end position would you like to achieve? Is your goal a position of dominance or equality? Would you be a cooperative player or one trying to play the toughest possible game? Which systems would you value most? What strategy and mode of play do you think the Red side will adopt? Finally, based on what you consider to be Blue's national security objectives, assign the 10,000 points allocated for your systems in the first move. Remember, the Red team will remove 1,000 points from your arsenal based on your valuation. You'd better be careful.

Finished with your point scoring? Now let us ask you some questions:

- What did you decide on for your long-term strategy? Did you strive to preserve a balance of capability (i.e., the time-honored concept of the triad which maintains balance between the manned bomber, the land-based ICBM, and sea-based systems to buffer against technological breakthroughs which might negate any single system)? For those of you who preserved the triad, did you do it "because there are three of them"? Could you have preserved the air-breathing leg by valuing the SLCM higher?
- Again, concerning strategy, we shall assume that your overall objective includes some measure of stability. Does your valuation pattern square with your definition of stability? By the way, many specialists argue that stability involves eliminating the incentive for a first strike or reducing the vulnerability to a first strike. Are you preserving or eliminating these capabilities and vulnerabilities? Does your point valuation scheme indeed reflect your stated strategy?

List of Available Weapons Systems

Blue Systems

System	No. Systems	W/H per System	Total Warheads	Yield (MT) per W/H	CEP (feet)	Vulnerability/ Hardness*
MX	10	10	100	0.34	300	3,000
MM3A	300	3	900	0.33	600	3,000
MM3	250	3	750	0.17	600	3,000
MM2	450	1	450	1.20	2,000	3,000
Trident	384	8	3,072	0.10	1,400	inv.
Poseidon	256	10	2,560	0.04	1,400	inv.
ALCM***	2,400	1	2,400	0.20	300	a/inv.**
SLCM****	600	1	600	0.20	300	inv.
Totals	**4,650**		**10,832**			

Red Systems

System	No. Systems	W/H per System	Total Warheads	Yield (MT) per W/H	CEP (feet)	Vulnerability/ Hardness*
SS-17	150	4	600	0.50	1,200	5,000
SS-18	308	10	3,080	0.50	800	6,000
SS-19	360	6	2,160	0.55	1,200	7,000
SS-24	10	10	100	0.10	1,000	a/inv.**
SS-25	72	1	72	0.55	1,000	a/inv.
SS-N-8	292	1	292	1.00	4,500	inv.
SS-N-18	224	7	1,568	0.10	3,600	inv.
SS-N-20	80	8	640	0.10	1,700	inv.
SS-N-23	32	10	320	0.10	1,600	inv.
ALCM***	800	1	800	0.25	400	a/inv.
SLCM****	200	1	200	0.25	400	inv.
Totals	**2,528**		**9,832**			

Table 1

* Hardness figures are in psi.
** a/inv. denotes "almost invulnerable."
*** Air-Launched Cruise Missiles (ALCM) represent entire bomber force.
**** SLCM denotes Submarine-Launched Cruise Missile.

Source: International Institute for Strategic Studies, London, *The Military Balance 1986-1987* (Letchworth, England: Garden City Press, Ltd., 1986).

- How did you assign points: by delivery system or by the number of warheads available within that system category? Take a moment and calculate the number of points per warhead in your scheme. Do you have a points-per-warhead spread which is appropriate? For instance, does MX have a very high points-per-warhead ratio while something else is much lower? If so, then you will probably save these few MX warheads while losing a large number of something else. Next, did you value anything at zero? If you did, then Red will get it for free in the first round. Is that what you intended? Finally, do you have any system whose total is at or below 1,000 points? Can you afford to lose that entire capability in one round, or would you like to hedge against that possibility by increasing that system total to above 1,000? If you need to do that, then where would those extra points come from?

In our developmental game, Blue conducted a rousing debate among the players before adopting a strategy. Central issues of the debate were as follows:

- The stated goal was security from, and deterrence of, a Red attack. The question was, should that ultimate goal be pursued through dominance over Red, or would stability be sufficient to accomplish the objective?
- To what degree should the Blue advantage in undersea weapons be preserved? To what degree would you allow continued Red superiority in throw weight, i.e., SS-18, SS-19?
- Should the triad be preserved, or should total elimination be allowed for such systems as land-based ICBMs so long as there is a full complement of ICBMs at sea? Would not the elimination of Blue land-based ICBMs also mean that the powerful SS-18 would be without its prime targets?
- To what degree are the fundamentals of flexible response maintained through the remaining systems? Are smaller, controlled responses still feasible? Does this dictate preservation of single-warhead, hence older, systems? Does a decay in flexible response capability also dictate a shift toward fundamental, vice extended, deterrence?
- To what degree should the newer, more capable systems (such as Trident and MX) be valued over the older systems (such as Poseidon and Minuteman II)? What points-per-warhead ratios are appropriate? How cheaply can the older systems be given away?
- How does verification affect point valuation? What impact does that issue have on system priority?

A similar debate took place on the Red side, only from a different perspective as Red's view of stability was quite different from Blue's. After more than two hours of heated discussion, decisions were made on both sides and strategies adopted. The values chosen for both Red and Blue in our example game are shown at table 2. Note that Red opted to protect his powerful SS-18 missiles, his mobile missiles (SS-24 and SS-25) and SLCMs, but was willing to sacrifice most of his submarine-launched ballistic missiles (SS-Ns) and bomber forces (represented by ALCMs). Blue took a very balanced approach, spreading his points evenly among elements of the triad, but gave highest value to his more modern systems, such as MX (4 points per warhead) and Trident (1 point per warhead and more than 3,000 total points). How do these valuations differ from your game? Why do they differ?

Let's return to your game. Again place yourself as the Blue negotiator. Exchange lists if you have a friend playing Red; if not, then accept the Red evaluation at table 2 for the next step. Now, cut 1,000 points from Red's inventory. Which systems will you remove? Will you go after his hard target kill capability, his mobile missile systems, or his submarine-launched weapons? What are your priorities of removal and why? Are you going to

Initial Valuation

Red System	Value	Blue System	Value
SS-17	600	MX	400
SS-18	2,750	MM3A	1,000
SS-19	900	MM3	500
SS-24	900	MM2	225
SS-25	900	Trident	3,075
SS-N-8	600	Poseidon	1,480
SS-N-18	600	ALCM	2,400
SS-N-20	500	SLCM	920
SS-N-23	900		
ALCM	600		
SLCM	750		
Totals	**10,000**		**10,000**

Table 2

play the toughest possible game, assuming your opponent will also, or will you cover for his weaknesses in the interest of stability. In the process, try to figure out what Red was telling you through his evaluation. Can you assess his intentions? How does Red's valuation affect your strategy? How about Red's perception of a final position or definition of stability? Does it matter, or can you proceed and protect your own interests *without* appreciating Red's view?

The removal (or "destruction") phase of the example was again accompanied by a rousing debate. Red could see the high value assigned to MM3A but knew that it was the system with the greatest killing power. The MX was the most modern and most capable single system, but the low numbers of warheads made it of lesser significance. Poseidon, MM3, and MM2 looked like bargains, but those systems posed no real threat. Blue could see several great bargains, particularly in the SS-19, but was quite concerned about the threat caused by the SS-18. Finally, both sides reached a decision (see table 3).

Systems Removed in First Cycle

Red System	Removed	Points	Blue System	Removed	Points
SS-18	11	98	MM3A	300	1,000
SS-19	360	900			
ALCM	2	2			
Totals		**1,000**			**1,000**

Table 3

Red removed from Blue the system that threatened it most: the MM3A, despite the relatively high number of points per warhead assigned to it. Blue, in true capitalistic fashion, took advantage of bargain prices offered for the SS-19, eliminating this system, then used leftover points to remove a few SS-18s and ALCMs. What do you see in these strategies? Was Blue trying for stability or dominance? How does the first removal phase compare with that of your game? Why was Red willing to pay such a price for MM3A? Would

both sides be able to continue these strategies throughout the game, or would dire consequences result? How did this compare to your approach?

Now, let's get back to your game. Having cut Red's inventory, either have your partner cut your Blue forces by 1,000 points, or put on your Red hat and cut your own. If you have to do the latter, be devious and brutal, acting according to Red's interests as you envision them. Pass the results of this first round back, examine the results, and start again—this time with only 9,000 points to assign. Repeat this process five times following the rules we outlined earlier, and see where it takes you. Ask yourself the same questions in each round. When you finish the last cycle ask yourself: Have we created a better world as a result of our drawdown?

In our example game, both sides were consistent with their initial strategy implementations throughout the five cycles. Red placed his highest priority on the SS-18, mobile missiles, and a few submarine systems. Adapting to this valuation, Blue removed the remaining systems—largely submarine-launched missiles and ALCMs (generally agreed to be stabilizing systems)—which had to be offered cheaply. Blue placed higher and higher value on his land-based ICBMs, but Red continued to remove them virtually without regard for cost. Finally, suffering from a severe warhead disadvantage, Red evened the balance somewhat in the last cycle by removing some cheaper, less threatening systems such as Poseidon and SLCM. The end game condition is shown at table 4. Note that Red lost his bomber capability and most of his submarine force, but retained a substantial number of silo-based and mobile missiles. Blue lost most of his land-based missiles but retained most of his submarine force (all of the Trident) and about half of his bombers. Is this a good end position in your mind? Would you have permitted negotiations to reach that point? How did your game's end point differ from that in our example game?

Systems Remaining after Five Cycles

Soviet System	Number	Warheads	U.S. Systems	Number	Warheads
SS-18	98	980	MM3	55	165
SS-24	10	100	MM2	450	450
SS-25	72	72	Trident	384	3,072
SS-N-18	75	526	ALCM	1,137	1,137
SS-N-23	32	320			
SLCM	199	199			
Totals	**486**	**2,197**		**2,026**	**4,824**

Table 4

Have We Created a Better World?

To add richness to the game, we need to make some sort of assessment as to the success or failure of negotiations. To do this, we have developed a computer simulation which shows the trends in stability from cycle to cycle.

Although we are discussing in this example only the beginning and end points, this analysis is equally important at the end of each cycle; for, if at any point along the negotiating path the situation becomes unstable, then the side with a preponderant advantage may quit or, worst yet, use its advantage. To conduct a stability analysis, our model asks the very basic question: If one side were to launch a first strike could it reduce the other's retaliatory capability to the extent that it is no longer a credible deterrent? If the answer to the question is "yes," then we have crisis instability, as one side may be tempted to conduct a disarming first strike. If the answer is "no," then neither side can conduct a successful first strike, and we have crisis stability. We begin with a stable situation; however, during the course of a game, one or both sides may develop a first-strike potential or at least move dangerously close to that capability. If so, then we have created a world worse than the one from which we started.

It should be emphasized that during the course of the game our concept of stability and analysis is not foisted upon the players; rather, they are expected to develop their own model and live by it. Only during the postgame critique is our concept of stability defined and the analysis of game results compared with it. This is done to aid player analysis and generate discussion rather than to display "answers." Nevertheless, both Red and Blue developed concepts of stability which were generally consistent with ours, perceiving that vulnerable, accurate weapons with high yields were destabilizing, while invulnerable and less accurate weapons with lower yields were stabilizing. There was the notable exception of the ALCM (which, recall, represented all air-delivered systems). Red saw the ALCM as a negligible threat, believing it could be defeated either by existing Soviet air defenses or by launching before impact. Thus, Red felt that ALCM should not be viewed as a silo-based missile killer even though it had the accuracy and yield combination to be one. In contrast, our analysis was based on potential; hence, ALCM was considered a hard-target killer. Blue also viewed stability in this manner and, therefore, valued the system much higher than Red.

In line with this view, Red executed a strategy that was consistent with his view of stability. He emphasized removing the destabilizing Blue systems despite the extraordinarily high value placed upon them. In contrast, Blue was opportunistic, taking advantage of Red bargains, gobbling up warheads to gain an advantage. As a consequence, Blue gained a large warhead advantage and removed most of Red's submarines and air-delivered weapons, leaving Red with predominantly targetable systems. Even with the warhead advantage, Blue continued to bargain hunt, sweeping away warheads despite the dissonance of this action with the originally defined strategy. Thus, Blue retained a balanced, albeit reduced, triad of forces, the preponderance of which was untargetable. By the end of the game, Blue had achieved a significant advantage and was approaching a very threatening

position. As a consequence, although we had reduced the arsenals of both sides, we had actually created a less stable world. In response to this situation, Red would probably have to loosen release procedures, maintain a "launch on warning" alert status for his SS-18s, and keep his mobile missiles deployed and ready, ensuring Blue could not launch a disarming first strike. Our long-sought strategic arms reduction may, in effect, have created a worse situation than the one in which we started.

All the above analysis and discussion manifested during the course of the game and the critique afterward. As a consequence, the players saw the game as a powerful tool to focus on the proper questions and issues of nuclear arms reduction.

The Power of the Game

Just by reviewing this quick example, we can get a feel for why the game is a powerful teaching vehicle. The game is simple, yet complex. Play is interesting, intense, and fiercely competitive. Players are thrust into the world of strategic systems in a way that causes the trade-offs of various bargaining positions and negotiations strategies, the complex interactions among the various weapons, and the difficult issue of stability to come alive. Most interesting is that the game focuses discussion on the contribution each category of weapons makes to U.S. national security strategy, rather than on what the system is capable of on a narrow technical basis. The problem of advocacy we experienced previously, in seminar, literally disappears as the group is forced to assign points to all systems. We saw the same net effect in evaluating risk as each side sought to cut 1,000 points from the other. In short, the scope and sophistication of seminar discussion was raised dramatically.

We have seen Red and Blue participants become personally involved at a level approaching "real" negotiations. The "game" takes on the air of serious business and becomes highly competitive in a hurry. We have seen players refuse to break for lunch and continue a rather spirited discussion in the elevator on their way home. Not only is this a sign that the game is good, but it also means the players have internalized the objectives. Red and Blue teams generally pursue divergent strategies, as each has a different view of how the world should look. Each can proceed on his own course to accomplish his goals, applying a completely different perspective on the value of retaining or removing various systems. In fact, in every game we have played, *both* sides have been quite happy in the end, feeling they had achieved their objectives, but each wondered how the crazy bunch on the other side could look so happy after having lost so decisively.

Periodic "summit conferences" during the game permit each team to express to the other whatever thoughts or ideas seem pertinent. These are great opportunities for one side to gain an appreciation for the other side's

strategy, and to hear the other side's interpretation of one's own strategy. A detailed, postgame critique is also quite valuable. Each side presents its view of the game to the other, giving a frank appraisal of strategy from a Red and Blue angle. The controller portion of the game critique gives players the benefit of a stability analysis (they are not given this until *after* the game), giving an interpretation of each side's strategy and the impact of the implementation of the strategy on stability. These postgame conferences have been lively and stimulating, and greatly enhance the learning experience.

We believe we have a superb method for satisfying at least our own objectives for teaching about arms control and negotiations; moreover, we suspect it might be useful in at least the wider academic community. However, at least two general questions remain: Does this simulation actually portray a possible path for arms reductions? Assuming the game parallels reality, is this simulation useful beyond the instructional environment?

Concerning the former question, we are concerned that we have dismissed the political and organizational pressures that we know to exist. Although they come into play with expert participants, these factors are not always present; we do not make any effort to incorporate them consciously, nor do we provide any controls on this type of input. Our only conclusion in this matter is that the *rational* approach may present a centerline position about which actual negotiations might cluster. In defense of this conclusion we have found a reasonable consistency in Blue and Red paths, especially with more "expert" players. On the other hand, we lack proof that either Blue or Red is playing as they actually would in real negotiations.

The latter possibility, that this technique has utility beyond the academic community, is appealing. We were very fortunate to have had the assistance of experienced personnel from the Arms Control and Disarmament Agency (ACDA), the Pentagon (Office of Secretary of Defense, Joint Chiefs of Staff, Air Staff), the other war colleges, and the Department of Energy in developing this methodology as a teaching device. In the process, they have suggested that it might be useful as: an introductory exercise for negotiators and supporting staffs; an analytical tool to formulate negotiating positions; or, just possibly, a technique in the actual negotiations to communicate or probe for avenues of potential agreement. These uses seem to be logical extensions of the methodology and thereby quite feasible. But whether this format could be used in actual U.S.-Soviet negotiations is highly debatable.[3] However, the format of the game does eliminate the need for both sides to agree upon objectives or definitions. Since each can operate under different premises and values, and both sides, in our experience, seemed content up to the point of 50 percent reductions, it may actually be possible to adapt this simulation to the real world—as suggested by Dr. Garwin and discussed in

note 2. But that is being notably presumptuous on our part and undoubtedly reflects the personal bias and enthusiasm we have toward this product.[4]

In closing, we believe it is important to reiterate that we eschew claiming credit for the originality of this concept. Our contribution is that we have rolled the idea into a teaching strategy that may or may not have application elsewhere. It is powerful as an instructional device and we want to share it with others who might be interested. We encourage comments and suggestions on how to improve our methods. Our clients are among those who will offer the "expert advice" to our negotiators, and we take very seriously our charge to educate them well.

Notes

1. Our quantification scheme needs explaining. First, we selected 10,000 points as a starting position because each side is initially given approximately 10,000 warheads. Thus, 10,000 points averages to roughly one point per warhead—an easy concept to work with. Second, the number of points to be reduced and reassigned each time was set in order to minimize player bookkeeping. We reduced the number of points to be assigned by 1,000 each round so that players would not *have* to revalue each time, providing they kept the same valuation priorities. We therefore reduced by 1,000 points each time because that removed 5,000 points in five cycles, for 50 percent of the beginning arsenal point value; however, players must recognize that the percentage of the *remaining* arsenal removed each cycle increases from 10 percent in the first cycle to 20 percent in the final cycle. Any of these features may, of course, be changed. We found that by reducing the numerical manipulations the players have more time to focus on the "strategy" issues.

2. We do not claim this concept as original. In fact, the seed for the idea came from a speech on SDI at the Naval War College by Dr. Richard Garwin. He mentioned it as a somewhat humorous solution to the difficulties we have experienced in negotiations. We considered it from the perspective of teaching about the process. Nonetheless, we believe it is correct to give him the credit for being the stimulus. By the same token, others we may not know may have had or even published similar ideas. In fact, we refined the concept by examining a similar approach in the legal proceedings of divorce and estate settlements. The bottom line is that we will be glad to take credit for developing this idea as a teaching tool, but if there exists a parallel article which our literature search missed, then we yield any credit with no contest. Our purpose in publishing is to share the results—which we will do freely.

3. If this format were to be used in actual negotiations, then the simulation would have to entertain such factors as modernization and defenses. We incorporated both of these into our game. However, we found that it is important for new players to familiarize themselves with the "base game" before launching into the full game with modernization and defenses. In addition, we have no doubt that an exchange model of some sort would be necessary—again we have constructed such a model, but it is based on our own definition of stability, our own (open source) estimates of system performances, and only uses single-shot kill probabilities. We have excluded such parameters as prelaunch survival, en-route system survivability, and probability of target acquisition. By the same token, we treat defense as a simple linear function. More elaborate exchange simulations are available and could be used in lieu of ours.

4. Dr. George Pitman of the Arms Control and Disarmament Agency, in a thorough critique provided during development, suggested an alternative structure. He stresses that negotiators historically have focused on the end state rather than the specific reduction process. Our structure clearly has the opposite focus and is oriented toward analyzing temporal stability; the game is therefore more "normative than heuristic" (Dr. Pitman's words). To better approximate actual negotiations, yet preserve the learning techniques offered in our original structure, he suggested ". . . a better way to play the game would be to have each side take a fifty percent cut in each round. At the end of each round, each side would accept or reject the cuts made by the other side. If the cuts were accepted by each side, then the game would be over. If not, each side would reevaluate its systems and the game would continue. The objective of the game would be to reach an agreement within five rounds. If no agreement were reached in five rounds, the game would terminate with no agreement."

Lord Nelson: Master of Command

Michael A. Palmer

Alfred Thayer Mahan termed Lord Nelson "the embodiment of the sea power of Great Britain."[1] Mahan's choice for the subtitle of his biography of the victor of Trafalgar reflects a generally held view: that within Nelson could be found all that was right in the Royal Navy—its soul, its philosophy, and all the traits that one embodies. Historians tend to place Nelson among a pantheon of (lesser) heroes: Lords Rodney, Howe, and St. Vincent to name a few.[2] Nelson is portrayed as a lineal descendant of the men who wore away at the "dead hand" of the *Fighting Instructions*; who pioneered the development and use of advanced signal codes; and who somehow prepared the stage for the great victories of the Nile, Copenhagen, and Trafalgar.

Far from being an evolutionary figure, Nelson brought a revolution, however short-lived, to naval warfare. He was not the personification of the Royal Navy in the age of sail, but an aberration. He no more pursued the command methods of Rodney and Howe than he obeyed the signals of Admirals Sir John Jervis at Cape St. Vincent or Sir Hyde Parker at Copenhagen. That anyone should think otherwise is astonishing, for with Nelson's death on 21 October 1805, his spirit was lost. St. Vincent observed, "there is but one Nelson." And so it was, the likes of Sam Slick's "cripple-gaited, one-eyed, one-armed little naval critter" never again walked the quarterdeck of a Royal Navy ship. The Nelson Touch, far from representing the embodiment of anything in the Royal Navy, both lived and died with its namesake.

Nelson's skill as a naval commander can best be understood within the framework of a modern term, C^3—command, control, and communications. While C^3 is a recent concept, the processes involved are as timeless as war itself. C^3 serves as a useful vehicle to examine command in any era, for the practical realities of method have been too often ignored by historians.

From the sixteenth through the late eighteenth centuries, sailing navies evolved into complex organizations, and systems of command developed accordingly. Ashore, naval bureaucracies grew up to administer the fleets. To command at sea, professional naval officer corps developed, replacing the

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soldiers who first strutted the quarterdecks of the state's ships. To provide for better control, ship types were reduced and standardized, the line ahead formation became the accepted order in battle, and large fleets were broken into divisions, each led by its own flag officer. Given the primitive communications systems available, doctrine developed to provide a common philosophy, for example, the Royal Navy's *Fighting Instructions*, upon which all in the fleet could draw and, expectantly, act in a coordinated fashion.[3] Despite advances in the processes of command, by the eve of the American Revolution, battles were becoming increasingly indecisive. Linear formation so restricted maneuver, and the *Fighting Instructions* were so apt to be interpreted differently in the chaos of an engagement, that decisive action seemed impossible.

During the last quarter of the eighteenth century, visual signalling underwent tremendous development in an effort to bring order to naval engagements.[4] Evermore detailed systems offered the prospect of direct control to a commander in chief as the signal book replaced the *Fighting Instructions* as his bible. But, in attempting to exercise centralized control over the fleet in battle, Rodney, Howe and others were chasing a chimera. As a result, the balance in the C^3 equation became skewed, and communications became a poor substitute for both effective command and control. The great sea battles of the American Revolution and those fought in the early years of the French Revolution remained indecisive. As then Captain Jervis of the *Foudroyant* wrote after the battle of Ushant in 1778: "two fleets of equal force can never produce decisive events, unless they are equally determined to fight it out, or the commander-in-chief of one of them *bitches* it so as to misconduct his line."[5]

On his return to the Caribbean in 1782, Rodney, who had paid little attention to signalling before the fiasco of his April 1780 battle off Martinique, intended to exercise nearly complete centralized control.[6] At the Saintes on 12 April 1782, Rodney's fleet captured 5 of the 30 French ships of the line engaged. While the action proved a turning point in Great Britain's fortunes and was heralded as a great victory, it was not the annihilative fleet action sought by many; nor was the Glorious First of June 1794, despite its moniker, when "Black Dick" Howe captured or destroyed 7 of the 26 ships he faced.[7]

Both these British victories were fought under centralized control based on signalling. At the Saintes, Rodney's flagships carried a suite of 40 flags and 7 pendants. A century before, 9 flags and a single pendant had sufficed. Inflation in the number of flags and signals, however, led to no more decisive results; nor did the adoption of the numerary system, by 1790, that reduced the number of flags required to 26 and expanded the number of signals in the book to 168.[8]

On 1 June 1794, between 9:24 a.m. when the first ships exchanged fire and 1:30 p.m. when the battle ended, Earl Howe made 14 signals: 8 general to the fleet and 6 to individual ships.[9] A similar pattern of centralized command was evident at the battle of Cape St. Vincent on 14 February 1797 at which then

Commodore Horatio Nelson, flying his broad pendant in the *Captain* (74 guns), first gained wide popular notice. Admiral Sir John Jervis, with 15 British ships of the line, defeated a Spanish force of 27 of the line, capturing 4 in the process. Jervis, an admirer of Howe's system, armed with a later version of the 1794 signal book, made 23 signals: 10 general and 13 to individual ships between 11:31 a.m. and 4:39 p.m.[10]

In each of these British triumphs, centralized control failed to lead to decisive victory. At the Saintes, Rodney maintained control but stripped the initiative from subordinates who believed that greater success could have been achieved had the commander in chief permitted an immediate pursuit of the disordered French. At the Glorious First of June, only 7 of Howe's 26 ships heeded the signal to pass through the French line from windward to leeward, a maneuver designed to prevent disengagement. At Cape St. Vincent, Nelson's decision to wear the *Captain* out of line and support the van, without orders, was, to a great extent, the key to Sir John's success.

Far from embracing the examples of Rodney, Howe, or Jervis, Nelson rejected the notion that the path to decisive victory lay through more centralized control and signalling. His nature, the influence of senior officers, and his own experiences led him towards a decentralized philosophy of command. Nelson's aggressiveness was not an acquired trait. Familiarity with his words and deeds makes clear the man's (almost) ceaseless activity, personal sacrifice, heroism, and sense of duty. Such traits may be refined by others, but they are innate in nature and surely were original dunnage when Nelson, at age 13, first boarded the *Raisonable* in December 1770.

As for the impact of Rodney and Howe, Nelson had little to say in his letters regarding the first, maintaining a polite silence that is understandable given Nelson's professional and personal ties to men who believed the Saintes more an opportunity lost than a triumph gained. In an oft-quoted letter to Howe, Nelson termed the victor of 1 June 1794 "the first and greatest Sea-officer the world has ever produced."[11] But in a more revealing, less flattering personal letter to the Reverend Dixon Hoste, whose young son served under Nelson, he wrote: "Lord Howe certainly is a great Officer in the management of a Fleet, but that is all."[12] Nelson considered the Glorious First of June another Saintes. He wrote his brother in 1794 concerning an impending engagement with a French fleet, "if we only make a Lord Howe's Victory, take a part, and retire into Port, Italy is lost."[13]

The relationship between Jervis, later Earl St. Vincent, and Nelson was warm, close, and based upon mutual respect. But the two men did not see eye-to-eye on every point, particularly methods of leadership. St. Vincent had reservations about Nelson's fitness for high command, believing him to be disordered and impetuous. "All the fear I have about him," St. Vincent wrote, "is that he will tire of being attached to a great fleet, and want to be carrying on a predatory war (which is his *métier*). . . ."[14] While St. Vincent

did not directly criticize his former subordinate's style of command, he did comment on Lord Duncan's victory at Camperdown, a triumph that resembled Trafalgar in form. St. Vincent wrote Viscount Howick, First Lord of the Admiralty: "Lord Duncan's action was fought pell-mell (without plan or system); he was a gallant officer (but had no idea of ractics, and being puzzled wirh them;) and attacked, without attention to form or order, trusting that the brave example he ser would achieve his object, which it did completely."[15] Obviously, disorderly battles fought in a "pell-mell" fashion disturbed St. Vincent, but it was just such an engagement that Nelson sought. After outlining his plan for bartle to Captain Richard Goodwin Keats in England in 1805, a plan executed in substance at Trafalgar, Nelson concluded: "It will bring forward a pell-mell Battle, and that is what I want."[16]

At Cape St. Vincent, Nelson had witnessed firsthand Sir John's loss of control of the battle. Jervis himself had not been content with the victory, considering himself ill-served by many of his subordinates. Nelson shared his chief's view, writing of his fellow commanders having done "their duty, and some not exactly to my satisfaction. . . . Success hides a multitude of faults."[17]

For Nelson, Cape St. Vincent had been his second frustrating fleet action. In March 1795 in the Mediterranean, a British fleet under Vice Admiral William Hotham, who had replaced Admiral Lord Hood, met and drove off a French force. Nelson made the sole capture that day, the *Ça Ira*. He had pressed Hotham to pursue, but the commander in chief replied: "We must be contented, we have done very well." But Nelson was not a man to be contented with marginal results. "Sure I am," he wrote, "had I commanded our Fleet . . . that either the whole French Fleet would have graced my triumph, or I should have been in a confounded scrape." He wrote 2 months later: "truly sorry am I that Lord Hood does not command us: he is a great Officer. . . ."[18]

It was Hood, an able, aggressive commander, but a difficult subordinate, to whom Nelson looked for inspiration. He had volunteered his services to Hood in the fall of 1782 at New York, the admiral then about to sail for the West Indies. Nelson preferred command of a line of battleship under Hood in the Caribbean where a fleet action was more likely than service on the American coast where prize money was the major consideration.[19] Nelson, then only 24, though a captain nearly 4 years, obviously impressed Hood. The admiral introduced Nelson to Prince William Henry, noting that "if he wished to ask questions relative to naval tactics . . . [Nelson] would give him as much information as any officer in the fleet."[20] Hood treated Nelson as if he were his son. It was in American waters in 1782 and 1783 tbat Hood and Nelson established a lasting relationship. Hood remained Nelson's patron. He presented his fellow Viscount to the House of Lords when Nelson first took his seat on 29 October 1801.[21] It was John M'Arthur, former secretary to Hood

and editor of the *Naval Chronicle*, who published the first biography of Nelson in 1809.[22] Nelson considered Hood "the greatest Sea-officer I ever knew," and "the best Officer, taking him altogether, that England has to boast of."[23]

Through Hood, Nelson came into contact with those unsatisfied with the "victory" at the Saintes. Hood had commanded Lord Rodney's rear division the day of the battle and had been forbidden to chase: Rodney, when pressed, had responded (as would Hotham a decade later to Nelson): "Come, we have done very handsomely as it is." But Hood believed that immediate pursuit would have netted 20 rather than 6 prizes. No doubt he made such sentiments known to his young subordinate.[24]

Hood's views were seconded by another of Nelson's friends, Captain William Cornwallis, who had commanded the *Canada* in the rear division at the Saintes. He wrote of the battle: "I do not suppose that such an opportunity ever offer'd of destroying so large a naval force, and particularly if it had been followed up at first. . . . I believe there never was a piece of success less talk'd of by those concern'd."[25]

That this view became Nelson's is obvious in a letter he wrote Cornwallis the year before Trafalgar.

> I imbibed from you certain sentiments which have greatly assisted me in my Naval career—That we could always beat a Frenchman if we fought him long enough; that the difficulty of getting at them was oftentimes more people's own fancy than from the difficulty of the undertaking; that people did not know what they could do until they tried, and that it was always to err on the right side to fight.
>
> I was then at that time of life to make the impression which has never been shaken. But, on the score of fighting, I believe, my dear friend, that you have had your full share, and in obtaining the greatest victory, if it had been followed up, that our Country ever saw.[26]

Nelson's own experiences in the Mediterranean Fleet under Hotham and Jervis made apparent the shortcomings of attempting centralized control of a battle. Under Hotham, Nelson had been restrained in his exercise of initiative. At Cape St. Vincent, Jervis reputedly resisted calls from his first captain, Robert Calder, to recall the *Captain*.[27] In wearing out of line, Nelson had risked his career. Despite his example and his belief that Sir John Jervis would ultimately approve such spirited insubordination, no other captain had been bold enough to imitate Nelson, not even his old friend "Coll," Captain Cuthbert Collingwood in the *Excellent*.

By May 1798, when then Rear Admiral Nelson entered the Mediterranean, detached from Earl St. Vincent's fleet, the hero of the St. Valentine's Day 1797 battle had become convinced of the value of a decentralized approach to command. Basic to Nelson's method was his rejection of the use of signals as a catholicon for C^3 problems. Not that he thought signalling useless; on the contrary, he was in the forefront of its use in the fleet. But he believed that in action, signals would "either be misunderstood, or, if waited for, very probably, from various causes, be impossible for the commander-in-chief to

make."[28] Remarkably, in Nelson's two battles fought under independent command, he achieved decisive triumphs without signals. At the Nile, Nelson made two signals after the opening of the engagement: for Captain Thomas Masterman Hardy's *Mutine* brig to pass within hail (a signal that went unheeded) and one general signal to the fleet to engage closer.[29] Lest the rear admiral's silence be attributed to the darkness that soon enveloped the two fleets, the same pattern is evident at Trafalgar. After the action began with the combined Franco-Spanish armada, Nelson made but three general signals: "England expects that every man will do his duty," to "prepare to anchor after the close of the day," and to "engage the enemy more closely." Two additional signals were made early to individual ships: to the detached *Africa* to engage closer, and to the *Temeraire*, the ship astern the *Victory* attempting to take the lead, to desist and return to her proper station.[30] There can be no comparison between Nelson's use of the signal book at the Nile and Trafalgar with Howe's or Jervis's at the Glorious First of June or Cape St. Vincent.

In lieu of communications, in battle Nelson relied on command and control—his personal leadership and doctrine. This he ultimately came to call the Nelson Touch. In a letter of 1 October 1805, written after rejoining the fleet at Cadiz, he wrote Lady Hamilton: "when I came to explain to them the '*Nelson Touch*,' it was like an electric shock. Some shed tears, all approved—'It was new—it was singular—it was simple!'"[31]

Nelson never explained in his letters exactly what the Touch was. Excluding the decisiveness of the result, historians have long noted that most of what he did at Trafalgar was neither new nor singular. The keys to Nelson's Touch were neither his tactics nor his appreciation of the poor fighting quality of his enemies, but his belief that the best way to achieve a decisive victory was to bring the enemy as quickly as possible to close battle, and to give to his subordinates a thorough indoctrination before the engagement, and near-complete initiative once it had begun.

As a leader, Nelson rejected the material means at hand—signals—preferring instead a method based on faith in himself and his subordinates. Perhaps his style was fitting for the son of the rector of Burnham Thorpe in an age when men sought to bring order from chaos and replace beliefs with understandings. But to Nelson, the technical revolution in communications had failed to lead the way to true victory. He sought, in its stead, communion with his subordinates. In the above-quoted letter to Lady Hamilton, the image invoked is religious: like Christ with his disciples at The Last Supper, Nelson gathers his "Band of Brothers" about him to give them his Touch, "like an electric shock," and some cry as his spirit fills them, "and, from Admirals downwards, it was repeated—'It must succeed, if ever they will allow us to get at them! You are, my Lord, surrounded by friends whom you inspire with confidence.' Some may be Judas's; but the majority are certainly much pleased with my commanding them."[32] The effect of the Touch was real

enough. Collingwood wrote of his commander after Trafalgar, "everything seemed, as if by enchantment, to prosper under his direction." Captain Edward Codrington wrote his wife, "Lord Nelson is arrived! A sort of general joy has been the consequence. . . ." Codrington noted "the superiority of Lord Nelson in all these social arrangements which bind his captains to their admiral."[33]

At such meetings Nelson indoctrinated his subordinates, reviewing the variations an engagement might take, making clear his intentions in each, as well as his expectations of those he led. At a stroke or touch, Nelson supplied a coherent doctrine that would unite all in battle. Simultaneously, by bringing his subordinates into his confidence, he exercised his own leadership, insuring that he would get the most from all. In this he differed markedly from Rodney, Howe, and Jervis who remained detached from those they led.[34]

Nelson introduced the Touch, although he had yet to so name it, during his pursuit of Vice Admiral François Paul Brueys in the Mediterranean in 1798. Captain Edward Berry noted that for 2 months before the engagement at Aboukir Bay, as the squadron raced back and forth across the Mediterranean in search of the French, Nelson ordered his captains to the flagship *Vanguard* where all became acquainted with his "ideas and intentions . . . by which means signals became almost unnecessary. . . ."[35]

It was Nelson's method that so astonished Earl Howe himself, who confided to Berry after the Nile: "It stood unparalleled, and singular in this instance, that every captain distinguished himself." But Nelson, in an explanatory letter to Howe, spoke of the "Band of Brothers" he commanded, men united by him and fully cognizant of his wishes.[36] At the Nile, Nelson's 13 of the line captured 9 of 13 French liners and burned 2 others.

Nelson's genius lay in his ability to perceive beforehand the forms a battle might take, and to shape for each a plan of action, and then to pass his own understanding to his admirals and captains. As Berry noted after the attack at Aboukir Bay, the plan had been one of several "formed two months before an opportunity presented itself of executing any of them, and the advantage now was, that they were familiar to the understanding of every captain in the fleet."[37] Discovering Brueys at anchor, Nelson was able to order an immediate attack despite the approach of nightfall, without the necessity of halting and preparing a plan of battle. The "Band of Brothers" knew what their commander wished done, and their expeditious attack surprised the French and led to their total defeat.

During 1804 and 1805, Nelson likewise developed plans for a battle with the combined Franco-Spanish Fleet. He considered it imperative to launch an expeditious attack, for as he observed to Captain Keats, "No day can be long enough to arrange a couple of fleets and fight a decisive battle according to the old system."[38] It was a decisive battle, not another "Lord Howe's

Victory," that Nelson sought. In both his 1803 and 1805 memoranda, and his discussion with Keats, Nelson spoke of the need for speed to achieve decisive results. By making the order of sailing double as the order of battle and by making sure his subordinates knew their missions, as they had at the Nile, before the enemy fleet was contacted, Nelson expected to bring on a general engagement as quickly as possible.

Nelson initially intended to divide his fleet into three divisions, but for a variety of reasons, fought at Trafalgar with two: the lee commanded by Rear Admiral Cuthbert Collingwood and the windward by Nelson himself. Significantly, historians have been more distressed by his alteration in the mode of artack than his captains, a fact that speaks well of the effect of the Nelson Touch.[39]

Once the battle commenced, Collingwood became an independent commander who had "the entire direction of his line to make the attack upon the enemy, and to follow up the blow until they are captured or destroyed."[40] Nelson, in his prebattle memoranda, placed no reliance on the use of signals under fire, for communications "from these moments are useless when every man is disposed to do his duty."[41] Nelson's reference here to duty, repeated in telegraphic code in his famous signal made at Trafalgar, is defined in his 1803 memorandum. "The great object is for us to support each other," he wrote, "and to keep close to the enemy and to leeward of him."[42] That was a commander's duty in battle, and Nelson believed that his subordinates were disposed to act in such a fashion if they were so allowed and not paralyzed in the expectation of signals from their commander in chief. As he reminded his captains in 1805, "in case signals can neither be seen nor perfectly understood, no captain can do very wrong if he places his ship alongside that of an enemy."[43] Here Nelson was repeating a long-held belief, one he attributed to Captain William Locker under whom he had served in the *Lowestoffe* in the Caribbean in 1777 and who had taught the young Nelson, "Lay a Frenchman close, and you will beat him."[44]

Another example of Nelson's lack of faith in signals was his decision to personally lead his division (as did Collingwood) during the approach to battle at Trafalgar, a point for which Mahan took him to task, attributing it to "his ardor for battle." Mahan correctly points out that a commander so situated was at great risk, noting "had any serious injury befallen their person, or the head of the column, the lack of influence would have been seriously felt."[45] But Mahan misses the point, for Nelson was killed at Trafalgar and his fleet still triumphed. Nelson led, not solely out of ardor, but because he had to decide when to give up the feint on the van and strike the enemy's center. Given his lack of faith in signalling under fire, it was perfectly consistent for Nelson to lead and in that way insure that the proper point was struck at the proper moment. Once that decision was made, his physical presence was superfluous, as his subsequent fate makes clear. His

spirit walked with every admiral and captain on a British quarterdeck that day. That was the whole point of the Nelson Touch.

Nelson recognized that whatever the advances in signalling, he could not simultaneously vanquish both the fog of war and Britain's enemies. Rather than viewing the former as an obstacle to be overcome along the path to victory, he treated it as an ever-present variable that could be made to function as an ally in the pursuit of decisive victory. It is clear from his writings that far from wishing to reduce the effects of the fog of war, Nelson sought to increase its severity. By promptly initiating a sharp, close action, he expected to "surprise and confound the enemy," as he told Keats. "They won't know what I am about. It will bring forward a pell-mell battle, and that is what I want."[46] By decentralizing his command functions, by indoctrinating his subordinates, by giving them the leeway to act on their own initiative, Nelson believed he could lessen the impact of the chaos of battle on his own fleet while maximizing it on the enemy's. In an engagement fought at close range, amidst great confusion, by ships shrouded in smoke, Nelson was confident his captains would overcome. He treated the fog of war as he did its nearest physical equivalent—the darkness of night. He wrote Howe after the Nile, "I had the happiness to command a Band of Brothers; therefore, night was to my advantage. Each knew his duty, and I was sure each would feel for a French ship."[47]

It is this too often overlooked aspect of Nelson's career that makes him the consummate naval leader in history. His contemporaries and historians have generally portrayed Nelson's tactics as the key to his victories. The Royal Navy attempted to institutionalize his success by including a Trafalgar maneuver, to "cut the enemy's line in the order of sailing in two columns," in a later edition of the signal book.[48] But the Nelson Touch could not be reduced to a mere signal in a manual, a fact many Royal Navy officers of the period understood. But those wise enough to sense that Nelson's tactics lay not at the heart of his victories, focused just as incorrectly on his aggressiveness. The "go-at-'em" school, which saw in a prompt, violent, headlong attack the secret to Nelson's success, failed to comprehend the accompanying Touch—his leadership and doctrine—that made the effort work.[49] Against a force on par qualitatively with the Royal Navy, Nelson's pell-mell attack at Trafalgar might well have been defeated. That is not to criticize the man nor diminish the lustre of his triumphs, for central to Nelson's method was his proper assessment of the incapacity of his opponents. However bad they were, the French and Spanish Fleets of the period were large, and neither Rodney, Howe, nor Jervis had been able to achieve more than marginal results. By bringing his entire force to bear as quickly as possible and keeping each subordinate in touch with his intentions through his personal doctrine, Nelson managed to achieve the results that had eluded others.

Moreover, by focusing on Nelson's tactics in battle, rather than on his method of command, historians have lessened the significance of his career. Admirals of the future will find little use in Nelson's evolutions. Task force commanders will never be presented with the opportunity, nor have the need, to break the line of an enemy squadron. But there are important lessons to be learned from Nelson's style of command. In the electronic age there seems to be a tendency in the military to view communications as the panacea for command and control problems, much as the development of numerary signal systems was heralded in Nelson's time. His greatness lay in his balanced approach to command: Nelson's leadership, organization, doctrine, and use of visual communications made him victorious in battle. The Nelson Touch was so successful, his spirit in a sense accompanying every admiral and captain on the quarterdeck, that even his fall failed to alter the course of the day.

Nelson practiced a naval form of what the Germans term *auftragstactic*, a current catchword in the American military. He favored the decentralized over the centralized system of command, as defined in Martin Van Creveld's *Command in War*.[50] Properly understood, Nelson's career can provide lessons to the modern naval officer. In all probability, whatever the advances in radios, computers, satellites, and sophisticated electronic communications systems, the fog of war will prove as resistant to technological advance as the common cold has to the march of modern medicine. The successful commander in chief will be he who, like Nelson, has remained the leader, the inspirer, the organizer, and the indoctrinator; who, like Nelson, expects his communications to fail him at a critical juncture but who has forged his subordinates into a "Band of Brothers" who will feel for, find, and destroy the enemy.

Notes

1. See Alfred Thayer Mahan, *The Life of Nelson: The Embodiment of the Sea Power of Great Britain* (Boston, Mass.: Little, Brown, 1897).

2. Geoffrey Bennett, *Nelson: The Commander* (London, England: B.T. Batsford, 1972), pp. 90-91.

3. See Julian S. Corbett, ed., *Fighting Instructions, 1530-1818* (Greenwich, England: Navy Records Society, Royal Navy College, 1905), v. 29 (hereafter cited as Navy Records).

4. L.E. Holland, "The Development of Signalling in the Royal Navy," *Mariner's Mirror*, February 1953, pp. 7-19.

5. John Jervis to George Jackson, 31 July 1778 in Jedediah Stephens Tucker, *Memoirs of Admiral the Right Honorable the Earl of St. Vincent* (London, England: R. Bentley, 1844), v. 1, pp. 67-68; David Hannay, ed., *Letters Written by Sir Samuel Hood (Viscount Hood) in 1781-82-83* (Navy Records, 1895), p. viii.

6. W.M. James, *The British Navy in Adversity: A Study of the War of American Independence* (London, England: Longmans, Green, 1926), pp. 223-224; David Spinney, *Rodney* (London, England: Allen & Unwin, 1969), pp. 321-329, 389-412; Lord Rodney to Lord Sandwich, 26 April 1780 in G.R. Barnes and J.H. Owens, eds., *The Private Papers of John, Earl of Sandwich: First Lord of the Admiralty, 1771-1782* (Navy Records, 1932-38), v. 3, pp. 211-212.

7. See Oliver Warner, *The Glorious First of June* (New York: Macmillan, 1961).

8. Holland, pp. 6-7; T. Sturges Jackson, ed., *Logs of the Great Sea Fights, 1794-1805* (Navy Records, 1899-1900), v. 1 after p. 8, 9-20.

9. *Ibid.*, pp. 23-51. According to the account of Sir Edward Codrington, then a lieutenant in the *Queen Charlotte*, Lord Howe's flagship, Howe remarked to his assembled officers after making the signal for the

fleet to pass through the French line, "Now gentlemen, no more book, no more signals." Either the story is apocryphal, or Howe soon changed his mind. See Jane Bouchier, *Memoir of the Life of Admiral Sir Edward Codrington* (London, England: Longmans, Green, 1873), v. 1, p. 31.

10. Christopher Lloyd, *St. Vincent & Camperdown* (New York: Macmillan, 1963), pp. 29-93; Corbett, ed., p. 254; Jackson, ed., v. 1, pp. 207-213.

11. Nelson to Howe, 8 January 1799 in Nicholas Harris Nicolas, ed., *The Dispatches and Letters of Vice Admiral Lord Viscount Nelson* (London, England: H. Colburn, 1845), v. 2, pp. 369-371.

12. Nelson to Hoste, 22 June 1795 in Nicolas, ed., pp. 45-46.

13. Nelson to his brother, 26 October 1794 in Nicolas, ed., v. 1, pp. 494-495.

14. St. Vincent to Lord Spencer, 30 November 1800 in H.W. Richmond, ed., *Private Papers of George, Second Earl Spencer* (Navy Records, 1913-1924), v. 4, p. 21.

15. Observations of St. Vincent on "Clark's Naval Tactics," enclosed with St. Vincent to Viscount Howick, 2 June 1806 in Tucker, v. 2, pp. 281-282.

16. Memorandum of a conversation between Nelson and Keats in Nicolas, ed., v. 7, p. 241*n*.

17. Nelson to his brother, 6 April 1797 in Nicolas, ed., v. 2, pp. 369-371.

18. Nelson to his wife, 1 April 1795, and Nelson to William Suckling, 7 June 1795 in Nicolas, ed., v. 2, pp. 25-27 and 40-41 respectively.

19. Nelson to his father, 19 October 1782, and Nelson to Locker, 17 November 1782 in Nicolas, ed., v. 1, pp. 67-68 and 68-70 respectively.

20. Nelson to Locker, 25 February 1783 in Nicolas, ed., v. 1, pp. 71-73.

21. Mahan, v. 2, p. 160.

22. See James Stanier Clarke and John M'Arthur, eds., *The Life of Admiral Lord Nelson, K.B., from His Lordship's Manuscripts* (London, England: T. Bensley for T. Cadell and W. Davies in the Strand, and W. Miller, Albermarle St., 1809).

23. Nelson to Hoste, 22 June 1795 in Nicolas, ed., v. 2, pp. 45-46; Nelson to his wife, 20 September 1794 in Nicolas, ed., v. 1, p. 483.

24. Hood to Jackson, 16 April 1782 in Hannay, ed., pp. 101-109.

25. Cornwallis' undated account of the Saintes in George Cornwallis-West, *The Life and Letters of Admiral Cornwallis* (London, England: R. Holden & Co., Ltd., 1924), pp. 118-127. In addition to Lord Hood and Cornwallis, Nelson had ties with several others who had fought under Rodney on 12 April 1782. Six of the "Band of Brothers" of the Nile were Saintes veterans: Sir James Saumarez, acting captain of the *Russell*; Alexander Ball, lieutenant in the *Formidable*; Davidge Gould, lieutenant in the *Conqueror*; Benjamin Hallowell, acting lieutenant in the *Alfred*; Thomas Foley, lieutenant in the *Prince George*; and Samuel Hood, Lord Hood's cousin, lieutenant in the *Barfleur*. Saumarez, Foley, Hallowell, and young Hood all profited, as did Nelson, from the patronage of Lord Hood. Another Saintes veteran and Hood man with ties to Nelson was William Domett, Hyde Parker's first captain at Copenhagen and later Nelson's during his 1801 command in the Baltic.

26. Nelson to Cornwallis, 30 December 1804, John Leyland, ed., *Dispatches and Letters Relating to the Blockade of Brest, 1803-1805* (Navy Records, 1899-1902), v. 1, p. xvi.

27. Nelson to his brother, 6 April 1797 in Nicolas, ed., v. 2, pp. 369-371.

28. Nelson's 1803 memorandum in Corbett, ed., pp. 313-316.

29. Jackson, ed., v. 2, pp. 56-59.

30. Great Britain, Admiralty, *Report of a Committee Appointed by the Admiralty to Examine and Consider the Evidence Relating to the Tactics Employed by Nelson at the Battle of Trafalgar* (London, England: H.M. Stationery Off., 1913), pp. 90-103.

31. Nelson to Lady Hamilton, 1 October 1805 in Nicolas, ed., v. 7, pp. 60-61. From the context, it appears that Nelson had discussed the Touch with Lady Hamilton before his departure from England. In a letter to Sir George Rose, written in the *Victory* off Plymouth on 17 September 1805, Nelson wrote: "I will try to have a Motto,—at least it shall be my watch-word, *Touch and Take*." See Nicholas, ed., v. 7, pp. 42-43.

32. *Ibid.*, pp. 60-61.

33. Collingwood to Admiral Sir Thomas Pasley, 16 December 1805 in Nicolas, ed., v. 7, pp. 241-242; Codrington to his wife, 30 September 1805 in Bouchier, v. 1, pp. 51-52.

34. See G.B.M. Mundy, *The Life and Correspondence of the Late Admiral Lord Rodney* (London, England: J. Murray, 1830), v. 2, p. 358; Bouchier, p. 12; and W. Clark Russell, *Collingwood* (London, England: Methuen and Co., 1891), pp. 71-74.

35. Captain Berry's narrative in Nicolas, ed., v. 3, pp. 48-56.

36. Nelson's note of Berry's reported conversation with Howe, in Howe to Nelson, 3 October 1798, and Nelson to Howe, 8 January 1799 in Nicolas, ed., v. 3, pp. 84 and 230-231 respectively.

37. Berry's narrative in Nicolas, ed., v. 3, pp. 48-56.

38. Nelson-Keats conversation in Nicolas, ed., v. 7, p. 241*n*.

39. Corbett, ed., pp. 290-320.

40. Nelson's 9 October 1805 memorandum in Corbett, ed., pp. 317-320.

41. Nelson's 1803 memorandum in Corbett, ed., pp. 313-316.

42. See Corbett. Holding the wind gauge, a position to windward of an opponent, gave to a sailing ship the initiative. Nelson's aim was to use this advantage to force a battle, but upon joining it, to take up a position to leeward, thereby preventing the disengagement of the enemy, and forcing a decision. Howe had attempted to do the same at the Glorious First of June, pp. 313-316.

43. Nelson's 1805 memorandum in Corbett, ed., pp. 317-320.

44. Nelson to Locker, 9 February 1799 in Nicolas, ed., v. 3, p. 260.

45. Alfred Thayer Mahan, *The Influence of Seapower upon History, 1660-1783* (Boston, Mass.: Little, Brown, 1890), p. 353.

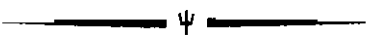
46. Nelson-Keats conversation in Nicolas, ed., v. 7, p. 241*n*.

47. Nelson to Howe in Nicolas, ed., v. 3, pp. 230-231. That Nelson sought simultaneously to increase the chaos of battle while maintaining control over his own subordinates is evident in a letter he wrote in 1801 during the Copenhagen campaign. He wrote: "On occasions we must sometimes have a regular confusion, and that apparent confusion must be the most regular method which could be pursued on the occasion." See Nelson to Troubridge, 29 March 1801 in John Knox Laughton, ed., *The Naval Miscellany* (Navy Records, 1902), v. 1, pp. 424-425.

48. Corbett, ed., p. 342.

49. *Ibid.*, pp. 336-338.

50. See Martin Van Creveld, *Command in War* (New York: Harvard University Press 1985).



RESEARCH IN THE NAVAL HISTORICAL COLLECTION

Gifts and Acquisitions

Evelyn M. Cherpak

Research opportunities for naval historians and scholars in allied fields have been enhanced recently by the addition of several large and important manuscript collections to the holdings of the Naval Historical Collection at the Naval War College. The collections have been deposited through the Naval War College Foundation, a private, nonprofit corporation which serves to enhance the educational and cultural resources of the college. The papers of Rear Admiral Edwin T. Layton, coauthor of *And I Was There: Pearl Harbor and Midway—Breaking the Secrets*, is one such collection. The manuscripts were presented to the Naval War College in two separate accessions: the first, donated in 1986 by Layton's widow, consists of his personal papers; the second, research source materials that he collected, was also presented by his widow through the good offices of coauthor Captain Roger Pineau, U.S. Naval Reserve (Retired). Since the college's Chair of Intelligence is named in Layton's honor, Mrs. Layton felt that the admiral's papers would best be placed here.

Early on in his career, in 1932, Layton received instruction in the Japanese language while serving in the Office of the Naval Attaché in Tokyo and then was sent to the American Legation in Peiping, China as an assistant naval attaché. He served several tours of duty in the Navy Department's Office of Naval Intelligence prior to his 1941 appointment as Pacific Fleet Combat Intelligence Officer on the staff of Admiral Chester W. Nimitz, Commander in Chief, Pacific Fleet. During the Korean war, from 1951-1953, he again served as Pacific Fleet Intelligence Officer. In 1958 Layton was appointed Director of the Naval Intelligence School at the Naval Receiving Station in Washington, D.C., his last active duty post before retirement in 1959.

The bulk of the materials, research source materials on naval intelligence in the Pacific during World War II, consist of the Japanese War History series,

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Senshi Sōsho; National Security Agency cryptographic documents, including translations of Japanese naval messages, attaché messages, radio intelligence summaries, and diplomatic messages; National Security Agency histories of radio intelligence, Japanese grand fleet maneuvers, communications intelligence activities, and mobile radio intelligence unit reports. Also available in this collection are strategic planning maps, oral history tapes and transcripts, notes, notebooks, correspondence, and a typescript copy of the Layton memoir. These materials are a treasure trove for those interested in the documentary evidence behind the story of our intelligence failure at Pearl Harbor, our subsequent success at Midway, the conflicts within the naval intelligence communities, and the personalities involved.

Brigadier General Paul Sherman, U.S. Marine Corps (Retired) and Mary Sherman, brother and sister of the late Admiral Forrest P. Sherman, recently donated their collection of his papers to the college. As a young lieutenant, Sherman attended the Naval War College, graduating in 1927, and in 1949 became Chief of Naval Operations, the youngest flag rank officer appointed up to that time. During a 1951 trip to Europe to negotiate U.S. basing rights with Spain, he suffered a heart attack and died in Naples, Italy.

His papers consist of letters sent to his parents and his sister, Mary, during World War II along with diplomas, certificates, pamphlets, and programs documenting his naval career. These documents are a useful supplement to the Sherman Papers held by the Naval Historical Center's Operational Archives in Washington, D.C.

The Bern Anderson Papers, donated by the admiral's widow who lives in nearby Jamestown, Rhode Island, are a fascinating collection that offers insights into the life and career of a naval officer who was both a scholar and a consummate professional. The collection consists of nine boxes and is divided into four major series: correspondence, writings, subject files, and miscellany. Some of the more significant contents are Anderson's correspondence with the noted naval historian Samuel Eliot Morison, 1952-1960, with whom he worked as a research associate in compiling *The History of U.S. Naval Operations in World War II*, a project based here at the Naval War College during those years. The correspondence gives the reader an in-depth view of the problems involved in writing a comprehensive, multivolumed history and is a fine complement to the Morison Papers at the Harvard University Archives.

Writings form the second major series and contain copies of Anderson's articles published in the U.S. Naval Institute *Proceedings*, his Naval War College student thesis, and term papers written while a doctoral candidate at Harvard University. This series also contains research materials for his major published works: *By Sea and River: The Naval History of the Civil War* and *Surveyor of the Sea: The Life and Voyages of Captain George Vancouver.*

Subject files, the third series, contains documents pertaining to Operation Hollandia, the 1944 invasion of New Guinea, and other Seventh Fleet

amphibious operations in the Pacific Theatre during World War II, 1942-1944, when Anderson was on the staff. The miscellany series contains diaries which Anderson kept during his naval career, 1919-1944, as well as diplomas, certificates, photographs, and newspaper clippings of Japanese incursions into Shanghai in 1932.

The college was fortunate in being recently selected as the official depository for the manuscripts and memorabilia of members of the Peter Tare Association of World War II PT boat officers. This is especially apropos as PT boat training facilities were located on the Naval Base in nearby Melville during the Second World War. Materials pertaining to PT Squadrons 2, 3, 6, 31, and 42 have been received to date.

In response to a concerted effort by staff to document the recent history and development of the Naval War College, the papers of Frederick H. Hartmann, Academic Advisor to Naval War College presidents and Alfred Thayer Mahan Professor of Maritime Strategy, 1966-1987, were presented as additions to the collection's manuscript holdings. Perspectives and insights into college academic plans, policies, and programs during a critical period in its history can be gleaned from an examination of these materials. Documents pertaining to the career of Professor Philip L. Gamble, holder of the Theodore Roosevelt Chair in Economics from 1968-1974 were also donated to the college in 1987.

The Naval Historical Collection, a division of the Naval War College Library and the college depository for archives and manuscripts, is located on the first floor of Mahan Hall. The collections, which focus on the history of the institution, naval warfare studies, and the Navy in Narragansett Bay, are open to scholars and interested researchers, Monday through Friday, 8:00 a.m. to 4:30 p.m., except on Federal holidays. Collection guides and manuscript registers may be obtained by writing to the Curator, Naval Historical Collection, Naval War College, Newport, R.I. 02841-5010 or by calling (401) 841-2435 (Autovon 948-2435).

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Ian Oliver

IN MY VIEW . . .

Castex Revived

Sir,

In his review of two new books on the strategic thought of Admiral Raoul Castex, Commander Michel P. Gevrey, French Navy, stated that "Castex's work has never been translated into English." Though, indeed, no translation has ever been published, the Naval War College had a translation of a good portion of it prepared just before World War II, and a bound copy remains, probably nnread, in its library. One of the books the Commander reviewed is entirled *Castex, Le Stratège Inconnu*. If Castex is, indeed, "the unknown strategist" to French readers, how much less is he known in the United States?

This ignorance should be remedied. Castex may serve us even today. He put strategy into a larger construct and looked for connections between the international system, national policy, land strategy, and maritime strategy. He showed how seeming opposites in strategy could be integrated and explored the appropriate strategies for powers of differing means and situations. He pricked lazy assumptions. He made no promises; his is a sober assessment of what navies can do. In short, Castex remains a challenging thinker whose contributions transcend his time. Americans absorb a great deal of Mahan, a little Corbett, and perhaps some Gorshkov, but this exposure is not enough. We need to take greater steps to ensure that we are not trapped within our peculiar strategic traditions. Castex can thus help us hone our strategic instincts.

Castex's *Théories stratégiques* comes in five large volumes, surely one reason why we avoid it. I suggest that it is time that an edited selection of the Naval War College's translation of Castex's ideas be published, such as Westcott did years ago for Mahan. Castex deserves better than oblivion.

Willard C. Frank, Jr.
Old Dominion University

Our Flagging Merchant Marine

Sir,

Two hundred years ago, there was no U.S. Navy. American shipyards in every state turned out a huge merchant marine which sailed the seven seas in search of trade. In the Mediterranean, corsairs swarmed out of North Africa to hijack cargo ships and hold the crews for ransom, and Congress responded by passing an act directing the construction of six frigates of the finest quality. In 1798, the first of these, the U.S.S. *Constellation*, put to sea, and the toast of the day became "Millions for Defense, but not One Cent for Tribute!" given by Robert Harper at a banquet for Justice John Marshall.

The first and foremost mission of that fledgling force was to protect the merchant marine. By being willing to project appropriate power in distant lands, that small fleet of frigates was able to command respect for the Stars and Stripes on the shores of Tripoli and insure the safety of American seamen. Today, we seem to have lost our national perspective as to the economic importance of commercial shipping to our strategic well-being. The next decade may find the U.S. Navy shy of its most historic mission.

The protection of foreign-flag ships is extremely detrimental to the American merchant marine. The political shortcut of reflagging Knwaiti tankers, owned and operated by Arab sheiks and protected by expensive U.S. Navy warships and sailors, is historically unique. After the Second World War, the common talk on the waterfront was a cocky assurance that the primary benefit of sailing in the American merchant marine was the exclusive protection of the world's greatest navy. "Let those rusty tubs call the Liberian Navy when they need help!"; so ran the old saw. There were over 5,000 active oceangoing ships in the U.S. commercial fleet in 1950, protected by a 1,200-ship navy. The ratio has changed since then.

According to Captain Bertil James Haney out of San Juan, Puerto Rico:

> Our little union hall . . . was crammed to capacity with starving senior officers following the collapse of America's largest and oldest shipping company, U.S. Lines. . . . In fact, the last six years has seen the U.S. private oceangoing fleet decline to only 365 ships, and fully 35% of seamen have permanently lost their jobs. Meanwhile, the [Administration] put the U.S. Flag on Kuwaiti tankers and waived the requirement that the officers and crew be Americans. The upshot of this is that after being reduced to tending bar following a two-week relief job . . . I shipped out as Chief Mate in the Honduran-flagged M/V LEFKIMMI, a sinking wreck. . . .

(Title 46 of the Code of Federal Regulations, Part 157, requires that the officers and crew of American ships be Americans, whenever possible. This is one of the laws waived by the Administration while U.S.-flag ships rust in port and American merchant seamen go on welfare.)

The question needs to be asked: Is the U.S. Navy for hire? Can the fleet be loaned or rented to countries unwilling to provide for their own defense on the simple pretext of a paper corporation and a nominal American sailing master? This certainly makes good business sense for Kuwait, but it puts nothing into the American economy. According to Professor E.B. Potter, a noted naval historian, "Maritime Power includes all those elements that put a nation in the position to deploy its military power on the sea, to move its forces from the sea to land, and maintain rhem there.

The element of maritime power is not limited to warships, weapons, or trained personnel, but includes land facilities and well placed bases, merchant shipping, and satisfactory international relations."

President Eisenhower called the merchant marine "our fourth arm of defense." In 1950, the United States ranked first in the world in numbers of ships, carrying capacity, and deadweight tonnage; today it is tenth. Of twenty U.S.-flag shipping lines in 1950, seven remain, and one of those is in bankruptcy. U.S.-flag ships carry less than 6 percent of the total U.S. foreign trade, down from 21 percent in 1950. Over thirty private U.S. shipyards have gone out of business in the past 10 years, and there are no commercial vessels under construction or on order in American yards today.

The decay of our maritime industry can be laid on many doorsteps. The high salaries of seamen, mates, masters, and shipyard workers are loudly proclaimed by owners and operators. Rate slashing by the state-controlled fleet of the Soviet Union is the favorite scapegoat of the right wing. While most countries have extensive cargo preference programs to aid their shipping lines, the United States refuses to violate the "principles" of free trade. As well as Title 46 CFR 157, the few cargo preference laws on the books are not being enforced by the Administration. Every party is willing to find fault with another, while the ships are sinking under their feet.

To be a maritime power requires both a navy and a merchant marine. Any military plan, anywhere, anytime is based on logistics. Without the ability to resupply, the Army is helpless, the Air Force is grounded for lack of fuel, and any subsequent maritime strategy of the Navy is fit only for the circular file. For military planners and strategic policymakers to assume an apolitical stance in this matter of national security is culpable. An effective U.S. industrial base must have a steady supply of raw materials from worldwide sources. The balance of trade to and from the United States needs to be shipped in U.S. ships crewed by American seamen. It is time for Congress to demand that U.S. laws concerning shipping be enforced.

The U.S. Navy should be in the business of protecting American tankers, built, owned, and operated by U.S. businessmen. If someone wants his goods to be protected, let him hire American ships and seamen to do the job. If the Stars and Stripes becomes yet another "rag-of-convenience," it is not worth the sacrifice of a single, red-blooded, white-hatted bluejacket! When reflagged Cuban ships begin the passage to Nicaragua, escorted by Soviet minesweepers, we shall regret this politically expedient precedent.

Sankey Blanton
Lt. Commander, U.S. Naval Reserve

Speedy Red Victory

Sir,

Lieutenant William K. Baker did an excellent job from our Western perspective in his review of S.P. Ivanov, *The Initial Period of War*. However, a key element of the Soviet perspective has escaped his mention.

I refer to Ivanov's analysis of what many Soviet spokesmen call "the Soviet-Japanese War of 1945." Secure in our knowledge that *we* defeated Japan and fascinated by the ethical and political issues surrounding our use of the A-bomb, we have tended to ignore Soviet lessons from the last days of World War II. Peter H. Vigor devotes an entire chapter to Soviet operations against Japan in his superb study, *Soviet Blitzkrieg Theory*, relying heavily on Ivanov for his primary source material. As Vigor remarks, it is the Soviet view that "there has been one single war in modern times which has indeed been won in its initial period; that this war was the Soviet-Japanese War in Manchuria of 1945, and that it was the USSR which won it." Not only do the Soviets claim to have conducted the largest regrouping of forces in history (around 30 divisions were transferred a distance of 9,000 to 12,000 kilometers), they so cloaked their mobilization with disinformation and camouflage as to achieve strategic, operational, and even tactical surprise. No Soviet reader could peruse Ivanov's analysis of this conflict without realizing its importance for the expansion of Soviet borders, power, and influence in the Pacific, through the seizure of Japanese-held territory.

Notwithstanding mandatory Soviet rhetoric and censorship, *The Initial Period of War* constitutes one of the most important monographs available in any language on what Ivanov calls "preparations for and delivery of the unexpected first strike with the creation of a new strategic front." This is about as close as unclassified Soviet-speak ever gets to an analysis of the ambitions, obstacles, and thought processes surrounding a putative Sovier attack upon NATO (or the People's Republic of China). Although printed in Moscow 13 years ago, Ivanov's book provides an important context for evaluating current Soviet capabilities for a quick march to the Rhine, as well as for crafting Western countermeasures to best deter such an attack.

G. Paul Holman
Naval War College

Ill-served

Sir,

I read with great interest and some wonderment Lieutenant Christopher Abel's article, "Controlling the Big Stick: Theodore Roosevelt and the Cuban Crisis of 1906." Interest because he writes well and has chosen a fascinating topic. Wonderment because his interpretation and exposition of the misguided actions of naval officers in 1906 bears a striking similarity to the misguided activities of other naval officers over the past several years. Presidents Roosevelt in 1906 and Reagan today have been ill-served by well-intentioned but uninformed zealots. At the same time, these naval officers, of both eras, have been ill-served by a leadership which allowed "operational initiative to fall to the Navy's commanders in the field."

When Lieutenant Abel writes of "These relatively junior officers" in 1906 "left to act in consonance with what they believed to be the best interests of . . . the Nation" he may just as well be writing of current events. His description of the reluctance of the naval officers landed in Cuba in 1906 to recognize that they were not carrying out

the wishes of their President, and indeed doing him great harm by their own idea of "protecting Americau interests," could easily be applied to the officers so much in today's news.

So long as many believe that "the diplomat is the servent, not the master of the soldier" (President T. Roosevelt at the Naval War College, quoted by Lieutenant Abel), we may expect to see similar fiascoes in the future.

William W. Struck
McLean, Virginia

Gulf Security

Sir,

Some observations on Lieutenant Cox's interesting essay, "The Gulf of Mexico: A Forgotten Frontier. . . . " The threat that Lieutenant Cox describes, most notably the mine and terrorist threat in the Gulf, far from being ignored, has been on our minds a great deal in the two years that the Maritime Defense Zone (MDZ) commands have been iu place. With CINCLANTFLT's full support, a number of exercises, mobilizing Coast Guard and Navy Forces, have been conducted out of such ports as Galveston, Mobile, Beaumont, and Houston. We've learned a great deal from these exercises. The environmental problems cited by Lieutenant Cox are certainly real, and security operations against unconventional threats are always difficult. Still, the situation is far from hopeless, and I think we have the organization that can do the job.

Our Sector Eight MDZ commander, a flag officer based in New Orleans, has responsibility for security in the Gulf from the high-water mark to 200 miles offshore where COMUSFORCARIB takes over. Similarly, our Sector Seven commander, based in Miami, owns the northern half of the Straits of Florida and the offshore waters of the eastern Gulf.

We report to the Commander in Chief, U.S. Atlantic Fleet who has approved plans which call for the assignment of significant active and reserve Naval and Coast Guard Forces to the Gulf when needed. I certainly endorse Lieutenant Cox's call for additional Navy resources but recognize as well that we must take our place in line. It is, as it ought to be, the CINC's prerogative to evaluate the threat and the priorities.

Finally, Lieutenant Cox's threat analysis makes the assumption that Cuba would play a significant role in support of hostilities in the Gulf. If we allow that, if we foolishly permit the other side to use Cuba as a base, then I agree with most everything that Lieutenant Cox has to say. But take Cuba out of the equation aud I think the level of threat is something we should be able to handle. Shame on us if we can't.

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PROFESSIONAL READING

A Harmonic in Some Diverse Writing on British Naval History

John B. Hattendorf

Cordingly, Davis. *Nicholas Pocock 1740-1821*. Annapolis, Md.: Naval Institute Press, 1986. 120pp. $18.95

Gough, Barry M. *Gunboat Frontier: British Maritime Authority and Northwest Coast Indians, 1846-1890*. Vancouver: University of British Columbia Press, 1984. 287pp. $27.95

Lambert, Andrew. *Battleships in Transition: The Creation of the Steam Battlefleet 1815-1860*. Annapolis, Md.: Naval Institute Press, 1985. 200pp. $18.95

Ranft, Brian, ed. *Ironclad to Trident: 100 Years of Defence Commentary: Brassey's 1886-1986*. London, England: Brassey's Defence Publishers, 1986. 407pp. $39

Rodger, N.A.M. *The Wooden World: An Anatomy of the Georgian Navy*. Annapolis, Md.: Naval Institute Press, 1986. 445pp. $21.95

Semmel, Bernard. *Liberalism and Naval Strategy: Ideology, Interest and Sea Power during the Pax Britannica*. Winchester, Mass.: Allen and Unwin, 1986. 239pp. $34.95

The recent spate of books on British naval history has touched a wide variety of topics and has ranged across the centuries. Some particularly important recent works have already been reviewed in this journal, such as Piers Mackesy's *War Without Victory* (November-December 1985); Brian Lavery's *The Ship of the Line* (March-April 1986) and Philip Zeigler's *Mountbatten* (Winter, 1987). In addition to those volumes, there

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are a half-dozen more that deserve to be grouped together as books that suggest a broad subtle change of emphasis in writing naval history. A glance at the list above produces no obvious connection between the titles, nor for that matter does one hear the same note struck in reading the books. Yet amidst the various chords produced, one can detect a resonance among all these works as one listens to the *sinfonietta* of naval history. Each study, in its own way, relates naval affairs to the broader concerns of society in general. Each is a specialized work, but at the same time, each brings light to its subject by demonstrating a relationship between naval history and some aspect of general history. Not long ago, naval history was so specialized that few without professional naval interests, a technical background and practical experience even bothered to read it. Only 70 years ago, the British naval historian Sir Julian Corbett lamented that naval history had not found its rightful place. "The general historian . . . cannot afford to neglect naval history," Corbett wrote, "and he is the poorer for that link never having been fully forged for him." In the intervening years, one can virtually count on one's fingers the number of first-class works of naval history that have succeeded in reaching toward that goal. Now, to have the authors listed here, as well as others simultaneously working along such lines, certainly suggests that a silent revolution has occurred in the field. This change has been readily obvious within the academic world which now shows strong interest in naval and military affairs. This change also needs to be fully appreciated by the naval profession. What once was a narrow specialist preserve has now rapidly become an example of something with broader ramifications. With this change, the body of expertise is shifting toward those who see the navy, not as a world apart, but as a small part of the whole world. The challenge for the navy is not to resist the change of emphasis, nor to resist what might be seen as the intrusion of outsiders. The challenge is to learn to benefit from the new insights which this change brings with it. Naturally, the new emphasis will tend to emphasize civil, political, intellectual and social issues, and it might be thought that some of the more specialized topics of purely professional interest might be forgotten. That need not be the case, but surely this new emphasis will add to our understanding through a cross-fertilization of thought and reflection.

Nicholas Rodger's *The Wooden World: An Anatomy of the Georgian Navy* deals with the earliest period among these books, and it is the most recent to appear. For the social history of the Royal Navy it stands as a beacon amidst largely uncharted waters. At the same time, it suggests a corrective to the work of earlier writers, particularly to Michael Lewis's *A Social History of the Navy*, John Masefield's *Sea Life in Nelson's Time* and Dudley Pope's *Life in Nelson's Navy*. However, these volumes, upon which our understanding of the social history of the navy rests, deal with the Napoleonic War period. Rodger's

work is a very carefully documented study of the social conditions within the navy during the Seven Years War, 1756-1763, in which he goes on to draw, with some caution, conclusions for the larger period 1740-1775. While the book is not the sweeping survey of the social history of the 18th century navy, as the title would suggest, Rodger's indepth examination, using hitherto untapped sources, paints a quite different picture of social conditions than the earlier writers have suggested. Traditionally, we have been led to believe that the English Navy of this period was a kind of floating concentration camp, but Nicholas Rodger skillfully shows that the social characteristics of the navy and society at-large were quite similar. Given the social values of both officers and enlisted men, a rigid and oppressive regime would not have been tolerated in the mid-18th century. As Rodger puts it, "no one who has ever commanded ships or men imagines that cruelty or oppression are the way to mould an efficient fighting force." British society in the 18th century displayed a kind of disordered cohesion, and so did the navy. "This made for a loose and disorderly system," Rodger writes, "but it also linked officers and their men together by the bonds of mutual need. Officers were not in a position to get what they wanted by the simple exercise of force and authority, and those who might have been inclined by nature to do so were restrained by the knowledge that the attempt would be counterproductive." In coming to this conclusion, Rodger relates the facts in a lucid style with a sense of humor and a keen eye for fascinating anecdotes. He is a rare writer who can coat his assiduous examination of the documents and pioneering analysis, based on the dry data of musters and paybooks, with engaging and readable prose.

Rodger examines with care the full range of issues from shipboard life, food and health, to career patterns, manning, discipline and politics. At the end of the volume there are appendices that provide a series of fascinating tables to support his conclusions and serve as a resource for other students of social history. Rodger's conclusion "that for all its undoubted peculiarities, the Navy resembled the society from which it was recruited in many more ways than it differed from it," expresses most clearly the new emphasis in naval history. His work is certainly a brilliant contribution to 18th century studies as well as a model for similar investigations of other periods and other navies.

David Cordingly's small book, *Nicholas Pocock 1740-1821*, is a study of a naval artist, and its value lies beyond the specialized interest of marine art historians. Indeed, Pocock is an unusual subject because so many of his working drawings, sketches and letters have survived. Using this material, Cordingly has been able to produce a portrait of a man that links the artist's own experience at sea, as well as his artistic work and career, with the taste of his high-ranking naval patrons and the evidence of historical events which these patrons provided to the artist. Cordingly's success in linking naval

history and art history is valuable. One hopes that this first volume in the *Conway Marine Artists* series is only the first step in an examination that could significantly enlarge our perspective. Needless to say, this is a neglected field, and it is one made far more difficult by the fact that "the admirals who commissioned paintings of sea battles, and the captains who ordered ship portraits were less concerned with a painter's artistic qualifications than with his knowledge of seamanship." Yet elucidation of that fact, which typifies so much naval art, certainly gives us a deeper perspective in appreciating both artist and art from an entirely new vantage point.

At first glance, Andrew Lambert's *Battleships in Transition* seems to be a book designed for the ship buff who is fascinated with the details of ship construction, rigging, and armament. The tables detailing such particulars and the well-chosen illustrations serve that purpose well. Yet the book is much more than that. Lambert also provides an interpretation which explains the nature of transition in warship design and shows the rationale for it in terms of both technical development and naval policy. In short, Lambert has attempted to take the study of warship design, which in the past has been seen only as a separate subject, and unite it with the mainstream of naval historical writing. This is a laudable goal which others can usefully emulate in the light of Lambert's success in this direction.

Two dates, 1815 and 1860, mark important periods in British naval history. The end of the Napoleonic War in 1815 is often regarded as the final high point in the age of fighting sail, while the year 1860, in which the first armored battleship, H.M.S. *Warrior*, was launched, is often used to mark the beginning of the era of modern warships. The 45 years between these two periods is usually forgotten, its warships regarded as ungainly and ill-designed wooden hybrids which could neither sail nor steam effectively. In fact, as Andrew Lambert brilliantly demonstrates in his richly illustrated volume, the years between 1815 and 1860 were a period of ferment, testing, and experimentation in which the steam battlefleet was created.

The central figure in Lambert's study is Captain Sir Baldwin Walker, Surveyor of the Royal Navy from 1847 to 1861. The British wooden steam warship was essentially his creation. A conservative and methodical man who lived in an era of dramatic innovation, Walker guided the surveyor's office along a path of evolution, rather than revolution, in introducing new naval technology. Leaving radical innovations to the French, he used superior British construction methods and conversions of older ships to maintain an effective balance.

By 1860, it was already clear that wood was no longer a suitable material for warship construction. Wood could not carry the concentrated weight of the newly developed engines and ordnance, but the change had been long delayed for several reasons. At first, timber was substantially cheaper than

iron, however this changed to give iron the advantage. Secondly, wooden hulls offered crews far better protection until armor plate was developed. Even then wooden hulled ironclads proved far stronger than ships built entirely of iron. Only after the navy adapted the idea of fitting armor plates, backed with a substantial amount of wood, to an iron hull was it proved that iron hulls could support more armor than wooden ones could. In addition, the Crimean War (1854-56) provided the first occasion when industrial nations mobilized their newly found technological powers to fight a war, and at the same time provided a stimulus to further research and development in warship design.

Lambert's book is clearly focused on British history, although developments in Russia, Turkey, the United States, Austria, Sweden, Denmark and Italy are summarized in three pages—and four pages of text are given to France. American readers will be interested to note that the British Navy had been particularly impressed by the U.S. Navy's steam frigate *Niagara* and the *Merrimack* class. The British built the *Mersey* class of 40 gun frigates in 1856-1858 as a direct response to American innovation. In general, this is a useful reference work combined with an insightful, extended essay on a transition period in naval ship design.

Gunboat Frontier is a masterful conclusion to Barry Gough's trilogy devoted to the Royal Navy's activities on the Canadian west coast in the 19th century. The previous volumes in the series, *The Royal Navy and the Northwest Coast of North America 1810-1914* (1971), and *Distant Dominion* (1980), rightfully attracted attention as well-researched and superbly written histories in the tradition of Gerald Graham. These earlier books dealt with the more commonly understood elements of naval power, extending the knowledge of naval historians to little known and seldom appreciated events. In his latest book, Gough examines an entirely new aspect of the subject: the interaction of the navy and the natives who were the objects of naval operations. Naval historians have traditionally looked at the continuum of a nation's national policy and strategy with its expression in terms of naval operations. Gough has taken a significant step forward in scholarship by including in that understanding the cross-cultural relations which are so often ignored, but which are so typical of overseas naval operations. His work in this area is all the more striking as it is a historical examination of the relationship between a European power and aborigines with few written records.

The central theme of the book is the navy as an instrument in extending British law and order among the Indians. In developing the theme, Gough first examines the relevant differences between white and Indian societies in the period, then reviews both British and Canadian provincial policy toward the Indians in British Columbia, focusing on the way in which the navy attempted to stop slavery, control the liquor trade, as well as to protect and support Christian missions in the region.

The readers of this journal will undoubtedly value the book more as a case study in naval power than for its contribution to Canadian history and the history of the American Indian, or even the light it throws on U.S. policy in Alaska. Yet, Gough's contribution in these areas is equally distinguished, even if it is not described in this review. The most interesting aspect for the general naval reader of this book is to see the customary technique used by a gunboat commander in carrying out his mission. Unquestionably, it was a technique which involved the use of force as a last alternative, but which maintained the resort to force as a credible choice for a naval commander, following a process of steadily escalating and selective pressures, short of all-out violence.

The customary technique for a gunboat commander was first to place his ship in a position where he could obviously use his guns to their greatest effect should they be needed. Then, as a show of force, he might draw attention to this fact by firing guns or rockets at a target. By the 1880s, searchlights could be used to increase the effect at night. Having suggestively demonstrated the potential use of his gunboat, the commander then attempted to reach his goals starting at the opposite end of the spectrum. First, he had a parley with the natives. If that brought no immediate results, he moved to punish publicly the offenders involved in petty crimes. If these restrained actions still brought no result, the commander then seized property, such as canoes which could also restrict the Indians' means of escape. Moreover, he could take chiefs as hostages until certain conditions were met. Throughout this process, an astute naval commander needed to be aware of the risks he was taking and the reactions of the other side. Therefore, he needed a constant stream of intelligence which was obtained by sendiug interpreters ashore with the police and by hiring native informants.

If the process of gradual escalation brought no satisfactory effect, overt force was used to destroy the livelihood of the natives. Gunboat sailors burned salmon weirs and canoes, torched villages and killed some of the inhabitants. As Gough phrased it, "If caught and tried, the guilty would be hanged before the assembled tribe. But in many cases, the smouldering ruins of a village and a scattered tribe were the telling testaments of the process of keeping Northwestern coast Indians in awe of British power."

Thus, the *Pax Britannica* constituted a system of worldwide dominion, but it was an empire based on power and not infrequently marked by racial and cultural tension. Peace in the British Empire meant a series of wars and low-level conflicts. In British eyes, this was a battle to establish virtue, law and order, and to prevent anarchy and chaos among peoples. It was a deeply felt responsibility which carried with it the high vision of eradicating slavery, piracy, murder, theft, cannibalism, and intertribal warfare. As an aside to this central purpose, there was Britain's prospect for gain through

trade and strategic position. In British Columbia, the character of this rule was determined, not by the distant committees meeting in London, but by the local governor and the local military and naval commanders on the spot. Their decisions and judgments mattered the most and characterized the era.

Despite the heavy cost of a "world police force," Britain clung to the basic principles of gunboat diplomacy for most of the 19th century: enforcement of local law and order through the threat of legalized violence. Barry Gough's case study is a major contribution to naval history and to understanding "gunboat diplomacy."

Bernard Semmel's *Liberalism and Naval Strategy* represents a welcome contribution to naval literature from a different quarter. All of the other scholars whose works I have mentioned here have been naval specialists whose work has broadened out to link other aspects of society with their special interest. Semmel, however, is an established student of liberal ideology who focuses on the navy for the first time. While his work occasionally betrays an unfamiliarity with naval affairs, these few slips are unimportant and do not mar the main point of his well-researched study of the naval literature of the late 19th and early 20th centuries. Semmel demonstrates that liberal ideology played a key role in the shaping of naval policy in that period. While liberal ideology is often characterized as pacifist and antimilitary in nature, Semmel demonstrates that then, as well as now, there are different conceptions of the ideology, some of which played a role in formulating naval plans. Among these were naval operations against the slave trade; war on, as well as the protection of, commerce; the debate over offensive and defensive conceptions of strategy; policies regarding neutral shipping; and international maritime law.

The author paints a picture of two extreme ideological types. On the one hand, he shows a radical-liberal, and on the other, a reactionary-conservative. But he cautions that these are stereotypes, and the idea of a polarization between the two must be guarded against. The characterization of the two serves a useful purpose in showing a difference in outlook, although in practice, a more practical and qualified version of the types were involved in naval debates. In looking at his two "ideal" types, he characterizes them as "a free trader confronting a mercantilist, a cosmopolitan and internationalist opposing a nationalist and patriot; an advocate of liberal maritime policy versus an up-holder of belligerent rights at sea." The radical-liberal saw himself as rational and peace-loving in the vanguard of progress, while the conservative insisted that men were always as they had been and would ever be: ruled by passion, a thirst for power and warlike. When one sees the naval debate of 1880-1914 unfold in these terms, one gets a very valuable and useful insight into the nature of the social and intellectnal outlooks which drive the debate over the fundamental uses of the navy. It is an insight useful not only to the historian but also to the observer of current discussion.

This book is not easy reading for one unfamiliar with the historical period or one unfamiliar with the intellectual viewpoints expressed. That aside, it is a valuable and far-reaching contribution to our understanding of naval history on a wide plane.

With *Ironclad to Trident*, the well-known British naval historian, Brian Ranft, has produced an excellent centenary volume for *Brassey's Annuals*. Founded in 1886 by the famous naval specialist Thomas Brassey, the *Annual* has flourished for a century under a variety of names. First called the *Navy Annual*, it has also been titled the *Naval and Shipping Annual*, *Brassey's Annual: The Armed Forces Yearbook*, and today it continues as the *Royal United Services Institute and Brassey's Defence Yearbook*. Each change has reflected the way people have viewed naval matters over the last hundred years, first as a specialist subject, then merging with shipping and merchant marine, and finally as part of a broader understanding complementing the other services under the rubric of defense. The mutation in names is perhaps more than a reflection of various editorial preferences. It shows the maturation of thought on naval and defense matters over the last century.

A century of volumes is a library in itself, and it has been no easy task to pare down these riches into a cohesive single volume. Professor Ranft has not only done an excellent job in accomplishing that, but also provides us with an outlined history of the publication and, through his selections, reminds us of the rich trove to he found in the full set of *Brassey's Annuals* sitting on the library shelves. Ranft's sound approach to his task has been to divide up the 100 years into chronological sections which have a thematic unity and to select those articles which, in his judgment, best depict the most significant developments—both as they were seen during those years and as we look back on those years from the standpoint of today. In addition to the articles, Ranft has also selected a fine group of illustrations and advertisements from the volumes.

The themes which have been chosen are "Global Rivalry and Technological Change" in the period 1886-1904; "Anglo-German Rivalry and Continuing Technical Advance," 1905-1914; "The Great War," 1914-1919; "Disarmament and the Air Power Controversy," 1920-1935; "The Approach to War," 1936-1939; "World War II: Interpreting the Lessons," 1940-1949; Infantry Wars in a Nuclear Age," 1950-1956; "Strains within Nato: The ICBM," 1957-1965; "Nato and the Increasing Soviet Threat," 1966-1981. Over the years, the *Annual* expressed a wide outlook, not confining itself entirely to British views. Among these selections, Ranft has chosen some distinguished American naval leaders, including an article by W.S. Sims in 1907 on "Tactical Qualities of the Dreadnought Type of Battleship," E.J. King on "U.S. Naval Aviation" in 1936, C.W. Nimitz on the "Future Employment of Naval Forces" in 1948, and E.P. Holmes on "NATO from a

SACLANT Point of View" in 1971. Going over the list of articles one is struck, too, by the growing contribution of academics to defense literature. In the selections, we note the names of such well-known writers as Alistair Buchan, Michael Howard, John Erikson, and Lawrence Freedman. Notable, too, are the writings of senior officers and defense officals, ranging from Winston Churchill's statement in the House of Commons as First Lord of the Admiralty in 1914, to J.M.A.H. Luns on NATO defense in 1978, to the final article by the current Chief of the British Defence Staff, Admiral of the Fleet Sir John Fieldhouse, on "British Defence Issues, 1986."

Throughout its history, *Brassey's Annuals* have sought to provide intelligent commentary and accurate information on defense matters. Utilizing well the nature of the material at hand, Brian Ranft has made a judicious selection of commentaries from the wealth of *Brassey's Annuals*, providing historical insight into the development of modern defense thinking.

With these six volumes, one can sense a widely reaching change of emphasis in writing naval history. It is not a new development, but one that has occurred slowly over a long period of time. What is new, however, is the proliferation of the broad perspective in linking naval affairs with society at large. This is something which should be welcomed not only in academic circles, but within the navy itself.

Cimbala, Stephen J., ed. *The Reagan Defense Program: An Interim Assessment*. Wilmington, Del.: Scholarly Resources Inc., 1986. 215pp. $35

Stephen Cimbala deserves praise for presenting a symposium in print that allows the reader to be led in quick succession from the realities and appearances of the present and previous National administrations through a discussion of decisionmaking processes, or the seeming inconsistencies thereof, to a remarkably clear discussion of defense manpower by Lawrence Korb. The middle of the book features a chapter on "Special Operations Forces in the 1980s" and a chapter on the War Powers Resolution that includes, as an appendix, the text of the 1973 resolution that was passed over President Nixon's veto. The remaining 40 percent concerns the Reagan record on strategic weapons—"Ballistic Missile Defense: The Strategic Defense Initiative," arms control, and a summary of the Reagan Strategic Offensive Modernization Program. All contributors to Cimbala's symposium are academic political scientists who carry out their assessments from the viewpoints of that discipline.

In a brief review designed to help the professional naval audience decide the potential value of this addition to the literature, and perhaps also its value as a personal accession, it would be folly to attempt to discuss and

argue with each of the eight authors, so a brief view of the landscape will have to do.

The Oliver and Nathan chapter describes the Reagan policy of "horizontal escalation" without any identification of the "vital" Soviet assets that are thought to be at risk to such a U.S. policy. Perhaps the problem is that the viability of a horizontal escalation policy can only be determined through quantitative examination of options and capabilities available to both sides.

In the chapter entitled "Decision Making, Decision Makers, and Some of the Results," Vincent Davis notes that the Reagan administrations have violated the first rule in forming a government, i.e., decide how to decide. This has led to muddled organizational and procurement decisionmaking nightmares in the White House and the Pentagon, and an apparent lack of a national strategy. The reader should ponder his generalization: "the Air Force had too few modern weapons, the Army had too few people, and the Navy had too few thinkers." He also noted the questionable state of readiness of the services, except for the Marine Corps.

Cimbala seems to dismiss major conventional wars as being too difficult to think about. Does he imply that the Reagan defense program is relying on "nuclear overhang"? By ignoring the defense policy aspects of full mobilization and protracted conflict, Cimbala and his colleagues are missing initiatives the Administration is taking that may well redress concerns about sustainability and readiness of conventional forces. Omission of these areas of concern lessens the value of this book because of the inescapable linkages among manpower, budget, and strategy.

Sarkesian's one-sided discussion of "Special Operations Forces in the 1980s" fails to recognize the Soviet Spetsnaz or the roles played by modern unconventional forces from the Franco-Prussian War and on. Those who would ponder special operations forces should visit France and its myriad plaques to heroes of the French Resistance, or Burma where the American General Peers raised an indigenous enemy in the tradition of Lawrence of Arabia. Better yet, read Anthony Cave Brown's monumental *Bodyguard of Lies*.

"Ballistic Missile Defense" by Donald M. Snow undertakes the Herculean task of outlining the elements of the strategic debate and the Reagan Strategic Defense Initiative. He fairly outlines some of the pros and cons, but absent is a very convincing assessment of technological factors—will it work? Nor does Snow outline the assumptions and conditions that have to be met for it to work. Substantive matters of physics and engineering are seemingly subordinated to ideological arrangements.

Charles R. Gellner and Jeanette Voas call the Reagan approach to arms control an evolving record of hope. There are many who would question the authors' implicit asser-

tions that the Administration is dedicated to arms control. They clearly describe the increasing complexity of attaining arms control objectives, a result of the continuing build-up of defensive systems, which remains a nonnegotiable part of the discussions. Here again questions of technological feasibility seem to have been eclipsed by economic and political considerations.

Stephen Cimbala contributes the final chapter on the "Reagan Strategic Offensive Modernization Program." He develops some interesting dichotomies in the simultaneous modernization of the strategic offensive forces and the introduction of the Strategic Defense Initiative. He touches on the idea of "escalation dominance," the credibility and controllability of the limited nuclear option and on the concept of "launch on warning." He comments that even if the U.S.S.R. were to spend itself into bankruptcy, it would not necessarily provide for a more stable international environment. Cimbala does not comment on a bankrupt U.S. position.

In summary, *The Reagan Defense Program* is useful if topical reading. Whether it can be called an assessment is doubtful as few assessment criteria are presented. To paraphrase the 1980 campaign—has the U.S. national security posture been improved or decreased as a result of the high expenditures made and promised for the future? The book does not answer, except in a peripheral manner. But there is much material for the serious student to ponder and much to argue about if one introduces technical considerations and objective measures of effectiveness. Cimbala's book closes the gap between science and politics by offering practitioners of each discipline a glimpse into the other. Unfortunately, if accurate technical material exists, it is in the classified literature and of limited utility for purposes of the defense debate.

ALBERT M. BOTTOMS
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Epstein, Joshua M. *The 1988 Defense Budget*. Washington, D.C.: The Brookings Institution, 1987. 57pp. $8.95

Joshua Epstein, a research associate in the Brookings' Foreign Policy Studies program and author of the Brookings' study of the FY87 defense budget, has written a study of the proposed FY88 defense budget in which he holds to the arguments presented in his previous work. Drawing on the research of other analysts as well as his own previous studies, Epstein concludes that the defense budget could be reduced by over $47 billion in budget authority in FY88-89 without adversely affecting the security of the United States. The budget cuts would be focused on the "investment accounts" (procurement, research and development, and military construction) in both strategic nuclear and conventional forces.

Epstein would reduce spending on strategic nuclear programs by canceling the Midgetman missile and the

antisatellite program, freezing spending on the Strategic Defense Initiative at the FY86 level, reducing development spending on the stealth strategic bomber, and capping the MX missile at 50 units. His basis for these proposals is that the United States already has a more than adequate deterrent, especially in the Trident submarine. The programs that he would cut add significant cost but do little to enhance the strategic nuclear war deterrent.

Although the cuts in strategic programs would save about $18.5 billion over the next two years, reductions in conventional forces would save even more—almost $28.8 billion in budget authority in FY88-89. The Navy would bear a large part of the budget cuts because Epstein would reduce the number of carrier battle groups from the programmed 15 to 12, thereby eliminating funding for two new nuclear-powered carriers and reducing spending on carrier-based aircraft and other ships in the carrier battle groups.

The rationale for the 600-ship, 15-carrier navy is said to be The Maritime Strategy which calls for the U.S. Navy to attack the Soviet Navy in its home ports. However, Epstein argues that to carry out such high-risk missions with even a moderate expectation of success would require at least 21 carriers. He claims that it would be more cost-effective to destroy the Soviet Navy through a combination of land-based air force attacks and naval barrier defenses. Without the offensive maritime strategy, no more than 12 carrier battle groups would be needed to defend the sea lines of communication.

Not all military affairs analysts reach Epstein's conclusion on the need for carriers. William V. Kennedy has argued for a 15-carrier navy and a modified maritime strategy (*Wall Street Journal*, 10 July 1987). Kennedy agrees with Epstein and other Brookings analysts that carrier-led attacks on the Russian naval base at Murmansk and operations in the Norwegian Sea would be suicide and cannot be the strategic basis for the 15-carrier, 600-ship navy. But, unlike Epstein, Kennedy believes that successful carrier and amphibious task force attacks could be carried out against the Soviet base at Petropavlovsk in the North Pacific. The threat to Soviet territory in the North Pacific might act as a deterrent to Soviet actions elsewhere and thus justify a 15-carrier battle group navy.

Epstein does favor some increases in naval spending on fast sea lift in place of more expensive airlift. Given this sea lift and the use of air power to block key passes in the Iranian mountains, he argues that Iranian oil fields could be defended against a Soviet invasion with two less Army light divisions than the Administration's budget calls for. He would convert these excess light divisions to armored brigades and shift them to NATO.

Epstein's analysis shows that a successful nonnuclear defense of NATO is possible. He indicates how this could be done, even with some reductions in certain NATO-oriented Army and Air Force programs. But

he also shows how NATO could not succeed if 100,000 U.S. troops were withdrawn as some have advocated. Interestingly, William Kennedy would favor the troop withdrawal to fund and man the 15-carrier navy.

Some hard choices lie ahead for U.S. defense planners. If increases in the defense budget continue to be less than the rate of inflation, as was the case in FY86 and FY87, then investment programs like shipbuilding may continue at the expense of operations and support funding needed to maintain personnel and readiness levels. Can we afford this? Epstein says no and provides his solution to the budget crunch. We may not like his conclusions, but we will be challenged to provide better ones. This study is worth reading in order to prepare for that challenge.

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Stubbing, Richard A. *The Defense Game*. New York: Harper & Row, 1986. 445pp. $21.50

In the recent plethora of books by so-called defense reformers, there have been some useful ones, but this one definitely does not fit into that category. *The Defense Game* contains errors in fact, is oversimplified, and casts issues in a manner that creates false impressions.

For instance: Stubbing claims that the military is overpaid and when he finishes with his pay gymnastics, the "typical" 0-3 is in the 44 percent tax bracket. Fact or fiction?

Another: he attempts to credit Secretary McNamara with the elimination of Atlas and Titan missiles (ICBMs) from the SAC inventory for financial reasons. This completely ignores the military's cognizance of differences between the operating efficiencies of solid and liquid-propelled missiles. The U.S. Air Force planned early on that Atlas and Titan I (liquids) were stopgap measures until Minuteman (solid) could be perfected.

Give Stubbing high marks for his "revelation" that the failure of the U.S. Air Force to pay adequate attention to the Close Air Support (CAS) mission has caused frustration for the Army and contributed to its higher cost alternatives. His solution grossly fails—he would transfer the CAS mission to the Army's control—overlooking the infrastructure of air fields, personnel, maintenance facilities, and other requirements that the Army lacks to perform this mission. Transfer of the mission would probably cause duplication of this infrastructure. He rightly damns the Army for its managing of DIVAD but fails to recognize that there is a valid need for an antiaircraft weapon to be deployed with ground troops. He considers aircraft carriers to be an infantile fixation of the Navy, without understanding their mission.

Stubbing's chapter on Caspar Weinberger is not only inaccurate but downright vicious and his comments misleading. He demands strong controls over the military, yet he decries micromanagement.

This reviewer has served in both the U.S. Air Force and the defense

industry for over 30 years. Granted there are problems and there is room for reform, but misguided and misleading books such as *The Defense Game* are counterproductive. If read and taken seriously by newly elected public officials and their staffs, it could lead to the creation of more don't-tell-me-the-facts-my-mind-is-made-up "experts" in Washington. There are many good staffers in Washington but when a supposedly "inside" staffer writes a book such as this, it casts a cloud over the entire Defense Establishment. Joining in its denunciation will only convince many defense critics of its correctness; ignoring it will only allow falsehoods to spread. This review is merely to alert the prospective reader to Stubbing's misleading innuendos and gross misstatements.

H. LARRY ELMAN
Colonel, U.S. Air Force

Flanagan, Stephen J. and Hampson, Fen Osler, eds. *Securing Europe's Future*. Dover, Mass.: Auburn House, 1986. 336pp. $32.50

The United States and her NATO allies have been confronted with a common military problem since the beginning of their alliance: the containment of Soviet military power. Too many Americans fail to see beyond this strategic imperative to understand the complexities of the European situation and the varying perspectives that result—a myopia that leads to frustrations on both sides of the Atlantic.

This volume, from the Harvard University Center for Science and International Affairs, is an important resource for policymakers and interested observers wishing to understand the sources of cohesion and strain in the Atlantic alliance. The well-written and detailed chapters provide an essential foundation for current discussions of issues ranging from nuclear force reductions and conventional deterrence to out-of-area operations, and do not seem dated by recent developments.

A foreword by Andrew Pierre introduces the problem: increased transatlantic contacts have not led to increased mutual understanding as the "successor generation" in Europe grows more influential and as non-European cultures become more important to Americans. As a result, there is a need for "careful management of divisive issues so as to maintain Alliance cohesion."

These issues are explored in depth in chapters dealing with nuclear and conventional issues such as the Strategic Defense Initiative, emerging technologies, nuclear and conventional options, and political issues such as the "German problem," European domestic politics, arms control, and possible NATO alternatives. A concluding section discusses European economic security, armed neutrality, and regional security beyond the traditional NATO area.

The various authors provide a context in which to understand issues currently dividing the alliance. It is important to remember that Europeans are anxious to avoid *any* war,

nuclear or conventional, on their territory; deterrence is their highest priority. Part of deterrence is accommodation to nearby political realities, a position viewed by many Americans as one of supine acquiescence and incipient Finlandization. One result of this is a disinclination by Europeans to support military doctrines that appear provocative, such as current options for striking far beyond the forward edge of troops to the reinforcing echelons of Warsaw Pact forces.

Another facet of deterrence is making the Soviets believe that any aggression would have incalculable consequences. It is this latter dimension that explains NATO-Europe's hesitation about nuclear arms reduction—even though a nuclear war would be fought primarily on their territory. Since any war would be disastrous for Europe, they feel that the increased risk that a war might go nuclear is acceptable if deterrence is thereby increased. It seems to this reviewer that many Europeans would prefer the Soviets to believe that Western nuclear forces constitute a "doomsday machine" that cannot be stopped once war begins. This contrasts with American "warfighting" doctrines that call for the careful management of nuclear forces. The latter position makes more sense if war should break out, but the former may be more useful for deterrence in Europe. As the "rational" use of nuclear forces has become less likely with nuclear parity, only irrational/automatic escalation remains credible. As the danger of this position becomes more apparent, Europeans are still unlikely to move to a declaratory policy of "no first use," although there will be support for a policy whereby no *early* first use is necessary to prevent a Warsaw Pact breakthrough.

On the degree to which NATO should become involved in regional security issues below the Tropic of Cancer, the book points out that it was the United States, not the Europeans, who insisted on the provision in the NATO Charter that operations there not be required in support of the alliance, although they may be permitted. While the United States supplanted her European allies as a global power, they grew unwilling to support global operations. In the early days of the alliance they would have been only too happy to have NATO support for their colonial empires.

Readers of this journal will note that the maritime dimension of the alliance is not well-covered. If, as Robert Jordan has pointed out, NATO should be viewed as a maritime alliance, this is a significant lapse in an otherwise comprehensive survey. The land forces' continental strategy cannot succeed without maritime power keeping the Atlantic bridge to Europe open and projecting power on the NATO flanks. The Maritime Strategy of the U.S. Navy has even more ambitious intentions, of course.

The previous reservation notwithstanding, *Securing Europe's Future* is an important addition to the professional libraries of those interested in explor-

ing the NATO alliance in depth and understanding the varying issues and perspectives that will shape its future—and thereby the future security of the United States.

JOHN ALLEN WILLIAMS
Loyola University of Chicago

Archer, Clive and Scrivener, David, eds. *Northern Waters*. New York: Barnes and Noble, 1986. 240pp. $37.50

Northern Waters is a collection of papers on security and resource issues affecting an area within the latitudes of 60°N to 80°S and longitudes 40°E to 90°W. This encompasses the islands of Arctic Canada, Greenland, Iceland, the Faroes, the Shetlands, Jan Mayen, and Svalbard, as well as the mainland of Norway, reaching to the Kola Peninsula, and including the adjacent seas.

At a glance, one can quickly see that the papers discuss an area of considerable strategic interest to the United States in general and the U.S. Navy in particular. They are written by various people from the region. Editors Archer and Scrivener provide an introduction that puts the articles in context and, further, joins the resource and security issues. They make three points:

- Since the northern waters protect areas of transit, they are important for the transportation of economic resources.
- There are resources within the region of the northen waters that are of great strategic value.
- Political actors in the area are able to make a deliberate connection between resource and security issues.

In many ways this book is a primer on the area as well as the issues. Subjects such as law of the sea, resource endowment and exploitation, transportation of resources, new military technologies (including an interesting discussion of satellites), contrasting military strategies and political perspectives (both internal and external), and the control of conflict are addressed. A modest amount of regional history provides a useful background. Because this book is a compilation of separare papers, a particular subject tends to be covered in its entirety in that one discourse. This makes it convenient to pick up the book and read only that in which you are interested.

What *Northern Waters* does best is give to an area, that is to most of us nothing but cold, barren land and seascape, a life and vibrancy that puts strategic discussions into a context. The treatment of Svalbard in the discussion on the "Soviet Union and Northern Waters" is particularly good. On balance, it is a valuable collection of papers that deserves the attention of strategists and planners concerned with East-West strategy in general and the northern latitudes in particular.

J.S. HURLBURT
Captain, U.S. Navy

Lamb, David. *The Arabs: Journeys Beyond the Mirage*. New York: Random House, 1987. 333pp. $19.95

In this book, David Lamb sets out to answer the question he posed in preparation for his Los Angeles Times Middle East correspondent assignment: "If I want to understand the Arabs, not just their politics, where do I go. . . . Who are they?" While any one volume would be insufficient to answer fully this overlarge question, the author comes very close to providing a very comprehensive look at the people "beyond the mirage" of Arab politics, U.S. Middle East policy, oil politics, etc.

Beginning with a look at the people of Cairo and the plight of modern Egypt, Mr. Lamb then takes the reader on a tour of the Middle East based largely on his personal experiences there during the momentous years of 1981-85. His descriptions of Lebanon, Libya, terrorism, Islam, religious fundamentalism, the Palestinians, oil and the Gulf States, and the challenge of modernization are written in a tight, easily read, journalistic style which is filled with graphic images of people, places, and phenomena of the Arab Middle East. His successful attempt to add flesh and color to a region, which in many cases is described in the cold, hard logic of geopolitics, is a useful tool for one wishing to understand the Arabs.

In writing this description, Mr. Lamb has used the journalists' method of simplification. This could prove frustrating to some readers, but—as in his description of the evolution of Islam—he has in most cases provided the reader with an accurate account without the burden of minutiae. Certainly, more detailed, thorough, and scholarly works on the world's third monotheistic religion abound, but they are not read by the average American, and misunderstanding persists.

The real strength of this book is that it is simple enough to catch and hold the average reader's interest, but detailed enough to inform accurately about numerous aspects of what is to many a totally alien and mystifying Middle Eastern culture. Lamb tries to adhere to the advice given him by many Arabs: "Understand our culture for what it is, not for when it fails to measure up to Western standards." In fact, there are several portions of this book (Lebanon, Palestine) which could be considered to be too pro-Arab.

The book is weakest where Lamb dabbles in political analysis. For example, he is obviously concerned about international terrorism but falls into the trap of minimizing its moral impact by comparing terrorist death statistics with U.S. traffic fatalities. Similarly, while providing a highly illuminating view of both the cunning and the tunnel vision of Muammar Qaddafi ("a good study for a psychiatrist"), Lamb again goes on to minimize the long-term political impact of terrorism. His prescription for the problem also indicates a lack of in-depth political analysis of the field: revivifying the peace process; balancing U.S. policy in the Middle East; reducing U.S.-Soviet competition; and covert assassination of terrorist leaders. The first three recommendations are commendable

but his political analysis would have been far more convincing had he enumerated practical ways in which to accomplish them and had he also explained in detail why these methods have not worked as yet.

Lamb has, however, successfully avoided the pitfall of expanding this book into coverage of all Muslims and thereby confusing the issue of "who practices Islam," with "who (and what) is an Arab." He adhered admirably well to the central focus of the book: where the Arabs came from, what drives them, and what challenges they are likely to face in the future—all with a view to producing something to be read and understood by the layperson.

I would not recommend this as a comprehensive sourcebook on the Middle East but, if complemented by a study of Israel and Iran, it would certainly provide a good start. For the Middle East scholar, it will be unsatisfying from the standpoint of serious political description, but it will provide a potpourri of verbal images to enliven his understanding of the region.

D.B. DISNEY, JR.
Commander, U.S. Navy

Parrot, Bruce. *The Soviet Union and Ballistic Missile Defense*. Boulder, Colo.: Westview Press, 1987. 121pp. $17.95

Tucker, Robert W. et al. *SDI and US Foreign Policy*. Boulder, Colo.: Westview Press, 1987. 126pp. $19.50

In *The Soviet Union and Ballistic Missile Defense*, Bruce Parrot analyzes Soviet ballistic missile defense (BMD) capabilities, deployments, and policy statements by tracing the evolution of Soviet policies toward BMD. Parrot's work is a useful and much needed addition to the small body of literature currently available on Soviet BMD policy. *SDI and US Foreign Policy* is a collection of essays by Johns Hopkins University professors Robert W. Tucker, George Liska, David P. Calleo, and the late Robert E. Osgood. The authors examine the implications of SDI *vis-à-vis* U.S.-Soviet relations and NATO.

In *The Soviet Union and Ballistic Missile Defense* Parrot uses inductive reasoning and protocol evidence to examine and compare Soviet military and civilian publications on U.S.-Soviet relations and strategic defense. Soviet public statements are also tested against Soviet weapons development for possible political deception. Parrot argues that there are serious BMD policy disagreements in the Soviet Politburo. He claims there are two contending policy lines and interservice rivalries in the military. Supporters of the first policy line—such as the patrons of Brezhnev and now Gorbachev—aver that détente with the West is necessary so that more economic resources can be channeled away from the military and into additional high technology projects, thereby closing the East-West technology gap and improving Soviet economic performance.

According to Parrot, Gorbachev's Politburo patrons are attempting to

implement a two-pronged plan of diplomacy and public pressure with a sophisticated Western media campaign. However, this plan has been consistently undermined by the supporters of the second policy line. Here Parrot points to Politburo members Romanov and Shcherbitskii—who are often cited by Western scholars as opponents of Gorbachev—and several leading military officers, such as Marshals Akhromeev and Ogarkov. The second policy line is strongly in favor of BMD. The Air Defense Forces, backed by elements of the General Staff, support this line, while the Strategic Rocket Forces are more cautious. Parrot assumes that Romanov and others are encouraging military leaders to oppose Gorbachev's diplomatic initiative. There is some minor contention on this point since there is not enough information on the closed-door polemics of the Kremlin. Some Soviet analysts and most emigré-based assessments maintain that the relationship of the Soviet military to the Party's Politburo is such that the military is not a key political player in intense policy debates. Nevertheless, in the post-Stalin era, the military has been able to voice its concerns and offer expert advice to the Politburo. Active military officers are not represented on the Politburo and, as result, their interests are not directly represented at those long "Thursday" meetings.

In *SDI and US Foreign Policy*, Tucker avers that "SDI raises the prospect of precipitating a war—and perhaps a nuclear war—between the superpowers." He buttresses this argument with a White House pamphlet on SDI which contends that deterrence would collapse if the Soviets unilaterally deployed a nationwide BMD. Tucker believes that SDI is the first way point on an isolationist course for U.S. foreign policy: "SDI betokens the attempt to return to a past that cannot be restored, to a past when we were secure from physical attack. . . . " Tucker's arguments are indeed worthwhile, although he occasionally discusses mutual assured destruction as if it were the same as mutual deterrence. He does not recognize the concept of mutual assured survival. Both mutual assured destruction and mutual assured survival are, of course, corollaries of the concept of mutual deterrence.

Liska's essay propounds the obverse of Tucker's isolationist argument. Liska maintains that the United States could use BMD to effect the "elimination of Soviet dominance in Eastern Europe, using local disaffection from behind the shield of strategic defense." Calleo argues that BMD is a "technological fantasy" that will only exacerbate conventional, vice nuclear, defense spending priorities. Osgood sees no transformation of the NATO alliance—at least not for the worst—caused by SDI or a deployed U.S. BMD and believes a weapons regime with antitactical ballistic missile systems will exist. There is some domestic opposition in Europe to SDI research programs, but the United Kingdom, West Germany, and France are involved in SDI

research programs and a similar European initiative, and France has even embarked on its own BMD research program.

ANTHONY C. HOLM
University of Nevada, Las Vegas

Prados, John. *Pentagon Games: Wargaming and the American Military*. New York: Harper & Row, 1987. 81pp. $9.95

John Prados is a man who knows the subject of wargaming well. As a designer of commercial wargames, he has tangled with the same problems in the creation of a tabletop game as Pentagon strategists do in the invention of a much more complex war simulation. In this book, Prados not only explains the difficulties and faults of using wargames as an accurate simulation of the real world, but delves into the reasons why strategists are so fascinated by the artifical reality they create.

The book begins with a quote from Stephen Vincent Benét which sums up the essential problems of converting slippery reality into hard technical data. "It is all so clear in the maps, so clear in the mind, but the orders are slow, the men . . . are slow to move, when they start they take too long on the way." Men cannot be reduced to "wooden blocks," orders cannot be expected to be executed perfectly every time, and confusion reigns on the battlefield. The war does not proceed as foreseen in the well-ordered world of the wargame—the fog and friction of battle triumph.

A short history of the development of wargaming follows, from early models such as "Go" and "Chess" to more advanced models such as the German "Kriegspiel" which utilized many different types of playing pieces, terrain, and a specific scale to represent size and weight of units. Interesting anecdotes abound throughout these pages, including a short history of the Japanese decision to attack Pearl Harbor and the use of a real-time Kriegspiel which led to the German counterattack at the Battle of the Bulge.

The remainder of the book focuses on the growing use of the wargame as a simulator of reality in U.S. military policy, starting with the "Aggressor" and "Opposing Forces" simulations of the late 1950s and 1960s, to the current "MILES" wargames held at Fort Irwin, California and the Studies Analysis and Gaming Agency (SAGA) games played deep within the Pentagon.

The greatest portion of the book deals with the problems of quantifying the arms and men that form an army. To have an accurate and realistic wargame, the values used for the combat ability of each specific type of weapon and unit must be extremely precise. Firepower, though, is an ambiguous concept. Firepower scores are determined in laboratory conditions where there are no duds, and all equipment works perfectly. Additionally, while each weapon is tested in isolation, in a battle they operate together. Their collective firepower values cannot simply be added to find an aggregate value for

the larger unit. Finally, the decrease of weapon effect over range is not usually figured into the firepower scores. Explosive shells retain the same strength regardless of the distance to the target, whereas solid shot weaponry effect decreases radically as distance goes up. Certain weapons become much more useful than others over small distance changes, but this is not calculated into unit strength.

A further fallacy in the creation of firepower scores lies in the use of the most recent war as the model for effectiveness of weapons, measured by which type of weapons cause what percentage of casualties. However, the technological advances in weaponry render any data obtained in a previous war almost useless for determining the utility of the weapon in the next war. The type of war fought can also change dramatically. The most obvious example is Vietnam where casualty percentages from mines and booby traps were much higher than in the Korean war, from which the weapon effectiveness figures had been drawn. The effects of terrain introduce another level of complexity into the design of a wargame. Like firepower, it is nearly impossible to quantify accurately the effects of terrain upon each piece of equipment moving over it, defending it, or shooting through it. Leadership, troop morale, and training add yet more complexity to the simulation, for weapons cannot be used to their full expected effectiveness if the troops that use them are of poor quality.

All of these uncertainties come to a head when nuclear weapons are introduced into the equation. There has never been a war that has employed tactical nuclear weapons, and the net U.S. experience of combat in a nuclear environment was a series of extremely artificial maneuvers conducted in the 1950s. Very little is known about how these weapons will function in a real war and what their effect will be upon other aspects of the battle. Any quantification of their effects contains a good element of guesswork.

The final type of wargames that Prados analyzes are politico-military simulations. These suffer from further subjectivity as they are usually moderated by human umpires who add their own biases into the game. In many games, the people who caused the game to be played have specific personal agendas and aims which they wish the games to show. Therefore, the umpires force the game to proceed in ways which the players are trying to avoid, thus negating any semblance of realism. One example was a SAGA game which ended in a nuclear war. One player complained that "if your control group had left us alone, we could have negotiated a lasting peace!"

The book includes three pull-out wargames to introduce the novice to the ideas behind simulated wargaming. Although fairly simple, they serve to illustrate the complexities of reducing real-life situations such as Pentagon research and development or budget procurements into playable

wargames. One realizes with a start that the appreciable differences between reality and these games is probably quite similar to the differences between a real war and a Pentagon simulation.

Prados does not state that wargames have no utility, only that now, during a period of peak interest in gaming technologies, they are being used far in excess of their abilities to predict anything real. Commanders who play wargames are often lulled into believing that they have had real battlefield experience, when in reality they have nothing of the sort. The true strength of wargames lies in their ability to inculcate basic tactical concepts into field commanders and to give the experience of making command decisions to higher level officials. To claim that a wargame, however complex, simulates the actual events of a war is the purest fantasy.

HENRY W. MAHNCKE
Washington, D.C.

Burrows, William E. *Deep Black: Space Espionage and National Security*. New York: Random House, 1987. 401pp. $19.95

As impelled by the title, William Burrows takes the reader on a fantastic, sometimes disconcerting, and often incredible journey into the deepest reaches of the so-called black world of the U.S. intelligence community. He approaches the subject with the zeal of an investigative reporter preparing an exposé and the plodding style of a graduate student writing a history seminar paper. His uneven handling of this material, while a distraction, fortunately does not detract from the fundamentally solid nature of the book.

Mr. Burrows begins and ends his book with the same thesis. According to him, "[I]n the case of arms control, it is important for the citizens of the Western democracies to gtasp enough of the process of the national technical means of verification and about space surveillance in general so that they can make informed judgments on the matter, rather than abandon such an important subject to the whims of successive politicians and their subordinate ideologues."

Despite the title, this work addresses much more than just the business of "space espionage and national security." The contents of the book range from a continuing discourse on the competition between the U.S. Air Force and the Central Intelligence Agency (CIA) for control of U.S. space-based reconnaissance assets, to a review of the growth of the U-2 and SR-71 programs, to rather elaborate (and one suspects sometimes speculative) discussions of past, present, and future space surveillance systems. The author even includes a discussion of the Soviet space reconnaissance programs and antisatellite weapons as he and his sources understand them. The technical descriptions make for fascinating reading, and the conviction with which Mr. Burrows describes the sophisticated equipment makes one believe that the

systems described could indeed do what he says they do. Unfortunately, the secrecy that shrouds such technology makes it virtually impossible to verify even the existence of these systems, not to mention their capabilities.

If the information presented is correct, as Mr. Burrows alleges, there is much that the intelligence community can point to with pride. The author examines in some detail how the developers of space-based surveillance systems continually push technology to the very limits in their search for a better way to gather the information demanded by the National Command Authority. There is also a great deal about the U.S. intelligence collection process that should be an embarrassment to the Government. Mr. Burrows does not seem to find fault with the trial and error methods employed in the pursuit of new technology. Rather, he criticizes the apparently unnecessary competition between agencies within the Government as each tries to best the other through its design contractors. His contention that secrecy often is used to hide inefficiency and a lack of cooperation between Government organizations is the heart of his criticism and is well-documented.

Perhaps the most frustrating aspect of this book is the reader's inability to confirm the accuracy of the author's statements. It is the nature of such works that the sources who are willing to discuss (for attribution) their experiences are often those who have expressed dissenting views, either during their tenure "on the inside," or after they have left the Government. This may mark them as "rabble-rousers" or "sore losers," and cast some doubt on their comments. The use of unnamed inside sources or expert sources who are outside of the system, while lending credibility, still falls short of confirming the accuracy of the author's allegations. Thus, the reader is left to decide for him/herself exactly where the truth lies.

In this book, the author has resorted on several occasions to the technique of "validation by condemnation." That is, he cites a well-placed individual who expressed fear or anger at the revelations being offered and then implies to the reader that this is proof of the accuracy of those revelations. This is an appealing argument and may have some basis in fact. The author's use of buzzwords and certain documentable facts also has the effect of lending credibility to what might otherwise be called innuendo or speculation. A good example of this is his habit of referring to space reconnaissance programs (real and postulated) by declassified or compromised code names that have appeared in the open press. This gives him the aura of someone on the inside, in spite of his acknowledgment that his data has been gathered from available unclassified sources.

The underlying motivation for this book is revisited convincingly in the final chapter. Mr. Burrows concludes his examination of the growth of the various "national technical means of

verification" with an intriguing enigma. His questions are simple and straightforward. If the United States has been able to detect and identify Soviet violations of previously negotiated arms control agreements through the use of the aforementioned national technical means, why do current Government officials contend that future arms control agreements are impossible because they would be vulnerable? If past systems have been sufficient to support allegations of Soviet treaty violations, why would the present and future surveillance systems described in this book be unsuited to the task of treaty monitoring in the future? The questions are good ones, no matter how one feels about the factual content of the rest of the book. The average reader will be left with an uncomfortable feeling that perhaps there is indeed something that the Government is not telling the American public. If that feeling persists, Mr. Burrows will have achieved his objective.

CHARLES L. ALDRICH
Lieutenant Colonel, U.S. Air Force

Lockhart, Robin Bruce. *Reilly: The First Man.* New York: Penguin Books, 1987. 167pp. $3.95

Readers who enjoyed Lockhart's *Reilly: Ace of Spies* will want to read his sequel, *Reilly: The First Man. Ace of Spies* was made into a TV miniseries and, in the final episode, after learning his fate from the Cheka (Soviet secret police) boss, the dreaded Feliks Dzherzhinsky, Reilly is gunned down in a forest clearing.

In his new book, Lockhart reveals the disagreement he had with the series' producers about this ending. He wanted the series to end as the book did, with Reilly's fate wrapped in mystery. In reality, the original Russian news version of Reilly's death stated that he had been killed on the Soviet-Finnish frontier in September 1925. But, there has never been an official Soviet statement that Reilly died at the hands of Soviet authorities.

Lockhart's sequel makes the startling claim that Reilly not only was not killed, but in fact defected to the Soviet side and for the next two decades assisted Soviet intelligence in setting up and running foreign clandestine operations. Lockhart's new book is a storehouse of evidence to support this unsettling thesis.

Why should it be unsettling that Sigmund Rosenblum (Reilly's real name) was not shot by Dzherzhinsky's fanatics, but ended up working for them? What importance would this have other than tidying up a footnote in the narrow and murky *demimonde* of espionage history? According to Lockhart, it is extremely important because Reilly's defection to the Soviets over 60 years ago so damaged Western security interests that the consequences are still with us today. Such was the evil fruit of Reilly's change of uniform that Western intelligence agencies, especially the British, have been crippled by the implantation of a coven of moles or by a suspicion of moles which has

precipitated a paralyzing mistrust among Allied intelligence agencies.

Here follows the bare bones of Lockhart's hypothesis. Sidney Reilly returned to Russia in 1925, only ostensibly, to contact members of the anti-Bolshevik conspiracy called the Trust. Beforehand, he had arranged, through back channels, with Dzherzhinsky to defect to the Soviet Union under the cover of the Trust operation. The Cheka received him with open arms and masked his defection with false reports of his death. Dzherzhinsky and companions welcomed Reilly with honor because although they were veteran conspirators—cunning and patient—their experience was almost entirely within Russia. Reilly not only brought them an Aladdin's cave of information on the British secret service, but a high degree of sophistication and familiarity with the world outside of backwards Russia—a quality in extremely limited supply among top Bolshevik leadership. After Reilly's disappearance in 1925, Soviet intelligence changed tack and launched a quiet but persistent and insidious attack on the West, focusing on Britain. Reilly's knowledge of the turf was indispensable and probably the inspiration behind the new effort. He identified targets among the sophisticated yet disaffected upper class in England. This resulted not only in the recruitment of a "hornet's nest of homosexual moles" but also of the lethally effective heterosexual, Kim Philby. (Apparently the KGB's enlightened employment policies barred no one on the grounds of his/her sexual preference.) The same approach was taken elsewhere in Europe and to some extent in the United States where the Roosevelt administration, all the way to the White House, became peppered with Soviet agents. Western counterespionage services, where they existed, were made aware of the scope of Soviet operations in the thirties only by the defection of key Soviet intelligence officers who bolted to the West in preference to certain death in the U.S.S.R., which Stalin's purges had turned into an abattoir. Though Reilly is now dead, his legacy lives on in current day Soviet clandestine operations, not only in technique, but in the patient long-term recruitment and placement of agents.

Lockhart makes this mouthful palatable by seasoning it with both evidence and conjecture. First, there is substantial data from widely disparate sources stating that Reilly did not die in 1925. Many sources attest (some to Lockhart personally) that Reilly was alive at least as late as the midforties. The author also claims that despite the fact that Reilly was illegitimate, left his motherland in his youth, and spied for Britain, he always had a deep affection for Russia. Furthermore, despite his high living and capitalist business adventures, Reilly's political leanings were very much to the Left. He not only flirted with Marxism in his youth, but in later life attested to the virtues of Bolshevism. (He even did this in writing to Lockhart's famous father, Bruce Lockhart, with whom Reilly

conspired to overthrow the Reds in 1918.) Reilly had, on occasion, predicted the victory of the Bolsheviks and often remarked that it would probably be better to join rather than to fight them. In addition, Reilly's personal and professional life gave such ample evidence of deceit and deviousness as to cast suspicion on his loyalties, if, indeed, he had any. It has also been attested that Reilly knew that the Trust was a Soviet setup before he made his final trip to Russia. Soon after Reilly's disappearance, British intelligence suffered dramatic reverses and agent losses in Russia. Lockhart claims that an MI5 (British counterespionage) "mole-hunter" told him in no uncertain terms that Reilly went completely over to Moscow.

Most of the evidence presented in *Reilly: The First Man* is circumstantial. Lockhart's chain of evidence has some weak links in it. The statement that Sidney Reilly did not die in 1925, lived two more decades, was Left in his politics, and so on, does not mean that he became a Karla-like *eminence grise* masterminding post-1925 Soviet intelligence operations. Although convincing and intriguing, many of Lockhart's arguments are of the *post hoc non propter hoc* genre.

On the other hand, airtight ratiocination is but one method of nailing down truth. Intuition is the mind's direct line-of-sight to the truth. The fact that Lockhart does not present his conclusions by means of a neo-scholastic thesis does not mean that he has not rent the veil shrouding the mystery of Sidney Reilly.

Lockhart also makes a case for a serious scholarly historical study of intelligence. If not handed down, a treasury of knowledge can be dissipated in less than a generation. How many professional intelligence officers in the West today have read even one of the accounts of important Soviet defectors such as Agabekov, Krivitsky, Reiss, and Orlov, or later defectors such as Gouzenko, whose revelations led to the disclosure of U.S. atom spies? Loss of memory is regarded as a mental disorder in a person. Can it be considered anything less in an institution?

Lockhart is an excellent writer. He is not only clear and concise, but eloquent. His prose is captivating, and his new book is good reading not only for those in the intelligence world, but also for those who enjoy a well-spun tale.

DENNIS A. BARTLETT
Saint Ignatius Institute

Dower, John W. *War Without Mercy: Race and Power in the Pacific War.* New York: Pantheon Books, 1986. 398pp. $22.50

The devastation left in the wake of the Pacific war was immense. For the United States, total victory was synonymous with total destruction. What was required to achieve total destruction was only possible through mass mobilization of the population and the creation of a fighting force which could mirror the intensity of the Nation's anti-Japanese sentiment. The result was a ferocious battle cry

which reduced the enemy to a subhuman level.

Perhaps it was only through this reduced consideration of the enemy that the war could have progressed through such horrific proportions. In any case, victory was achieved in a "war without mercy." In his book, *War Without Mercy: Race and Power in the Pacific War*, John W. Dower examines the evidence of this racial intensity between the United States and Japan. In a time when it appears as though the population of the world has gained a greater understanding of, and respect for, racial differences and diverse heritages, it is disturbing to read Dower's account and accept the fact that he is writing about very recent history. The war atrocities, the savagery in battle, the dehumanization of the enemy by both sides, and the very dimensions of the conflict, which Dower describes in comprehensive detail, are shocking and difficult to imagine. According to the author, however, these facets were unique to the Pacific war and are the products of racial differences which turned into racial hatred.

In addition to his examination of the war itself, Dower devotes a good portion of his text to an exploration of Japanese culture and the perception of the "Yamato Race" as the nucleus of a grand global policy by the Japanese. While this examination reveals some very interesting and enlightening aspects of Japanese society, Dower's conclusions will not surprise any student of Japanese history. There is, however, in the final chapter of this book, a subtle foreboding over Japan's economic prowess and how that may once again spawn "patriotic anger" between the United States and Japan. If economic competition leads to conflict, just as territorial expansion did in 1941, Dower appears to believe that racial aspects of such a conflict may appear again. How prevalent these aspects become will certainly be an indication of how far the world has truly progressed over the past 40 years.

THOMAS B. MODLY
Lieutenant, U.S. Navy

Nguyen, Tien Hung and Schecter, Jerrold L. *The Palace File*. New York: Harper & Row, 1986. 542pp. $22.95

This book chronicles the demise of the Republic of Vietnam. It is a distressing story. There is little that is new in it, but the detailed documentation of American guarantees to Saigon and the blend of anguish and outrage permeating its pages combine to leave the reader with a feeling of anger and shame, anger at what happened and shame for America's role therein.

Three themes are intertwined in this tale. One is about the decline and fall of South Vietnam, reaching high drama in the spring of 1975. The second deals with key personalities in the United States and South Vietnam and the part they played in the final debacle. The third is the South Vietnamese perception of what transpired—indeed, this is President Nguyen Van

Thieu's history of the last years of his country, told principally through Nguyen Tien Hung's pen.

One sees the slide into disaster beginning with an optimism that altered, pace by measured pace, into a sense of foreboding followed by an awareness of impending doom. To the South Vietnamese, the blend of Vietnamization plus negotiations utilized by the Nixon administration "competed with and undercut one another." The U.S. opening to Beijing meant to Thieu that "South Vietnam had metamorphosed from being an asset to a liability." The Paris Accords of 1973, which purported to achieve "peace with honor . . . [made] no provision for the removal of North Vietnamese troops [from South Vietnam]. . . ." It was understood in Saigon that "the threat of U.S. intervention was critical to deterring a North Vietnamese invasion." Thieu apparently believed that to be a credible threat, principally because of Nixon's earlier willingness to use force in the face of massive public and political opposition. Reinforcing South Vietnamese confidence in the American guarantee was the apparent existence of "a U.S. contingency plan to keep North Vietnamese targeting information updated even after the cease-fire."

We cannot know if such a threat would ever have been exercised had Nixon been President when, or perhaps, *if*, Hanoi had undertaken its grand offensive against Saigon. What is certain is that the Watergate scandal weakened the Presidency and replaced Nixon with a weak and mediocre President. The scandal and its immediate consequences were not fully understood by Thieu. What was recognized in short-order was that Congress "had no time or inclination to deal with any other issue, let alone aid for South Vietnam."

These developments finally made an impression on Saigon. The authors describe how Thieu planned to relinquish virtually all of the two northern Corps areas in order to save the rest of the country, as "a reduced 1975 [U.S.] aid program could support only a truncated South Vietnam." The intensity of the ensuing Communist assault, initiated before that withdrawal could occur, was a shock to Saigon, although the attack itself apparently was not a surprise. The end was truly pathetic. As the authors put it, "Evening TV news programs showed terrified refugees struggling to flee Da Nang, the South Vietnamese Army in a shambles, and [President] Ford playing golf." On 30 April 1975, the war ended with the last Americans and some South Vietnamese scrambling for safety from the ruins of a war.

It is hard to be dispassionate about this portrayal of an American humiliation and a South Vietnamese catastrophe. One is struck by how personalized the Vietnamese leadership viewed policy in general and the United States in particular. Senses of reassurance, despair, and betrayal fluctuated according to the U.S. officials with whom Saigon was dealing. Nixon comes across in a

generally favorable light as a strong President who "had no illusions about Hanoi's intentions" and acted as best he could under the circumstances. Others do less well in this book. There is something profoundly unsettling about a photograph of Ford, Kissinger et al. sitting in the White House under a portrait of Theodore Roosevelt, while acquiescing in defeat and abandoning an ally. One senses that Nixon (to say nothing of Roosevelt!) would have done better.

The book itself is hardly a model of craftsmanship. It reads like a diary with some expanded narrative and documentation. The discussion lacks chronological continuity in places. The authors acknowledge the corruption that permeated the Vietnamese leadership, yet they downplay Thieu's own authoritarianism and corruption, to say nothing of the venality of his family. The text could also have benefited from the judicious application of a better editorial pen.

These caveats notwithstanding, one must nonetheless acknowledge the essential accuracy of the book's thesis. The United States pledged its support to South Vietnam before and after the Paris accords were signed, and the U.S. Congress—aided and abetted by Ford, Kissinger, and their cohorts—betrayed that trust. The extent to which U.S. policy was hostage to the vagaries of elections occurring at fixed intervals is driven home with exceptional force. It is hard to escape the conclusion that the U.S.S.R. and the People's Republic of China served Hanoi better than the United States served Saigon; after all, whose flag now flies over Ho Chi Minh City? Averting a repetition elsewhere of this modern tragedy remains the first order of business for the United States.

ALAN NED SABROSKY
U.S. Army War College

Evans, Ernest. *Wars Without Splendor: The U.S. Military and Low-Level Conflict.* Westport, Conn.: Greenwood Press, 1987. 160pp. $27.95

A small book of even smaller success, *Wars Without Splendor* does, nevertheless, have some virtues. The first four chapters provide a brief but knowledgeable *tour de horizon* of the current state of revolutionary insurgency and terrorism. With somewhat less success, Evans, a professor of international relations at Rhodes College, Memphis, Tennessee, also discusses why he thinks low-intensity conflict is a major American foreign policy problem.

The second part of the book reviews the Nation's current and proposed capabilities for dealing with low-level conflict. Evans defines "capability" in strictly military terms, which indicates that he has drawn incomplete lessons from all the historical experience he cites in the first section of his book. Becoming more flaccid as it limps to a close, *Wars Without Splendor* offers no new concepts or even a thoughtful synthesis of old ideas in its two skeletal concluding chapters. Only a useful selected bibliography reminds

the reader of the author's earnest intentions. However important its subject, *Wars Without Splendor* may be safely forgotten.

ALLAN R. MILLETT
Ohio State University

Larrabee, Eric. *Commander in Chief: Franklin Delano Roosevelt, His Lieutenants and Their War.* New York: Harper & Row, 1987. 723pp. $25

This superb history, beautifully and tightly written, is a summation of U.S. war experience as directed or influenced by the President as Commander in Chief and by his principal deputies—briefly preceding and including World War II. Not only are the Joint Chiefs (Marshall, Arnold, and King) featured, but the Unified Commanders (MacArthur, Nimitz, and Eisenhower) are included as well. In addition, three central figures (Vandegrift, Stilwell, and LeMay), key to America's involvement, are highlighted to reflect the depth and breadth of the President's awareness and the varied but close relationships he had developed within the military over the years.

Narrative in style, the author's insights provide thorough evaluations of the characters and actions of the President, his lieutenants, and allied officers. Specific battles provide insights into situations and theories of which some examples are: the mid-1943 U.S. raid on the Ploesti (Rumania) refineries as a test of strategic warfare; Vandegrift's and Nimitz' leadership in pivotal Guadalcanal and Midway battles; and Eisenhower's brilliance in building the coalition which resulted in the successful invasion of Normandy. Special gems such as Roosevelt's put-down of MacArthur, "You must not talk that way to the President!" and the wonderful quotes from a 23-year-old Army Air Force officer, Bert Stiles, killed very shortly after having written them.

Though the book is generally based on secondary sources, extensive research and cross-checking generate fresh insights and understandings. The author is reasonably objective and shows warmth and understanding toward his principals despite their sometimes surprising deviations; exceptions being MacArthur and Stilwell. The myths surrounding MacArthur receive more than pinpricks, and readers must weigh for themselves how deserved these "cuts to size" are. There is a certain lack of focus that makes the chapter on Stilwell the least satisfying. There is no dearth of incident, too much discussion of U.S.-China relationships at every level, but no discussion of Stilwell's relationship with the Communist Chinese. The worth of General Stilwell in the field is not developed sufficiently to justify the proposition that it was wrong to have fired him when the Generalissimo insisted.

On the other hand, President Roosevelt could not have a more sympathetic biographer. Though his strong stands against the Joint Chiefs are noted, and his divergences from Churchill and the British Joint Chiefs

fully covered, there is no hint that any of these decisions were other than right and proper. In his service to his country, it is clear that President Roosevelt relished his role as Commander in Chief and found in it his ultimate fulfillment. His life had qualified him very remarkably for wartime leadership, and his understanding of the Constitution and our democratic process insured his political success, whatever his military genius. He proved himself global in scope, brilliant in conception, sensitive to logistics and timing, perceptive in selecting major leaders, and effective in delegating. Only in Guadalcanal did he interfere directly with a military operation after it was underway. He insisted that the JCS direct every possible force to save that shoestring campaign, and his intervention proved correct.

As World War II fades into the past, especially for today's military and political leaders, this book is most timely, reminding us of such major war requirements as mobilization, rules of engagement, battle readiness, and strategic plans. *Commander in Chief* should be required reading for *every* War College student and military commander, *every* member of Congress, and *every* media reporter.

The tools may have changed, but the global and personal dynamics of war remain the same. This book reminds us of the fundamentals of war—the human factor, the irrationalities, the raw courage, the glories and squabbles of services and allies, the untried and variedly successful theories, the mobilization of production, and above all, the essentiality of publicly supported objectives and an agreed basic strategy.

T. R. WESCHLER
Vice Admiral, U.S. Navy (Ret.)

Hammel, Eric. *Guadalcanal: Starvation Island*. New York: Crown Publishers, 1987. 435pp. $24.95

For several years the Naval War College's warfighting courses have used the battles for Leyte Gulf as the primary case study of World War II. There, an overwhelming superiority of U.S. power determined the outcome—tactical brilliance and errors notwithstanding. The battles on and around Guadalcanal from August through December of 1942 offer far more thought provoking and valuable material for contemporary military leaders and planners. In today's world we no longer have a dominance of power. The early months of any future war may well resemble those months of confusion and bloodshed to control an island of no strategic importance where, as Hammel states, a "confluence of events" focused the military might of two great nations.

To his credit, Eric Hammel does not become pretentious in attempting to provide strategic overviews or draw historical implications. What he does do very well, and in chronological order, is portray small pieces of this campaign as viewed by those in the jungle, in the cockpit, and on the decks of the naval units involved.

The action is vividly captured but not overblown; the fear, hunger, filth, disease, stupidity, improvisational brilliance, and sheer bravery of the combatants at Guadalcanal could not be overstated. This book should be read by all who train for warfare for the same reasons stated eloquently by Ernest Hemingway in his introduction to *Men At War*, published in the same year this battle occurred: "So when you have read it you will know that there are no worse things to be gone through than men have been through before."

Battles in the Coral Sea in May and off Midway in June had been costly strategic victories, their value not clearly perceived despite the successful containment of Japanese expansion. The British, Australians, and New Zealanders, who had the most at stake in the Solomons, were overtaxed defending the Empire elsewhere. Japanese attempts to build an airfield on the Lunga Plain forced changes in U.S. strategy and focused attention on Guadalcanal.

U.S. ground, sea, and air units had been stripped of the personnel trained to provide cadres for newly built units. Surviving on captured food, troops suffered from fungal and jungle diseases, and tolerated clothing inadequate for jungle warfare. Our torpedoes were totally ineffective while those of the Japanese could tear off a cruiser's bow or disintegrate a destroyer in seconds. Our Navy still steamed in close line ahead and tried to cross the "T" long after those torpedoes had made this the worst possible tactic. Fighter aircraft designed for export to Europe were diverted to the theater without support or even directions for assembly. Their oxygen systems were inoperative and could not be flown above 14,000 feet to take on the Zeros, Vals, and Bettys which operated well above that ceiling. Ships sailed into battle without doctrine, communications, or knowledge of the others on their team. Admirals worried about conserving scarce carrier assets while men died on the beach. At one time there were no fully operational carriers in the theater. The sheer violence of some battles still ranks as the worst of all time; the events at Bloody Ridge and the early hours of Friday, 13 November, off Savo Island, should never be forgotten.

The litany could be extended over several pages but more important are the human traits pictured so well by Hammel: the bravery, ingenuity, dedication despite frustration, endurance, and sheer guts under the worst possible conditions. Many of the names he mentions have lived on in history: Puller, Walt, Edson, Foss, Scott, Callaghan, Vandegrift, Halsey. Thousands more never made the history books though their gallantry was fully as great. He introduces a few and permits us glimpses of the conflagration through their eyes, glimpses that remain starkly vivid despite the years.

Warfare is more than arrows drawn across a map, more than long-range high-tech weapons. It concerns dedicated men and women who may find themselves in a situation such as

Guadalcanal, fighting a determined enemy at a distance of only a few feet or yards, with weapons designed for long-range use, and where tactics will fail and operable strategy will become clear only in hindsight. Eric Hammel has written a concise, readable, colorfully descriptive but unassuming tribute to those who served their nation with distinction at that difficult time. To have been at Guadalcanal was the mark of a tested hero for many years. These men, pictured so well by Hammel, would agree with Hemingway's words from that same year, "I have seen much war in my lifetime and I hate it profoundly. But there are worse things than war; and all of them come with defeat. The more you hate war, the more you know that once you are forced into it, for whatever reason it may be, you have to win it."

DAVID G. CLARK
Captain, U.S. Navy

Coffman, Edward M. *The War to End All Wars: The American Military Experience in World War I.* Madison: University of Wisconsin Press, 1986. 412pp. $35

This standard work, first published 19 years ago, is reprinted in paperback without change, a fitting decision because no alternative interpretation has materialized. Coffman's book remains the best single history of the American Expeditionary Forces (A.E.F.) during World War I. He sought to produce an account "more comprehensive than earlier histories" by moving beyond traditional headquarters narratives and bringing in "the people who were actually involved . . . at all levels." In this respect he anticipated John Keegan's *The Face of Battle* and aspects of the "new social history."

Nevertheless, the book culminates rather than inaugurates a historiographical effort. Like predecessor accounts that it replaces, the book concentrates on the A.E.F. of 1917-1918 and the celebration of its achievements. Although more candid and less partisan than earlier accounts written closer to 1917-1918, the book—like other such works—is essentially an operational history of the A.E.F. Limited analyses of national policy and strategy are subordinated to operations, although mobilization and logistics receive measurable coverage. The book approaches its subject from the national perspective, minimizing treatment of the larger struggle of which the American contribution was a part.

We leave Coffman's pages with the feeling that despite all manner of difficulties, including unpreparedness and obtuseness on the part of the Allies, the A.E.F. became a splendid fighting force and made the difference in the war. The youthful, vigorous, and pristine republic was successful in its effort to resolve the conflict that had exhausted decadent Europe. General John J. Pershing emerges as the hero of the enterprise—taut, disciplined, seasoned, and determined—the embodiment of what it takes to win campaigns

despite all manner of interference from the home government and allies.

The only competitor volume is that of Harvey DeWeerd, *President Wilson Fights His War*, also published in 1968 as part of the Macmillan series on the wars of the United States. DeWeerd attempted to break with the traditional approach to his subject, recognizing the obvious reality that the struggle was essentially European in nature: "Europe was fully engaged for four years . . . any attempt to describe the American contribution in a vacuum, or to present the European phases of the war as mere background to the American effort is bound to produce distortion."

Unfortunately this promising approach did not lead to a distinctive, authoritative outcome. Despite his intent, DeWeerd produced a book that in essentials is similar to those of the A.E.F.—tradition centered. He provides extensive background, devoting most of the first two hundred pages to the development of the war during 1914-1917, before the A.E.F. became a factor. Moreover, he recognizes that American operations in 1918 were an aspect of inter-Allied campaigns—the desperate Anglo-French-Belgian defense against the great German offensives of March-July and Foch's decisive counteroffensives of July-November.

Until someone offers a new analysis based on a perspective different from that of the traditional A.E.F. studies and does the task well, *The War to End All Wars* will remain the standard general history of the American role in the great conflict of 1914-1918.

DAVID F. TRASK
U.S. Army Center of Military History

Gall, Lothar. *Bismarck: The White Revolutionary 1851-1898*. London: Allen & Unwin, 1986. 676pp., 2 vols. $69.90

Published in German in 1984, this important work constitutes the first in-depth reevaluation of Otto von Bismarck by a major West German historian since 1945. Gall, professor of modern history at Frankfurt University, has taken as his theme, Bismarck the "white" or conservative revolutionary. The two volumes, divided at the year 1871, abound with attestations to the Iron Chancellor's ability to conduct the politics of the feasible. The statesman who emerges from these pages based his actions upon cold, rational calculations of power politics, knew the limitations of any given situation, and placed *realpolitik* above *idealpolitik*.

Gall has two major points to make. First, he rejects both the positive hero worship of Bismarck by the Prussian school—largely based upon Bismarck's memoirs wherein the chancellor wrote history not "as it happened" but rather as he wished it to have happened—and the denigration of Bismarck's accomplishments by today's scholars. Along the way, Gall rejects the thesis that Bismarck was the master manipulator. Rather

than unraveling a carefully thought out, predetermined plan to realize Prusso-German hegemony in Europe, Bismarck conducted several short campaigns against isolated adversaries on the basis of the given power-political constellations. In doing so, he was guided less by ideas than by vital interests.

Secondly, Gall decries the ongoing fixation of West German historians with the alleged primacy either of domestic or foreign affairs. Both interact constantly; neither is independent of the other. Thus he depicts Bismarck's colonial policy of 1884-86 as a function of both foreign and domestic policy. Moreover, Gall rejects current buzzwords such as "Bonapartism" and "Caesarism" to depict Bismarck, as neither reflects the political system under which Bismarck worked. The chancellor's relationship with the military is a case in point. Gall argues that the permanent elevation of the military above the political branch of government, its constitutional foundation as a weapon of royal prerogative, and its five or seven-year removal from Parliament's budgetary control reflect more the realities of the Prusso-German state that Bismarck inherited than his own specific views on the subject.

Bismarck's greatest accomplishment—especially in light of subsequent German history—was his ability to understand the nature of the European chessboard upon which every piece interacted with every other. Taking the Anglo-Russian antagonism as the norm in European affairs, Bismarck sought to pursue a "free hand" in diplomacy within the limits imposed by this constant. His voluntary renunciation of future wars of aggression and acceptance of semi-hegemony in Europe in the "Bad Kissingen Decree" of 1877, perhaps, is the best evidence of the chancellor's intellectual growth from his earlier days as crisis minister and political juggler.

On the negative side of the ledger, Gall points out that Bismarck left a bitter legacy, or mortgage, both to his own and to future generations. The chancellor's penchant for denouncing his political foes as enemies of the state, his simplistic friend-foe mentality, his inability to appreciate political compromise, and his "irresponsible" policy of forceful "Germanization" of Prussian-Polish lands foreshadowed many of the future policies of German leaders, especially during the two World Wars of the 20th century.

This superb study, above all, partially liberates West German scholarship from the narrow confines imposed upon it by those who believe in the primacy of impersonal structures and systems and restores the credibility of "historical biography" as a legitimate method of explaining historical phenomena. It further reaffirms A.J.P. Taylor's assertion that Bismarck is the one European statesman worthy to be recalled from the grave for a discussion of his policies.

HOLGER H. HERWIG
Vanderbilt University

Schroeder, John H. *Shaping a Maritime Empire: The Commercial and Diplomatic Role of the American Navy, 1829-1861*. Westport, Conn.: Greenwood Press, 1985. 229pp. $35

John Schroeder is a professor of history at the University of Wisconsin, Milwaukee and the author of several previous works about the antebellum U.S. Navy. In this study his central thesis is that although the U.S. Navy's role expanded greatly between the inauguration of Andrew Jackson in 1829 and the outbreak of the American Civil War in 1861, this expanded role was not part of a conscious policy shift, but was an *ad hoc* response to growing American commerical interests and diplomatic responsibilities. Despite the Navy's expanded role, he writes, "traditional American assumptions and attitudes about the professional military, in general, and the navy, in particular, remained in place."

In the 1840s, proto-Mahanians like Matthew F. Maury and Secretary of the Navy Abel P. Upshur urged upon Congress the idea that a nation's navy should be comparable to its commercial interests. Such views were out of step with the mainstream of American thought about the proper use of an American Navy. Nevertheless, expanded commercial interests and diplomatic ties during the next two decades dictated an expanded role for the Navy. U.S. naval vessels were the most visible American presence in areas where Americans traded, and captains of those vessels almost automatically assumed a diplomatic role--often as negotiators, occasionally as combatants. The absence of a clear national policy defining this expanded role meant that there was virtually no coordination between American diplomatic representatives and the Navy Department. As a result, Navy captains did not feel bound to honor requests, however urgent, from American diplomats, and at no time did an American administration use the Navy as part of a systematic strategy to expand American interests abroad.

Schroeder illustrates his thesis clearly with a number of specific examples that make the book as much a history of American naval activity as of American naval policy. He does a much better job, for example, of explaining the political significance of antebellum U.S. Navy scientific expeditions than does Vincent Ponko in *Ships, Seas, and Scientists* (Annapolis, Md.: Naval Institute Press, 1974), and he provides an excellent, if brief, overview of the diplomatic activities of U.S. Navy captains like Lawrence Kearney and Matthew C. Perry in the Far East.

Another particular strength of the book is Schroeder's explanation of the connection between naval policy and the growing sectional crisis in the 1840s and 1850s. For example, during the Oregon border dispute with England in the 1840s, many southerners supported naval expansion out of fear that British naval forces in the Caribbean might raid the southern coast of the United States and incite a slave rebellion. Thus it was concern for the security

of their peculiar institution rather than an ambition to possess Oregon that motivated them. Similarly, southerners advocated the construction of small steam vessels (as opposed to larger warships) in the 1850s, at least in part because they saw them as potentially useful for penetrating South American rivers and spreading U.S. influence in areas where southern filibusters might take the next step toward eventual American annexation and the further expansion of the southern slave empire. Northerners were suspicious, quite naturally, of southern motives in both cases and voted accordingly.

This book is an excellent survey of antebellum naval policy and a must for naval historians of the 19th century.

CRAIG SYMONDS
U.S. Naval Academy

Lewis, Archibald R., and Runyon, Timothy J. *European Naval and Maritime History 300-1500.* Bloomington: Indiana University Press, 1985. 192pp. $22.50

This small volume is a welcome addition to the literature on medieval warfare. There are several volumes readily available on land warfare, but this is the first which attempts to give a broad general survey of the development of naval and maritime history. The authors have tried to present the story at a popular level and they have succeeded in giving us a very broad overview of more than a thousand years. Quite rightly, they have chosen to see naval history in this period as one which includes maritime and commercial relationships, rather than as simple listings or descriptions of fights on the water. For indeed, war at sea in this period had not developed into the rather specialized form of state-controlled activity that we understand today.

In presenting this overview, the authors have also provided the reader with a very useful list of books for further reading and, at th. same time, surveyed the literature for the key pieces of interpretation. The text itself is unencumbered with details that so often dominate the work of medieval historians. Instead we have a refreshing synthesis that brings together the main points that we know, not only from traditional means of research, but also from the exciting new developments in underwater archaeology. For the medieval period, much of naval development remains obscured in the "Dark Ages," and this volume shows clearly where these gaps are. At the same time the authors have successfully outlined the transition from naval battles fought like land battles to true naval battles fought offshore. One also sees the development of characteristically naval tactics for such battles, as well as the simultaneous development of early forms of amphibious warfare, convoy, and raids. In the broadest aspect, one can see the relationship of naval power to the development of a nation's overseas influence and power as well as its clear connection to financial, commercial, and maritime interests. Most importantly, the

authors, by examining the early stages of European naval and maritime development, illuminate the limited effect of naval power on land power.

This is a short, very readable book that gives to the naval specialist both a broad perspective and stimulation for further research in the field, as well as insight into a highly technical aspect of scholarship for the general student of medieval history.

JOHN B. HATTENDORF
Naval War College

Raven, Allan. *Fletcher-Class Destroyers*. Annapolis, Md.: Naval Institute Press, 1986. 158pp. $21.95

Watton, Ross. *The Battleship Warspite*. Annapolis, Md.: Naval Institute Press, 1987. 120pp. $21.95

Allan Raven begins a new series, "Warship Design Histories," with this volume on *Fletcher*-class destroyers of the Second World War. His format is similar to the "Anatomy of the Ship" series except that the snbject is an entire class rather than a single ship.

A brief introduction, complete with tables and sketches of design proposals, is followed by more than 90 photographs, frequently superb and clearly reproduced. Next are line drawings mixed with photographs which observe the "Anatomy of the Ship" formula for general arrangement plans, fittings and equipment, propellers, shafting and rudders, antennas, weapons and associated equipment, fire control equipment, and camouflage and funnel designs. The drawings, while excellent, are fewer in number and the keyed captions less extensive than in the "Anatomy of the Ship" series.

Raven concludes by listing the 175 *Fletcher*-class destroyers and their builders along with the dates they were laid down and commissioned. It is a pity the list could not have been expanded somewhat to include the fate of each ship. The emphasis, however, is clearly on design and materiel rather than on operational history and the class as a whole, at the expense of individual ships.

The now solidly established "Anatomy of the Ship" series has chosen for its ninth subject what is undoubtedly one of the most famous warships of the 20th century. H.M.S. *Warspite* incurred damage from mines, aircraft, and a radio-controlled glider bomb in a career that spanned the two World Wars, including a harrowing time at the Battle of Jutland where her steering mechanism broke down; extensive reconstruction during the interwar period; the second Battle of Narvik in 1940; the Mediterranean and Cape Matapan in 1941; D-day; and finally, at the conclusion of her career, providing support for the landing at Walcheren in November 1944.

Watton, who previously completed the cruiser *Belfast* volume in the same series, has matched his high standards with this work on the *Warspite*. The book adheres to the usual series format, with nine pages of introductory text followed by a

brief outline of the ship's career, but the emphasis is on materiel rather than history. The succeeding 22 pages carry photographs (the core of the book) and line drawings which are a distinctive feature of this series and provide the reader with a detailed view of the ship's anatomy. These include general arrangements and deck plans, machinery, hull construction, superstructure, armament, fire control equipment, fittings, ship's boats, and aircraft. Also included is information on camouflage schemes. The line drawings are keyed, sometimes in great detail, but generally clear even to those without a technical background. Oblique drawings are also provided for perspective.

PAUL G. HALPERN
Naval War College

Campbell, John. *Naval Weapons of World War Two.* Annapolis, Md.: Naval Institute Press, 1986. 403pp. $34.95

Recently I needed some definitive physical descriptions of World War II 40mm and 20mm guns. Norman Friedman's U.S. section of *Destroyer Weapons*, as well as other library references, provided pictures but no plan and profile drawings. John Campbell's *Naval Weapons of World War Two*, which unevenly remedies this deficiency, is an easy-to-use, Jane's-sized volume. Organized by country, it starts with Great Britain (the original was produced by Conway Press of that country) and works down by navy size through the United States, Japan, Germany, France, Italy, and the Soviet Union. These chapters are followed by a section on "Other Countries" which mainly covers weapons unique to the smaller nations and often based on U.S., British, and Swedish designs. Each of the major country chapters contain technical descriptions of guns, gun design, gun mountings, fire control, specific heavy, medium, and light caliber guns and their turrets or mountings, automatic guns, torpedoes, antisubmarine weapons, mines, bombs, rockets, and missiles such as they then were. Much of this is backed up by official descriptions and drawings, some of the latter rendered useless because of significant reduction without touch-up.

As might be expected, the British and U.S. chapters are very thorough, particularly the former. My problem with the 40mm and 20mm guns, for example, is solved by reproductions of official plans for the 40mm quads and twins and the 20mm singles. Regrettably, there are statistics but no drawings of the infamous 1.1-inch antiaircraft quad upon which the United States planned to rely as the war started. The sections on turret design are intriguing, for this is a little-known area of sophisticated design, construction, and testing which dictated the success of a particular class of warship. There were, necessarily, few large caliber designs, and the expertise, such as it was, could only be maintained by a handful of the larger, more affluent nations.

Germany and Italy are well-covered; France and Japan less so.

Many of the drawings in the French and Italian sections are originals, while none exist in the chapter on Japan. The Russian section, as might be expected, contains relatively little specific information. The few drawings, apparently created exclusively for the book, do not approach those in the European and U.S. sections in quality or in information.

One-fourth of the book is devoted to Great Britain while the U.S. section covers two-thirds as much. The latter provides an excellent complement to the Naval Institute's recent volume on battleships, cruisers, and destroyers, with details of each class's armament components. Much of this deals specifically with the designs rather than the reasons for their development. All torpedo summaries, while good, suffer from too few torpedo cutaways. Where is the famous Mk 24 "mine," the first truly successful homing torpedo?

In summary, *Naval Weapons of World War Two* covers the physical details of the weapons systems that influenced the development of so many combatants that are of interest to historians and others. This volume is not perfection and may elicit a number of reasoned responses to some of the points about which the author speculates. Thus, a second edition, especially if it included comparable details on the Japanese Navy, would be of great benefit and a welcome contribution to this body of knowledge.

RICHARD F. CROSS III
Alexandria, Virginia

Heatley, C.J., III. *The Cutting Edge*. Annapolis, Md.: Naval Institute Press, 1986. 152pp. $38

This is the one—this is the one for all the armchair aviators, amateur aviators, poor folks with lead wings, naval aviators, warp drivers, fast burners, and all those who know they have got the right stuff. C.J. "Heater" Heatley is a Navy fighter pilot, and superb photographer whose pictures inspired the movie *Topgun*. He must have the only optically true canopy in the Navy, for his photographs—taken through his canopy with a hand-held 35mm camera—are without blemish and are magnificent. There are so many grand photographs beautifully reproduced in this book that you will find yourself saturated at first and only on the second or third pass realize that each in its own way is a small masterpiece. My favorite is an F-14 climbing through a humid sky with rarefaction condensation waves forming over the wings. Picking yours will be a delightful chore.

Everything photogenic in carrier aviation is here—the people, the sky, the clouds, the sea, the ships, and the planes. All the good ones are here: F-18s, F-14s, A-6s, A-7s, S-3s, E-2Cs, CODs, and choppers. The aerial photographs of Russian aircraft could be sold to them to facilitate their lagging recruitment. Accepting the cliche about a picture being worth a thousand words, Heatley skillfully weaves lean text, from the pilots and crew, between his photographs. Since I cannot show you the photographs with this review, you will have to settle for a few of the best words.

From Heatley: "Morning launches are the best. The dawn patrol. . . . There's something about strapping on 50,000 pounds of fire breathing hardware, roaring off into the heavens and defying the laws of nature."

An A-6 pilot: "Getting airborne is the only phase of carrier aviation that you, as a pilot, have no control over."

The F-14 pilots: "When you go supersonic, you don't feel a thing . . . . Things just happen faster." "Fighter pilots always want to dogfight. That's the whole reason they became fighter pilots." An F-14 pilot on intercepting Russian overflights: "They speak pretty good English. They ask us what it's like to be on a carrier; we tell them we're there for the dancing girls."

From the pilots flying other aircraft: " . . . I like flying a single person plane (A-7). You get to make all the decisions." "We say there are only two types of pilots, those who fly the FA-18 and those who wish they did."

On carrier landings: "Trapping on a carrier is violent. . . . You go from 150 miles per hour to nothing in two seconds." "Night landings are definitely the hardest thing that a naval aviator does. . . . One day you may have a great landing, and the next day, it's as if snakes are in the cockpit."

The words are good, the pictures outstanding. For about six times the price of going to see the movie *Topgun* you can buy *The Cutting Edge*. Do so, it has staying power—you won't be hungry two hours later.

FRANK C. MAHNCKE
Naval War College

RECENT BOOKS

Selected Accessions of the Naval War College Library

Annotated by
Murray Bradley and Patricia Daly

Blechman, Barry M. *U.S. Security in the Twenty-First Century*. Boulder, Colo.: Westview Press, 1987. 173pp. $15.95

Applying statistics, Delphic techniques, and expert opinions to factors that influence long-range U.S. military planning, the author arrives at five alternative strategic environments for the beginning of the next century. Among the factors considered are demographic trends, nuclear proliferation, military technology, and public opinion. In general, he forecasts a weakening of international institutions, accompanied by more independent foreign policies and frequent recourse to military force.

Cartwright, John et al. *The State of the Alliance 1986-1987: North Atlantic Assembly Reports*. Boulder, Colo.: Westview Press, 1987. 376pp. paper $32.50

The North Atlantic Assembly is composed of legislators from NATO's 16 member nations who meet biannually to discuss matters of common concern. This collection of reports presented to the 32nd meeting covers such diverse topics as transatlantic public opinion, the effect of the economic and political climate, arms control, and NATO's nuclear strategy as impacted by the Strategic Defense Initiative. An appendix contains the policy recommendations adopted by the Assembly.

Cordesman, Anthony H. *The Arab-Israeli Military Balance and the Art of Operations: An Analysis of Military Lessons and Trends and Implications for Future Conflicts*. Lanham, Md.: University Press of America for the American Enterprise Institute for Public Policy Research, 1987. 205pp. $21.50

The likelihood of future Arab-Israeli conflicts is predicted by reviewing seven Arab-Israeli wars, not in terms of either side's performance in a particular battle, but with a view to determining the lessons in the conduct of military operations that both sides learned—or did not learn. Tables are also provided showing trends in Arab-Israeli manpower, weaponry, and military expenditures, including foreign military aid from 1973 to 1983.

Fehér, Ferenc and Heller, Agnes. *Doomsday or Deterrence? On the Antinuclear Issue*. Armonk, N.Y.: Sharpe, 1986. 154pp. $35 paper $12.95

A political and philosophical criticism, from the viewpoint of democratic socialism, of the current antinuclear movement as antithetical to human freedom. Two basic tenets of the movement—(1) A weak Soviet Union is threatened by a bellicose United States, and (2) "Better Red than dead"—are shown to be contradictory and responsible for false alternatives. The authors propose a future preserving the nuclear deterrent, imposing a general arms freeze, and working toward a redefinition of détente.

Havens, Thomas R.H. *Fire Across the Sea: The Vietnam War and Japan 1965-1975*. Princeton, N.J.: Princeton University Press, 1987. 329pp. $37.50 paper $17.50

Japan's silent partnership with the United States in the Vietnam war affected it's society, culture, politics, and external relations. As a result of it's nonmilitary involvement in the war, Japan became the leading economic power in Southeast Asia and eventually a challenge to the United States in world markets. This narrative history also portrays the way in which Japan's antiwar movement led to a new citizen involvement in public issues and a more critical view of the United States after 20 years of unquestioning admiration.

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